

ASPEN TECHNOLOGY INC /DE/  
Form 10-Q  
October 27, 2016  
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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 September 30, 2016

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: 001-34630

ASPEN TECHNOLOGY, INC.

(Exact name of registrant as specified in its charter)

Delaware 04-2739697

(State or other jurisdiction of incorporation or organization) (I.R.S. Employer Identification No.)

20 Crosby Drive  
Bedford, Massachusetts 01730  
(Address of principal executive offices) (Zip Code)  
(781) 221-6400  
(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, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer  Accelerated filer   
Non-accelerated filer  Smaller reporting company   
filer  (Do not check if

a smaller reporting  
company)

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act): Yes  No   
As of October 20, 2016, there were 77,231,153 shares of the registrant's common stock (par value \$0.10 per share) outstanding.

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aspenONE is one of our registered trademarks. All other trade names, trademarks and service marks appearing in this Form 10-Q are the property of their respective owners.

Our fiscal year ends on June 30, and references to a specific fiscal year are to the twelve months ended June 30 of such year (for example, "fiscal 2017" refers to the year ending June 30, 2017).

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## PART I - FINANCIAL INFORMATION

## Item 1. Financial Statements.

## Consolidated Financial Statements (unaudited)

ASPEN TECHNOLOGY, INC. AND SUBSIDIARIES  
CONSOLIDATED STATEMENTS OF OPERATIONS  
(Unaudited)

|  | Three Months Ended<br>September 30,<br>2016      2015<br>(Dollars in<br>Thousands, Except<br>per Share Data) |            |
|--|--|------------|
| Revenue:                                 |  |            |
| Subscription and software                | \$ 113,444   | \$ 111,859 |
| Services and other                       | 6,606  | 8,437      |
| Total revenue                            | 120,050  | 120,296    |
| Cost of revenue:                         |  |            |
| Subscription and software                | 5,069  | 5,242      |
| Services and other                       | 6,437  | 7,730      |
| Total cost of revenue                    | 11,506   | 12,972     |
| Gross profit                             | 108,544  | 107,324    |
| Operating expenses:                      |  |            |
| Selling and marketing                    | 22,025   | 22,436     |
| Research and development                 | 18,632   | 16,597     |
| General and administrative               | 13,157   | 12,862     |
| Total operating expenses, net            | 53,814   | 51,895     |
| Income from operations                   | 54,730   | 55,429     |
| Interest income                          | 272  | 82         |
| Interest expense                         | (869)  | (1)        |
| Other income, net                        | 646  | 896        |
| Income before provision for income taxes | 54,779   | 56,406     |
| Provision for income taxes               | 19,779   | 19,635     |
| Net income                               | \$35,000   | \$36,771   |
| Net income per common share:             |  |            |
| Basic                                    | \$0.44   | \$0.44     |
| Diluted                                  | \$0.44   | \$0.44     |
| Weighted average shares outstanding:     |  |            |
| Basic                                    | 79,048   | 83,876     |
| Diluted                                  | 79,385   | 84,320     |

See accompanying Notes to these unaudited consolidated financial statements.

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ASPEN TECHNOLOGY, INC. AND SUBSIDIARIES  
 CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME  
 (Unaudited)

|   | Three Months Ended<br>September 30, |            |
|---|-------------------------------------|------------|
|   | 2016                                | 2015       |
|   | (Dollars in Thousands)              |            |
| Net income  | \$ 35,000                           | \$ 36,771  |
| Other comprehensive loss:   |                                     |            |
| Net unrealized gains (losses) on available for sale securities, net of tax effects of \$15 and (\$12)<br>for the three months ended September 30, 2016 and 2015, respectively | (26                                 | ) 23       |
| Foreign currency translation adjustments  | (904                                | ) (1,733 ) |
| Total other comprehensive loss  | (930                                | ) (1,710 ) |
| Comprehensive income  | \$ 34,070                           | \$ 35,061  |

See accompanying Notes to these unaudited consolidated financial statements.

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ASPEN TECHNOLOGY, INC. AND SUBSIDIARIES  
 CONSOLIDATED BALANCE SHEETS  
 (Unaudited)

|  | September 30,<br>2016                           | June 30,<br>2016 |
|--|---|------------------|
|  | (Dollars in<br>Thousands, Except<br>Share Data) |                  |
| <b>ASSETS</b>  |   |                  |
| Current assets:  |   |                  |
| Cash and cash equivalents  | \$48,377  | \$318,336        |
| Short-term marketable securities   | 143,174   | 3,006            |
| Accounts receivable, net   | 21,847  | 20,476           |
| Prepaid expenses and other current assets  | 12,154  | 13,948           |
| Prepaid income taxes   | 112   | 5,557            |
| Total current assets   | 225,664   | 361,323          |
| Property, equipment and leasehold improvements, net  | 15,766  | 15,825           |
| Computer software development costs, net   | 680   | 720              |
| Goodwill   | 25,278  | 23,438           |
| Intangible assets, net   | 9,067   | 5,000            |
| Non-current deferred tax assets  | 12,264  | 12,236           |
| Other non-current assets   | 1,225   | 1,196            |
| Total assets   | \$289,944                                       | \$419,738        |
| <b>LIABILITIES AND STOCKHOLDERS' DEFICIT</b>   |   |                  |
| Current liabilities:   |   |                  |
| Accounts payable   | \$3,754   | \$3,559          |
| Accrued expenses and other current liabilities   | 29,968  | 36,105           |
| Income taxes payable   | 11,838  | 439              |
| Borrowings under credit agreement  | 140,000   | 140,000          |
| Current deferred revenue   | 226,105   | 252,520          |
| Total current liabilities  | 411,665   | 432,623          |
| Non-current deferred revenue   | 28,097  | 29,558           |
| Other non-current liabilities  | 33,767  | 32,591           |
| Commitments and contingencies (Note 16)  |   |                  |
| Series D redeemable convertible preferred stock, \$0.10 par value—   |   |                  |
| Authorized— 3,636 shares as of September 30, 2016 and June 30, 2016  | —   | —                |
| Issued and outstanding— none as of September 30, 2016 and June 30, 2016  |   |                  |
| Stockholders' deficit:   |   |                  |
| Common stock, \$0.10 par value— Authorized—210,000,000 shares  |   |                  |
| Issued— 102,218,791 shares at September 30, 2016 and 102,031,960 shares at June 30, 2016                               | 10,222  | 10,203           |
| Outstanding— 77,468,068 shares at September 30, 2016 and 80,177,950 shares at June 30, 2016                            |   |                  |
| Additional paid-in capital   | 646,647   | 659,287          |
| Retained earnings (deficit)  | 29,324  | (5,676 )         |
| Accumulated other comprehensive income   | 1,721   | 2,651            |
| Treasury stock, at cost—24,750,723 shares of common stock at September 30, 2016 and 21,854,010 shares at June 30, 2016 | (871,499 )                                      | (741,499 )       |
| Total stockholders' deficit  | (183,585 )                                      | (75,034 )        |
| Total liabilities and stockholders' deficit  | \$289,944                                       | \$419,738        |

See accompanying Notes to these unaudited consolidated financial statements.

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ASPEN TECHNOLOGY, INC. AND SUBSIDIARIES  
 CONSOLIDATED STATEMENTS OF CASH FLOWS  
 (Unaudited)

|   | Three Months Ended<br>September 30, |            |
|---|-------------------------------------|------------|
|   | 2016                                | 2015       |
|   | (Dollars in Thousands)              |            |
| Cash flows from operating activities:   |                                     |            |
| Net income  | \$ 35,000                           | \$ 36,771  |
| Adjustments to reconcile net income to net cash provided by operating activities:                                       |                                     |            |
| Depreciation and amortization   | 1,791                               | 1,547      |
| Net foreign currency gains  | (745 )                              | (1,189 )   |
| Stock-based compensation  | 4,958                               | 4,423      |
| Deferred income taxes   | (46 )                               | —          |
| Provision for (recovery from) bad debts   | (7 )                                | 26         |
| Tax benefits from stock-based compensation  | 584                                 | 1,577      |
| Excess tax benefits from stock-based compensation   | (584 )                              | (1,577 )   |
| Other non-cash operating activities   | 90                                  | 159        |
| Changes in assets and liabilities:  |                                     |            |
| Accounts receivable   | (1,355 )                            | 8,769      |
| Prepaid expenses, prepaid income taxes, and other assets  | 1,885                               | 812        |
| Accounts payable, accrued expenses, income taxes payable and other liabilities  | 12,520                              | 2,348      |
| Deferred revenue  | (27,841 )                           | (35,220 )  |
| Net cash provided by operating activities   | 26,250                              | 18,446     |
| Cash flows from investing activities:   |                                     |            |
| Purchases of marketable securities  | (193,748 )                          | —          |
| Maturities of marketable securities   | 53,184                              | 10,370     |
| Purchases of property, equipment and leasehold improvements   | (898 )                              | (1,119 )   |
| Payments for business acquisitions  | (5,400 )                            | —          |
| Payments for capitalized computer software costs  | (51 )                               | —          |
| Net cash (used in) provided by investing activities   | (146,913 )                          | 9,251      |
| Cash flows from financing activities:   |                                     |            |
| Exercises of stock options  | 3,089                               | 611        |
| Repurchases of common stock   | (151,621 )                          | (55,033 )  |
| Payments of tax withholding obligations related to restricted stock   | (1,297 )                            | (1,125 )   |
| Excess tax benefits from stock-based compensation   | 584                                 | 1,577      |
| Net cash used in financing activities   | (149,245 )                          | (53,970 )  |
| Effect of exchange rate changes on cash and cash equivalents  | (51 )                               | (237 )     |
| Decrease in cash and cash equivalents   | (269,959 )                          | (26,510 )  |
| Cash and cash equivalents, beginning of period  | 318,336                             | 156,249    |
| Cash and cash equivalents, end of period  | \$ 48,377                           | \$ 129,739 |
| Supplemental disclosure of cash flow information:   |                                     |            |
| Income taxes paid, net  | \$ 1,239                            | \$ 2,895   |
| Interest paid   | 850                                 | 1          |
| Supplemental disclosure of non-cash investing and financing activities:   |                                     |            |
| Change in purchases of property, equipment and leasehold improvements included in accounts payable and accrued expenses | \$ 506                              | \$ (631 )  |
| Change in common stock repurchases included in accrued expenses   | (1,621 )                            | 33         |



See accompanying Notes to these unaudited consolidated financial statements.

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ASPEN TECHNOLOGY, INC. AND SUBSIDIARIES  
NOTES TO UNAUDITED CONSOLIDATED FINANCIAL STATEMENTS

1. Interim Unaudited Consolidated Financial Statements

The accompanying interim unaudited consolidated financial statements of Aspen Technology, Inc. and its subsidiaries have been prepared on the same basis as our annual consolidated financial statements. We have omitted certain information and footnote disclosures normally included in our annual consolidated financial statements. Such interim unaudited consolidated financial statements have been prepared in conformity with U.S. Generally Accepted Accounting Principles (GAAP), as defined in the Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC) Topic 270, Interim Reporting, for interim financial information and with the instructions to Rule 10-01 of Regulation S-X. Accordingly, they do not include all of the information and footnotes required by GAAP for complete financial statements. It is suggested that these unaudited consolidated financial statements be read in conjunction with the audited consolidated financial statements for the year ended June 30, 2016, which are contained in our Annual Report on Form 10-K, as previously filed with the U.S. Securities and Exchange Commission (SEC). In the opinion of management, all adjustments, consisting of normal and recurring adjustments, considered necessary for a fair presentation of the financial position, results of operations, and cash flows at the dates and for the periods presented have been included and all intercompany accounts and transactions have been eliminated in consolidation. The results of operations for the three months ended September 30, 2016 are not necessarily indicative of the results to be expected for the subsequent quarter or for the full fiscal year.

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions. These estimates and assumptions 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.

Unless the context requires otherwise, references to we, our and us refer to Aspen Technology, Inc. and its subsidiaries.

2. Significant Accounting Policies

(a) Principles of Consolidation

The accompanying consolidated financial statements include the accounts of Aspen Technology, Inc. and our wholly owned subsidiaries. All intercompany balances and transactions have been eliminated in consolidation.

(b) Significant Accounting Policies

Our significant accounting policies are described in Note 2 to the consolidated financial statements included in our Annual Report on Form 10-K for the fiscal year ended June 30, 2016. There were no material changes to our significant accounting policies during the three months ended September 30, 2016.

(c) Revenue Recognition

We generate revenue from the following sources: (1) Subscription and software revenue; and (2) Services and other revenue. We sell our software products to end users primarily under fixed-term licenses. We license our software products primarily through a subscription offering which we refer to as our aspenONE licensing model. Our aspenONE products are organized into two suites: 1) engineering and 2) manufacturing and supply chain, or MSC. The aspenONE licensing model provides customers with access to all of the products within the aspenONE suite(s) they license. We refer to these arrangements as token arrangements. Tokens are fixed units of measure. The

amount of software usage is limited by the number of tokens purchased by the customer.

We also license our software through point product term arrangements, which include software maintenance and support, known as our Premier Plus SMS offering, for the entire term, as well as perpetual license arrangements.

Four basic criteria must be satisfied before software license revenue can be recognized: persuasive evidence of an arrangement between us and an end user; delivery of our product has occurred; the fee for the product is fixed or determinable; and collection of the fee is probable.

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Persuasive evidence of an arrangement—We use a signed contract as evidence of an arrangement for software licenses and SMS. For professional services we use a signed contract and a work proposal to evidence an arrangement. In cases where both a signed contract and a purchase order are required by the customer, we consider both taken together as evidence of the arrangement.

Delivery of our product—Software and the corresponding access keys are generally delivered to customers via electronic delivery or via physical medium with standard shipping terms of Free Carrier, our warehouse (i.e., FCA, named place). Our software license agreements do not contain conditions for acceptance.

Fee is fixed or determinable—We assess whether a fee is fixed or determinable at the outset of the arrangement. Significant judgment is involved in making this assessment.

As a standard business practice, we offer fixed-term license arrangements, which are generally payable on an annual basis.

We cannot assert that the fees under our aspenONE licensing model and point product arrangements with Premier Plus SMS are fixed or determinable because of the rights provided to customers and economics of the arrangements and because we do not have an established history of collecting under the terms of these contracts without providing concessions to customers. As a result, the amount of revenue recognized for these arrangements is limited by the amount of customer payments that become due.

Collection of fee is probable—We assess the probability of collecting from each customer at the outset of the arrangement based on a number of factors, including the customer's payment history, its current creditworthiness, economic conditions in the customer's industry and geographic location, and general economic conditions. If in our judgment collection of a fee is not probable, revenue is recognized as cash is collected, provided all other conditions for revenue recognition have been met.

Vendor-Specific Objective Evidence of Fair Value (VSOE)

We have established VSOE for professional services and certain training offerings, but not for our software products or our SMS offerings. We assess VSOE for SMS, professional services, and training, based on an analysis of standalone sales of the offerings using the bell-shaped curve approach. We do not have a history of selling our Premier Plus SMS offering to customers on a standalone basis, and as a result are unable to establish VSOE for this deliverable.

We allocate the arrangement consideration among the elements included in our multi-element arrangements using the residual method. Under the residual method, the VSOE of the undelivered elements is deferred and the remaining portion of the arrangement fee is recognized as revenue upon delivery of the software, assuming all other revenue recognition criteria are met. If VSOE does not exist for an undelivered element in an arrangement, revenue is deferred until such evidence does exist for the undelivered elements, or until all elements are delivered, whichever is earlier.

## Subscription and Software Revenue

Subscription and software revenue consists primarily of product and related revenue from our (i) aspenONE licensing model; (ii) point product arrangements with our Premier Plus SMS offering included for the contract term; and (iii) perpetual arrangements.

When a customer elects to license our products under our aspenONE licensing model, our Premier Plus SMS offering is included for the entire term of the arrangement and the customer receives, for the term of the arrangement, the right to any new unspecified future software products and updates that may be introduced into the licensed aspenONE software suite. Due to our obligation to provide unspecified future software products and updates, we are required to recognize revenue ratably over the term of the arrangement, once the other revenue recognition criteria noted above have been met.

Our point product arrangements with Premier Plus SMS include SMS for the term of the arrangement. Since we do not have VSOE for our Premier Plus SMS offering, the SMS element of our point product arrangements is not

separable. As a result, revenue associated with point product arrangements with Premier Plus SMS included for the contract term is recognized ratably over the term of the arrangement, once the other revenue recognition criteria have been met.

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### Services and Other Revenue

#### Professional Services Revenue

Professional services are provided to customers on a time-and-materials (T&M) or fixed-price basis. We recognize professional services fees for our T&M contracts based upon hours worked and contractually agreed-upon hourly rates. Revenue from fixed-price engagements is recognized using the proportional performance method based on the ratio of costs incurred to the total estimated project costs. Project costs are typically expensed as incurred. The use of the proportional performance method is dependent upon our ability to reliably estimate the costs to complete a project. We use historical experience as a basis for future estimates to complete current projects. Additionally, we believe that costs are the best available measure of performance. Out-of-pocket expenses which are reimbursed by customers are recorded as revenue.

In certain circumstances, professional services revenue may be recognized over a longer time period than the period over which the services are performed. If the costs to complete a project are not estimable or the completion is uncertain, the revenue is recognized upon completion of the services. In circumstances in which professional services are sold as a single arrangement with, or in contemplation of, a new aspenONE license or point product arrangement with Premier Plus SMS, revenue is deferred and recognized on a ratable basis over the longer of (i) the period the services are performed, or (ii) the license term. When we provide professional services considered essential to the functionality of the software, we recognize the combined revenue from the sale of the software and related services using the completed contract or percentage-of-completion method.

We have occasionally been required to commit unanticipated additional resources to complete projects, which resulted in losses on those contracts. Provisions for estimated losses on contracts are made during the period in which such losses become probable and can be reasonably estimated.

#### Training Revenue

We provide training services to our customers, including on-site, Internet-based, public and customized training. Revenue is recognized in the period in which the services are performed. In circumstances in which training services are sold as a single arrangement with, or in contemplation of, a new aspenONE license or point product arrangement with Premier Plus SMS, revenue is deferred and recognized on a ratable basis over the longer of (i) the period the services are performed or (ii) the license term.

#### Deferred Revenue

Deferred revenue includes amounts billed or collected in advance of revenue recognition, including arrangements under the aspenONE licensing model, point product arrangements with Premier Plus SMS, professional services, and training. Under the aspenONE licensing model and for point product arrangements with Premier Plus SMS, VSOE does not exist for the undelivered elements, and as a result, the arrangement fees are recognized ratably (i.e., on a subscription basis) over the term of the license. Deferred revenue is recorded as each invoice becomes due.

#### Other Licensing Matters

Our standard licensing agreements include a product warranty provision. We have not experienced significant claims related to software warranties beyond the scope of SMS support, which we are already obligated to provide, and consequently, we have not established reserves for warranty obligations.

Our agreements with our customers generally require us to indemnify the customer against claims that our software infringes third-party patent, copyright, trademark or other proprietary rights. Such indemnification obligations are generally limited in a variety of industry-standard respects, including our right to replace an infringing product. As of September 30, 2016 and June 30, 2016, we had not experienced any material losses related to these indemnification obligations and no claims with respect thereto were outstanding. We do not expect significant claims related to these indemnification obligations, and consequently, have not established any related reserves.

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(d) Loss Contingencies

We accrue estimated liabilities for loss contingencies arising from claims, assessments, litigation and other sources when it is probable that a liability has been incurred and the amount of the claim, assessment or damages can be reasonably estimated. We believe that we have sufficient accruals to cover any obligations resulting from claims, assessments or litigation that have met these criteria. Please refer to Note 16 for discussion of these matters and related liability accruals.

(e) Foreign Currency Transactions

Foreign currency exchange gains and losses generated from the settlement and remeasurement of transactions denominated in currencies other than the functional currency of our subsidiaries are recognized in our results of operations as incurred as a component of other income, net. Net foreign currency gains were \$0.6 million and \$0.9 million during the three-months ended September 30, 2016 and 2015, respectively.

(f) Research and Development Expense

We charge research and development expenditures to expense as the costs are incurred. Research and development expenses consist primarily of personnel expenses related to the creation of new products, enhancements and engineering changes to existing products and costs of acquired technology prior to establishing technological feasibility.

In the three months ended September 30, 2016 and September 30, 2015, we acquired technology for \$0.4 million and \$0.3 million, respectively. At the time we acquired the technology, the projects to develop commercially available products did not meet the accounting definition of having reached technological feasibility and therefore the cost of the acquired technology was expensed as a research and development expense.

(g) Recently Issued Accounting Pronouncements

In May 2014, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) No. 2014-09, Revenue from Contracts with Customers (Topic 606). ASU No. 2014-09 supersedes the revenue recognition requirements in Revenue Recognition (Topic 605), and requires entities to recognize revenue when they transfer promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled to in exchange for those goods or services. As currently issued and amended, ASU 2014-09 is effective for annual reporting periods beginning after December 15, 2017, including interim periods within that reporting period, though early adoption is permitted for annual reporting periods beginning after December 15, 2016. We will adopt ASU No. 2014-09 during the first quarter of fiscal 2019. We are currently evaluating the impact of ASU No. 2014-09 on our consolidated financial statements, implementing accounting system changes related to the adoption, and considering additional disclosure requirements.

In April 2015, the FASB issued ASU No. 2015-05, Intangibles - Goodwill and Other - Internal-Use Software (Subtopic 350-40): Customer's Accounting for Fees Paid in a Cloud Computing Arrangement. The amendment provides guidance to customers about whether a cloud computing arrangement includes a software license. If a cloud computing arrangement includes a software license, the customer should account for the software license element of the arrangement consistent with the acquisition of other software licenses. If the arrangement does not include a software license, the customer should account for a cloud computing arrangement as a service contract. The amendment was effective for annual reporting periods beginning on or after December 15, 2015. We adopted ASU No. 2015-05 during the first quarter of fiscal 2017. The adoption of ASU No. 2015-05 did not have a material impact on our consolidated financial position, results of operations or cash flows.

In February 2016, the FASB issued ASU No. 2016-02, Leases (Topic 842). Under the amendment, lessees will be required to recognize virtually all of their leases on the balance sheet, by recording a right-of-use asset and lease liability. The ASU is effective for annual periods, including interim periods within those annual periods, beginning



after December 15, 2018. Early adoption is permitted. We are currently evaluating the impact of ASU No. 2016-02 on our consolidated financial statements.

In March 2016, the FASB issued ASU No. 2016-09, Compensation - Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting. The amendment identifies several areas for simplification applicable to entities that issue share-based payment awards to their employees, including income tax consequences, the option to recognize gross stock compensation expense with actual forfeitures recognized when they occur, and certain classifications on the statements of cash flows. The ASU is effective for annual periods, including interim periods within those annual periods, beginning after December 15, 2016. Early adoption is permitted. We are currently evaluating the impact of ASU No. 2016-09 on our consolidated financial statements.

In June 2016, the FASB issued ASU No. 2016-13, Financial Instruments - Credit Losses (Topic 326). The amendment changes the impairment model for most financial assets and certain other instruments. Entities will be required to use a model

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that will result in the earlier recognition of allowances for losses for trade and other receivables, held-to-maturity debt securities, loans, and other instruments. For available-for-sale debt securities with unrealized losses, the losses will be recognized as allowances rather than as reductions in the amortized cost of the securities. The ASU is effective for annual periods, including interim periods within those annual periods, beginning after December 15, 2019. Early adoption is permitted. We are currently evaluating the impact of ASU No. 2016-13 on our consolidated financial statements.

In August 2016, the FASB issued ASU No. 2016-15, Statement of Cash Flows (Topic 230). The amendment updates the guidance as to how certain cash receipts and cash payments should be presented and classified, and is intended to reduce the existing diversity in practice. The ASU is effective for annual periods, including interim periods within those annual periods, beginning after December 15, 2017. Early adoption is permitted. We are currently evaluating the impact of ASU No. 2016-15 on our consolidated financial statements.

### 3. Marketable Securities

The following table summarizes the fair value, the amortized cost and unrealized holding gains (losses) on our marketable securities as of September 30, 2016 and June 30, 2016:

|  | Fair Value             | Cost       | Unrealized<br>Gains | Unrealized<br>Losses |
|--|------------------------|------------|---------------------|----------------------|
|  | (Dollars in Thousands) |            |                     |                      |
| September 30, 2016:                    |                        |            |                     |                      |
| U.S. corporate bonds                   | \$ 143,174             | \$ 143,215 | \$ —                | \$ (41 )             |
| Total short-term marketable securities | \$ 143,174             | \$ 143,215 | \$ —                | \$ (41 )             |
| June 30, 2016:                         |                        |            |                     |                      |
| U.S. corporate bonds                   | \$ 3,006               | \$ 3,006   | \$ —                | \$ —                 |
| Total short-term marketable securities | \$ 3,006               | \$ 3,006   | \$ —                | \$ —                 |

Our marketable securities were classified as available-for-sale and reported at fair value on the unaudited consolidated balance sheets. Net unrealized gains (losses) were reported as a separate component of accumulated other comprehensive income, net of tax. Realized gains (losses) on investments were recognized in earnings as incurred. Our investments consisted primarily of investment grade fixed income corporate debt securities with maturity dates ranging from October 2016 through May 2017 as of September 30, 2016 and August 2016 as of June 30, 2016.

### 4. Fair Value

We determine fair value by utilizing a fair value hierarchy that ranks the quality and reliability of the information used in its determination. Fair values determined using “Level 1 inputs” utilize unadjusted quoted prices in active markets for identical assets or liabilities that we have the ability to access. Fair values determined using “Level 2 inputs” utilize data points that are observable, such as quoted prices, interest rates and yield curves for similar assets and liabilities.

Cash equivalents of \$30.8 million and \$286.2 million as of September 30, 2016 and June 30, 2016, respectively, were reported at fair value utilizing quoted market prices in identical markets, or “Level 1 inputs.” Our cash equivalents consist of short-term, highly liquid investments with remaining maturities of three months or less when purchased.

Marketable securities of \$143.2 million and \$3.0 million as of September 30, 2016 and June 30, 2016, respectively, were reported at fair value calculated in accordance with the market approach, utilizing market consensus pricing models with quoted prices that were directly or indirectly observable, or “Level 2 inputs.”

Financial instruments not measured or recorded at fair value in the accompanying unaudited consolidated financial statements consist of accounts receivable, installments receivable, accounts payable and accrued liabilities. The

estimated fair value of these financial instruments approximates their carrying value. The estimated fair value of the borrowings under the Credit Agreement (described below in Note 11, Credit Agreement) approximates its carrying value due to the floating interest rate.

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## 5. Accounts Receivable

Our accounts receivable, net of the related allowance for doubtful accounts, were as follows as of September 30, 2016 and June 30, 2016:

|                     | Gross                  | Allowance | Net      |
|---------------------|------------------------|-----------|----------|
|                     | (Dollars in Thousands) |           |          |
| September 30, 2016: |                        |           |          |
| Accounts receivable | \$23,155               | \$ 1,308  | \$21,847 |
|                     | \$23,155               | \$ 1,308  | \$21,847 |

June 30, 2016:

|                     |          |          |          |
|---------------------|----------|----------|----------|
| Accounts receivable | \$22,080 | \$ 1,604 | \$20,476 |
|                     | \$22,080 | \$ 1,604 | \$20,476 |

As of September 30, 2016, we had two customer receivable balances that individually represented approximately 22% and 13% of our total receivables. The balance that represented approximately 22% of our total receivables as of September 30, 2016 was collected subsequent to September 30, 2016.

## 6. Property and Equipment

Property, equipment and leasehold improvements in the accompanying unaudited consolidated balance sheets consisted of the following:

|   | September 30,<br>2016  | June 30,<br>2016 |
|---|------------------------|------------------|
|   | (Dollars in Thousands) |                  |
| Property, equipment and leasehold improvements - at cost: |                        |                  |
| Computer equipment  | \$ 10,590              | \$ 10,387        |
| Purchased software  | 23,354                 | 23,705           |
| Furniture & fixtures                                      | 6,990                  | 6,712            |
| Leasehold improvements                                    | 13,122                 | 12,523           |
| Accumulated depreciation                                  | (38,290 )              | (37,502 )        |
| Property, equipment and leasehold improvements - net      | \$ 15,766              | \$ 15,825        |

## 7. Acquisitions

On October 26, 2016, we completed the acquisition of all the outstanding shares of Mtelligence Corporation (“Mtelligence”), a California-based provider of predictive and prescriptive maintenance software and related services used to optimize asset performance, for total cash consideration of \$37.4 million. The purchase price consisted of \$31.9 million of cash paid at closing and up to an additional \$5.5 million to be held back until April 2018 as security for certain obligations of the Sellers.

In August 2016, we acquired certain technology and trademarks for total cash consideration of \$6.0 million. The purchase price consisted of \$5.4 million of cash paid at closing and up to an additional \$0.6 million to be paid in August 2017. The acquisition met the definition of a business combination as it contained inputs and processes that are capable of being operated as a business. The preliminary allocation of the purchase price as of September 30, 2016 allocated \$4.0 million to developed technology and \$2.0 million to goodwill. The fair value of the developed technology of \$4.0 million was determined using the replacement cost approach. The developed technology is being amortized on a straight-line basis over its estimated useful life of 6 years. The acquisition is treated as an asset

purchase for tax purposes and accordingly, the goodwill resulting from the acquisition is expected to be deductible.

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## Fidelis Group, LLC

In June 2016, we completed the acquisition of all the outstanding shares of Fidelis Group, LLC ("Fidelis"), a provider of asset reliability software used to predict and optimize asset performance. The purchase price consisted of \$8.0 million of cash paid at closing and up to an additional \$2.0 million to be paid in December 2017.

A preliminary allocation of the purchase price is as follows. The valuation of the net assets acquired and the deferred tax liabilities, including adjustments identified subsequent to the acquisition date, are considered preliminary as of September 30, 2016.

|                                     | Amount<br>(Dollars in<br>Thousands) |
|-------------------------------------|-------------------------------------|
| Tangible assets acquired, net       | \$ 65                               |
| Identifiable intangible assets:     |                                     |
| Developed technology                | 1,272                               |
| Customer relationships              | 753                                 |
| In-process research and development | 3,097                               |
| Goodwill                            | 6,706                               |
| Deferred tax liabilities, net       | (1,893 )                            |
| Total assets acquired               | \$ 10,000                           |

We used the income approach to determine the values of the identifiable intangible assets. The weighted-average discount rate (or rate of return) used to determine the value of the Fidelis intangible assets was 18% and the effective tax rate used was 34%. The values of the developed technology, in-process research and development and customer relationships are being amortized on a straight-line basis over their estimated useful lives of 10 years, 11 years and 8 years, respectively. The in-process research and development will begin amortization upon completion, which is expected in fiscal 2017.

The goodwill, which is not deductible for tax purposes, reflects the value of the assembled workforce and the company-specific synergies we expect to realize by selling Fidelis products and services to our existing customers. The results of operations of Fidelis have been included prospectively in our results of operations since the date of acquisition.

## 8. Intangible Assets

We include in our amortizable intangible assets those intangible assets acquired in our business and asset acquisitions. We amortize acquired intangible assets with finite lives over their estimated economic lives, generally using the straight-line method. Each period, we evaluate the estimated remaining useful lives of acquired intangible assets to determine whether events or changes in circumstances warrant a revision to the remaining period of amortization. Acquired intangibles are removed from the accounts when fully amortized and no longer in use.

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Intangible assets consist of the following as of September 30, 2016 and June 30, 2016:

|                                   | Gross<br>Carrying<br>Amount | Accumulated<br>Amortization |  | Net<br>Carrying<br>Amount |
|-----------------------------------|-----------------------------|-----------------------------|--|---------------------------|
|                                   | (Dollars in Thousands)      |                             |  |                           |
| September 30, 2016:               |                             |                             |  |                           |
| Technology and patents            | \$7,868                     | \$ (2,628 )                 |  | \$ 5,240                  |
| In process research & development | 3,097                       | —                           |  | \$ 3,097                  |
| Customer relationships            | 753                         | (23 )                       |  | \$ 730                    |
| Total                             | \$11,718                    | \$ (2,651 )                 |  | \$ 9,067                  |
| June 30, 2016:                    |                             |                             |  |                           |
| Technology and patents            | \$3,696                     | \$ (2,596 )                 |  | \$ 1,100                  |
| In process research & development | \$3,200                     | \$ —                        |  | \$ 3,200                  |
| Customer relationships            | \$700                       | \$ —                        |  | \$ 700                    |
| Total                             | \$7,596                     | \$ (2,596 )                 |  | \$ 5,000                  |

Total amortization expense related to intangible assets is included in operating expenses and amounted to less than \$0.1 million and \$0.1 million for the three months ended September 30, 2016 and September 30, 2015, respectively. Amortization expense is expected to be approximately \$0.7 million in fiscal 2017, \$1.2 million in fiscal 2018, \$1.2 million in fiscal 2019, \$1.2 million in fiscal 2020, \$1.2 million in fiscal 2021, and \$3.6 million thereafter.

## 9. Goodwill

The changes in the carrying amount of goodwill for our subscription and software reporting unit during the three months ended September 30, 2016 was as follows:

|  | Gross<br>Carrying<br>Amount | Accumulated<br>impairment<br>losses | Effect of<br>currency<br>translation | Net<br>Carrying<br>Amount |
|--|-----------------------------|-------------------------------------|--------------------------------------|---------------------------|
|  | (Dollars in Thousands)      |                                     |                                      |                           |
| Goodwill, net, at June 30, 2016        | \$89,007                    | \$ (65,569 )                        | \$ —                                 | \$23,438                  |
| Goodwill from acquisition              | 2,000                       | —                                   | —                                    | 2,000                     |
| Subsequent Fidelis goodwill adjustment | (78 )                       | —                                   | —                                    | (78 )                     |
| Foreign currency translation and other | —                           | —                                   | (82 )                                | (82 )                     |
| Goodwill, net, at September 30, 2016   | \$90,929                    | \$ (65,569 )                        | \$ (82 )                             | \$25,278                  |

No triggering events indicating goodwill impairment occurred during the three months ended September 30, 2016.

## 10. Accrued Expenses and Other Liabilities

Accrued expenses and other current liabilities in the accompanying unaudited consolidated balance sheets consist of the following:

|  | September 30,<br>2016  | June 30,<br>2016 |
|--|------------------------|------------------|
|  | (Dollars in Thousands) |                  |
| Royalties and outside commissions                    | \$ 2,657               | \$ 2,640         |
| Payroll and payroll-related                          | 11,247                 | 17,809           |
| Other  | 16,064                 | 15,656           |
| Total accrued expenses and other current liabilities | \$ 29,968              | \$ 36,105        |

Other non-current liabilities in the accompanying unaudited consolidated balance sheets consist of the following:

|                                     | September 30,          | June 30,  |
|-------------------------------------|------------------------|-----------|
|                                     | 2016                   | 2016      |
|                                     | (Dollars in Thousands) |           |
| Deferred rent                       | \$ 6,516               | \$ 6,361  |
| Uncertain tax positions             | 20,778                 | 23,535    |
| Other                               | 6,473                  | 2,695     |
| Total other non-current liabilities | \$ 33,767              | \$ 32,591 |

#### 11. Credit Agreement

On February 26, 2016, we entered into a \$250.0 million Credit Agreement (the “Credit Agreement”) with JPMorgan Chase Bank, N.A., as administrative agent, Silicon Valley Bank, as syndication agent, and the lenders and other parties named therein (the “Lenders”). The indebtedness evidenced by the Credit Agreement matures on February 26, 2021. Prior to the maturity of the Credit Agreement, any amounts borrowed may be repaid and, subject to the terms and conditions of the Credit Agreement, borrowed again in whole or in part without penalty. As of September 30, 2016, we had \$140.0 million in outstanding borrowings under the Credit Agreement. Debt issuance costs related to the Credit Agreement were recorded in prepaid expenses and other current assets in our consolidated balance sheet.



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Borrowings under the Credit Agreement bear interest at a rate equal to either, at our option, the sum of (a) the highest of (1) the rate of interest publicly announced by JPMorgan Chase Bank, N.A. as its prime rate in effect, (2) the Federal Funds Effective Rate plus 0.5%, and (3) the one-month Adjusted LIBO Rate plus 1.0%, plus (b) a margin initially of 0.5% for the first full fiscal quarter ending after the date of the Credit Agreement and thereafter based on our Leverage Ratio; or the Adjusted LIBO Rate plus a margin initially of 1.5% for the first full fiscal quarter ending after the date of the Credit Agreement and thereafter based on our Leverage Ratio. We must also pay, on a quarterly basis, an unused commitment fee at a rate of between 0.2% and 0.3% per annum, based on our Leverage Ratio. The interest rate as of September 30, 2016 was 2.03%.

All borrowings under the Credit Agreement are secured by liens on substantially all of our assets. The Credit Agreement contains affirmative and negative covenants customary for facilities of this type, including restrictions on: incurrence of additional debt; liens; fundamental changes; asset sales; restricted payments; and transactions with affiliates. The Credit Agreement contains financial covenants regarding maintenance as of the end of each fiscal quarter, commencing with the quarter ending June 30, 2016, of a maximum Leverage Ratio of 3.0 to 1.0 and a minimum Interest Coverage Ratio of 3.0 to 1.0. As of September 30, 2016 we were in compliance with these covenants.

## 12. Stock-Based Compensation

The weighted average estimated fair value of option awards granted during the three months ended September 30, 2016 and 2015 was \$12.96 and \$13.59, respectively.

We utilized the Black-Scholes option valuation model with the following weighted average assumptions:

|                            | Three Months<br>Ended<br>September 30,<br>2016 |        | 2015 |  |
|----------------------------|--|--------|------|--|
| Risk-free interest rate    | 1.1 %  | 1.4 %  |      |  |
| Expected dividend yield    | 0.0 %  | 0.0 %  |      |  |
| Expected life (in years)   | 4.6  | 4.6    |      |  |
| Expected volatility factor | 31.5 %   | 34.1 % |      |  |

The stock-based compensation expense and its classification in the unaudited consolidated statements of operations for the three months ended September 30, 2016 and 2015 are as follows:

|                                | Three Months Ended<br>September 30,<br>2016 |          | 2015 |  |
|--------------------------------|---|----------|------|--|
|                                | (Dollars in Thousands)                      |          |      |  |
| Recorded as expenses:          |   |          |      |  |
| Cost of services and other     | \$ 369                                      | \$ 357   |      |  |
| Selling and marketing          | 955   | 912      |      |  |
| Research and development       | 1,062                                       | 824      |      |  |
| General and administrative     | 2,572                                       | 2,330    |      |  |
| Total stock-based compensation | \$ 4,958                                    | \$ 4,423 |      |  |



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A summary of stock option and RSU activity under all equity plans for the three months ended September 30, 2016 is as follows:

|  | Stock Options |                                 |   |                                      | Restricted Stock Units |  |
|--|---------------|---------------------------------|---|--------------------------------------|------------------------|--|
|  | Shares        | Weighted Average Exercise Price | Weighted Average Remaining Contractual Term | Aggregate Intrinsic Value (in 000's) | Shares                 | Weighted Average Grant Date Fair Value |
| Outstanding at June 30, 2016                         | 1,314,142     | \$ 32.47                        | 7.23  | \$ 12,340                            | 493,332                | \$ 41.06                               |
| Granted  | 451,877       | 45.43                           |   |                                      | 399,684                | 45.44                                  |
| Settled (RSUs)                                       | —             |                                 |   |                                      | (85,469 )              | 41.86                                  |
| Exercised  | (129,147 )    | 24.34                           |   |                                      | —                      |  |
| Cancelled / Forfeited                                | (35,905 )     | 38.62                           |   |                                      | (29,432 )              | 42.25                                  |
| Outstanding at September 30, 2016                    | 1,600,967     | \$ 36.65                        | 7.92  | \$ 16,242                            | 778,115                | \$ 43.18                               |
| Vested and exercisable at September 30, 2016         | 793,402       | \$ 29.79                        | 6.61  | \$ 13,493                            | —                      |  |
| Vested and expected to vest as of September 30, 2016 | 1,518,819     | \$ 36.26                        | 7.86  | \$ 16,001                            | 695,341                | \$ 43.12                               |

The weighted average grant-date fair value of RSUs granted during the three months ended September 30, 2016 and 2015 was \$45.44 and \$44.33, respectively. During the three months ended September 30, 2016 and 2015, the total fair value of shares vested from RSU grants was \$4.0 million and \$3.4 million, respectively.

At September 30, 2016, the total future unrecognized compensation cost related to stock options was \$9.3 million and is expected to be recorded over a weighted average period of 3.1 years. At September 30, 2016, the total future unrecognized compensation cost related to RSUs was \$30.1 million and is expected to be recorded over a weighted average period of 3.1 years.

The total intrinsic value of options exercised during the three months ended September 30, 2016 and 2015 was \$2.7 million and \$0.9 million, respectively. We received \$3.1 million and \$0.6 million in cash proceeds from option exercises during the three months ended September 30, 2016 and 2015, respectively. We withheld \$1.3 million and \$1.1 million for withholding taxes on vested RSUs during the three months ended September 30, 2016 and 2015, respectively.

At September 30, 2016, common stock reserved for future issuance or settlement under equity compensation plans was 5.1 million shares.

### 13. Stockholders' Deficit

#### Stock Repurchases

On January 28, 2015, our Board of Directors approved a share repurchase program for up to \$450.0 million worth of our common stock. On April 26, 2016, the Board of Directors approved a \$400.0 million increase in the share repurchase plan. The timing and amount of any shares repurchased are based on market conditions and other factors. All shares of our common stock repurchased have been recorded as treasury stock under the cost method.

On August 29, 2016, as part of our common stock repurchase program, we entered into an accelerated share repurchase program (the "ASR Program") with a third-party financial institution. Pursuant to the terms of the ASR Program, we made an upfront payment of \$100.0 million in exchange for an initial delivery of approximately 1.76

million shares of our common stock, representing 80% of the total shares ultimately expected to be delivered over the program's term. The initial shares received, which had an aggregate cost of \$80.0 million based on the August 29, 2016 closing share price, were recorded as an increase to treasury stock. As of September 30, 2016, \$20.0 million, representing the difference between the upfront \$100.0 million payment and the \$80.0 million cost of the initial share delivery, was recorded as a reduction to additional paid-in capital in our consolidated balance sheet.

At the ASR Program's conclusion, the financial institution may be required to deliver additional shares of common stock to us, or, under certain circumstances, we may be required to, at our election, deliver shares of our common stock or make a cash payment to the financial institution. Final settlement of the ASR Program is expected to occur during the second quarter of

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fiscal 2017, with the number of shares to be delivered, or the amount of any cash payment to be made, determined based on the volume-weighted average price per share of our common stock over the term of the ASR Program, less an agreed-upon discount.

During the three months ended September 30, 2016 we repurchased 1,138,858 and 1,757,855 shares of our common stock for \$50.0 million and \$80.0 million in the open market and as part of the ASR Program, respectively.

As of September 30, 2016, the total remaining value under the share repurchase program approved on January 28, 2015 and amended on April 26, 2016 was approximately \$371.3 million.

#### Accumulated Other Comprehensive Income

As of September 30, 2016, accumulated other comprehensive income was comprised of foreign currency translation adjustments of \$1.8 million and net unrealized losses on available for sale securities of less than \$0.1 million. As of September 30, 2015, accumulated other comprehensive income was comprised of foreign currency translation adjustments of \$4.8 million and net unrealized gains on available for sale securities of less than \$0.1 million.

As of June 30, 2016, accumulated other comprehensive income was comprised of foreign currency translation adjustments of \$2.7 million and net unrealized losses on available for sale securities of less than \$0.1 million. As of June 30, 2015, accumulated other comprehensive income was comprised of foreign currency translation adjustments of \$6.5 million and net unrealized losses on available for sale securities of less than \$0.1 million.

#### 14. Net Income Per Share

Basic income per share is determined by dividing net income by the weighted average common shares outstanding during the period. Diluted income per share is determined by dividing net income by diluted weighted average shares outstanding during the period. Diluted weighted average shares reflect the dilutive effect, if any, of potential common shares. To the extent their effect is dilutive, employee equity awards and other commitments to be settled in common stock are included in the calculation of diluted net income per share based on the treasury stock method.

The calculations of basic and diluted net income per share and basic and dilutive weighted average shares outstanding for the three months ended September 30, 2016 and 2015 are as follows:

|  | Three Months Ended<br>September 30,                      |           |
|--|--|-----------|
|  | 2016   | 2015      |
|  | (Dollars and Shares in Thousands, Except per Share Data) |           |
| Net income                                   | \$ 35,000  | \$ 36,771 |
| Weighted average shares outstanding          | 79,048   | 83,876    |
| Dilutive impact from:                        |  |           |
| Share-based payment awards                   | 337  | 444       |
| Dilutive weighted average shares outstanding | 79,385   | 84,320    |
| Income per share                             |  |           |
| Basic  | \$ 0.44  | \$ 0.44   |
| Dilutive                                     | \$ 0.44  | \$ 0.44   |

For the three months ended September 30, 2016 and 2015, certain employee equity awards were anti-dilutive based on the treasury stock method. Additionally, options to purchase 762,113 shares of our common stock were not included in the computation of dilutive weighted average shares outstanding, as of September 30, 2016, because their exercise prices ranged from \$44.38 per share to \$47.40 per share and were greater than the average market price of our common stock during the periods then ended. These options were outstanding as of September 30, 2016 and expire at various dates through June 30, 2020.

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The following employee equity awards were excluded from the calculation of dilutive weighted average shares outstanding because their effect would be anti-dilutive as of September 30, 2016 and 2015:

|                        | Three Months Ended<br>September 30,<br>2016      2015<br>(Shares in Thousands) |       |
|------------------------|--|-------|
| Employee equity awards | 1,535  | 1,187 |

## 15. Income Taxes

The effective tax rate for the periods presented was primarily the result of income earned in the U.S., taxed at U.S. federal and state statutory income tax rates, income earned in foreign tax jurisdictions taxed at the applicable rates, as well as the impact of permanent differences between book and tax income.

Our effective tax rate for the three months ended September 30, 2016 was 36.1% as compared to 34.8% for the corresponding period of the prior fiscal year. Our effective tax rate increased for the three months ended September 30, 2016 compared to the same period in 2015 primarily due to an increase in the uncertain tax positions liability. During the three months ended September 30, 2016 and 2015, our income tax expense was driven primarily by pre-tax profitability in our domestic and foreign operations, the impact of permanent items, and an increase in the uncertain tax positions liability mentioned above. The permanent items are predominantly a U.S. domestic production activity deduction being slightly offset by non-deductible stock-based compensation expense.

We use the “with and without” ordering approach to calculate our tax provision when necessary. This methodology requires us to utilize all other tax attributes before recognizing excess tax benefits. Excess tax benefits are generated when the deductible value of stock-based compensation for income tax purposes exceeds the value recognized for financial statement purposes. Excess tax benefits are not included as a component of deferred tax assets. When realized, excess tax benefits reduce income taxes payable and increase additional paid in capital. In our unaudited consolidated statements of cash flows, the excess tax benefits of \$0.6 million and \$1.6 million were reported as sources of cash flows from financing activities with offsetting reductions to cash flows from operating activities during the three months ended September 30, 2016 and 2015, respectively.

Deferred income taxes are recognized based on temporary differences between the financial statement and tax bases of assets and liabilities. Deferred tax assets and liabilities are measured using the statutory tax rates and laws expected to apply to taxable income in the years in which the temporary differences are expected to reverse. Valuation allowances are provided against net deferred tax assets if, based upon the available evidence, it is more likely than not that some or all of the deferred tax assets will not be realized. The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income and the timing of the temporary differences becoming deductible. Management considers, among other available information, scheduled reversals of deferred tax liabilities, projected future taxable income, limitations of availability of net operating loss carryforwards, and other matters in making this assessment.

We do not provide deferred taxes on unremitted earnings of foreign subsidiaries since we intend to indefinitely reinvest those earnings either currently or sometime in the foreseeable future. Unrecognized provisions for taxes on undistributed earnings of foreign subsidiaries, which are considered indefinitely reinvested, are not material to our consolidated financial position or results of operations.

## 16. Commitments and Contingencies

## Operating Leases

We lease certain facilities under non-cancellable operating leases with terms in excess of one year. Rental expense on leased facilities under operating leases was approximately \$2.2 million and \$2.1 million during the three months ended September 30, 2016 and 2015, respectively.

Standby letters of credit for \$3.0 million as of September 30, 2016 secure our performance on professional services contracts, certain facility leases and potential liabilities. This is a decrease from \$3.5 million as of June 30, 2016. The letters of credit expire at various dates through fiscal 2018.



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## Legal Matters

In the ordinary course of business, we are, from time to time, involved in lawsuits, claims, investigations, proceedings and threats of litigation. These matters include an April 2004 claim by a customer that certain of our software products and implementation services failed to meet the customer's expectations. In March 2014, a judgment was issued by the trial court against us in the amount of approximately 1.9 million Euro ("€") plus interest and a portion of legal fees. We subsequently filed an appeal of that judgment. As of September 2016, the appellate court determined that we are liable for damages in the amount of approximately €1.7 million plus interest, with the possibility of additional damages to be determined in further proceedings by the appellate court.

While the outcome of the proceedings and claims referenced above cannot be predicted with certainty, there were no such matters, as of September 30, 2016 that, in the opinion of management, are reasonably possible to have a material adverse effect on our financial position, results of operations or cash flows. Liabilities, if applicable, related to the aforementioned matters discussed in this Note have been included in our accrued liabilities at September 30, 2016, and are not material to our financial position for the period then ended. As of September 30, 2016, we do not believe that there is a reasonable possibility of a material loss exceeding the amounts already accrued for the proceedings or matters discussed above. However, the results of litigation (including the above-referenced appeal) and claims cannot be predicted with certainty; unfavorable resolutions are possible and could materially affect our results of operations, cash flows or financial position. In addition, regardless of the outcome, litigation could have an adverse impact on us because of attorneys' fees and costs, diversion of management resources and other factors.

## 17. Segment Information

Operating segments are defined as components of an enterprise that engage in business activities for which discrete financial information is available and regularly reviewed by the chief operating decision maker in deciding how to allocate resources and to assess performance. Our chief operating decision maker is our President and Chief Executive Officer.

The subscription and software segment is engaged in the licensing of process optimization software solutions and associated support services. The services segment includes professional services and training. We do not track assets or capital expenditures by operating segments. Consequently, it is not practical to present assets, capital expenditures, depreciation or amortization by operating segments.

The following table presents a summary of our reportable segments' profits:

|                                       | Subscription<br>and software | Services | Total     |
|---------------------------------------|------------------------------|----------|-----------|
|                                       | (Dollars in Thousands)       |          |           |
| Three Months Ended September 30, 2016 |                              |          |           |
| Segment revenue                       | \$113,444                    | \$6,606  | \$120,050 |
| Segment expenses (1)                  | (45,726 )                    | (6,437 ) | (52,163 ) |
| Segment profit                        | \$67,718                     | \$169    | \$67,887  |
| Three Months Ended September 30, 2015 |                              |          |           |
| Segment revenue                       | \$111,859                    | \$8,437  | \$120,296 |
| Segment expenses (1)                  | (44,275 )                    | (7,730 ) | (52,005 ) |
| Segment profit                        | \$67,584                     | \$707    | \$68,291  |

(1) Our reportable segments' operating expenses include expenses directly attributable to the segments. Segment expenses include selling and marketing, research and development, stock-based compensation and certain corporate

expenses incurred in support of the segments. Segment expenses do not include allocations of general and administrative; interest income, net; and other income, net.

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## Reconciliation to Income before Income Taxes

The following table presents a reconciliation of total segment profit to income before income taxes for the three months ended September 30, 2016 and 2015:

|  | Three Months Ended<br>September 30,<br>2016      2015<br>(Dollars in Thousands) |           |
|--|---|-----------|
| Total segment profit for reportable segments | \$ 67,887   | \$ 68,291 |
| General and administrative                   | (13,157 )   | (12,862 ) |
| Other income, net                            | 646   | 896       |
| Interest income (expense), net               | (597 )  | 81        |
| Income before income taxes                   | \$ 54,779   | \$ 56,406 |

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### Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.

You should read the following discussion in conjunction with our unaudited consolidated financial statements and related notes thereto contained in this report. In addition to historical information, this discussion contains forward-looking statements that involve risks and uncertainties. You should read "Item 1A. Risk Factors," of Part II for a discussion of important factors that could cause our actual results to differ materially from our expectations.

Our fiscal year ends on June 30th, and references in this Quarterly Report to a specific fiscal year are to the twelve months ended June 30<sup>th</sup> of such year (for example, "fiscal 2017" refers to the year ending on June 30, 2017).

#### Recent Events

On October 26, 2016, we completed the acquisition of all the outstanding shares of Mtelligence Corporation ("Mtelligence"), a California-based provider of predictive and prescriptive maintenance software and related services used to optimize asset performance, for total cash consideration of \$37.4 million. The purchase price consisted of \$31.9 million of cash paid at closing and up to an additional \$5.5 million to be held back until April 2018 as security for certain obligations of the Sellers.

#### Business Overview

We are a leading global provider of process optimization software solutions designed to manage and optimize plant and process design, operational performance, and supply chain planning. Our aspenONE software and related services have been developed specifically for companies in the process industries, including the energy, chemicals, and engineering and construction industries. Customers use our solutions to improve their competitiveness and profitability by increasing throughput and productivity, reducing operating costs, enhancing capital efficiency, and decreasing working capital requirements.

Our software incorporates our proprietary mathematical and empirical models of manufacturing and planning processes and reflects the deep domain expertise we have amassed from focusing on solutions for the process industries for over 35 years. We have developed our applications to design and optimize processes across three principal business areas: engineering, manufacturing and supply chain. We are a recognized market and technology leader in providing process optimization software for each of these business areas.

We have established sustainable competitive advantages within our industry based on the following strengths:

- Innovative products that can enhance our customers' profitability;
- Long-term customer relationships;
- Large installed base of users of our software; and
- Long-term license contracts.

We have approximately 2,100 customers globally. Our customers consist of companies engaged in process industries such as energy, chemicals, engineering and construction, as well as consumer packaged goods, power, metals and mining, pulp and paper, pharmaceuticals and biofuels.

#### Business Segments

We have two operating and reportable segments: i) subscription and software and ii) services. The subscription and software segment is engaged in the licensing of process optimization software solutions and associated support services. The services segment includes professional services and training.

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### Key Components of Operations

#### Revenue

We generate revenue primarily from the following sources:

**Subscription and Software Revenue.** We sell our software products to end users primarily under fixed-term licenses. We license our software products primarily through a subscription offering which we refer to as our aspenONE licensing model. Our aspenONE products are organized into two suites: 1) engineering, and 2) manufacturing and supply chain, or MSC. The aspenONE licensing model provides customers with access to all of the products within the aspenONE suite(s) they license. Customers can change or alternate the use of multiple products in a licensed suite through the use of exchangeable units of measurement, called tokens, licensed in quantities determined by the customer. This licensing system enables customers to use products as needed and to experiment with different products to best solve whatever critical business challenges they face. Customers can increase their usage of our software by purchasing additional tokens as business needs evolve.

We provide customers technical support, access to software fixes and updates and the right to any new unspecified future software products and updates that may be introduced into the licensed aspenONE software suite. Our technical support services are provided from our customer support centers throughout the world, as well as via email and through our support website.

We also license our software through point product arrangements with our Premier Plus SMS offering included for the contract term, as well as perpetual license arrangements.

**Services and Other Revenue.** We provide training and professional services to our customers. Our professional services are focused on implementing our technology in order to improve customers' plant performance and gain better operational data. Customers who use our professional services typically engage us to provide those services over periods of up to 24 months. We charge customers for professional services on a time-and-materials or fixed-price basis. We provide training services to our customers, including on-site, Internet-based and customized training. Our services and other revenue consists of revenue related to professional services and training. The amount and timing of this revenue depend on a number of factors, including:

- whether the professional services arrangement was sold as a single arrangement with, or in contemplation of, a new aspenONE licensing arrangement;
- the number, value and rate per hour of service transactions booked during the current and preceding periods;
- the number and availability of service resources actively engaged on billable projects;
- the timing of milestone acceptance for engagements contractually requiring customer sign-off;
- the timing of collection of cash payments when collectability is uncertain;
- and
- the size of the installed base of license contracts.

#### Cost of Revenue

**Cost of Subscription and Software.** Our cost of subscription and software revenue consists of (i) royalties, (ii) amortization of capitalized software and purchased technology intangibles, (iii) distribution fees, and (iv) costs of providing Premier Plus SMS bundled with our aspenONE licensing and point product arrangements.

**Cost of Services and Other.** Our cost of services and other revenue consists primarily of personnel-related and external consultant costs associated with providing customers professional services and training.

#### Operating Expenses

**Selling and Marketing Expenses.** Selling expenses consist primarily of the personnel and travel expenses related to the effort expended to license our products and services to current and potential customers, as well as for overall management of customer relationships. Marketing expenses include expenses needed to promote our company and our products and to conduct market research to help us better understand our customers and their business needs.

**Research and Development Expenses.** Research and development expenses consist primarily of personnel expenses related to the creation of new software products, enhancements and engineering changes to existing products and costs of acquired technology prior to establishing technological feasibility.



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**General and Administrative Expenses.** General and administrative expenses include the costs of corporate and support functions, such as executive leadership and administration groups, finance, legal, human resources and corporate communications, and other costs, such as outside professional and consultant fees and provision for bad debts.

**Other Income and Expenses**

**Interest Income.** Interest income is recorded for the accretion of interest on the investment in marketable securities and short-term money market instruments.

**Interest Expense.** During the three months ended September 30, 2016, interest expense is primarily related to our Credit Agreement. During the three months ended September 30, 2015, interest expense was comprised of miscellaneous interest charges.

**Other Income, Net.** Other income, net is comprised primarily of foreign currency exchange gains (losses) generated from the settlement and remeasurement of transactions denominated in currencies other than the functional currency of our operating units.

**Provision for Income Taxes.** Provision for income taxes is comprised of domestic and foreign taxes. Benefits from income taxes are comprised of any deferred benefit for tax deductions and credits that we expect to utilize in the future. We record interest and penalties related to income tax matters as a component of income tax expense. We expect the amount of income tax expense to vary each reporting period depending upon fluctuations in our taxable income by jurisdiction.

**Key Business Metrics**

We utilize certain key non-GAAP and other business measures to track and assess the performance of our business and we make these measures available to investors. We have refined the set of appropriate business metrics in the context of our evolving business and use the following non-GAAP business metrics in addition to GAAP measures to track our business performance:

• Annual spend;

• Free cash flow; and

• Non-GAAP operating income.

None of these metrics should be considered as an alternative to any measure of financial performance calculated in accordance with GAAP.

**Annual Spend**

Annual spend is an estimate of the annualized value of our portfolio of term license arrangements, as of a specific date. Management believes that this financial measure is a useful metric to investors as it provides insight into the growth component of license bookings during a fiscal period. Annual spend is calculated by summing the most recent annual invoice value of each of our active term license contracts. Annual spend also includes the annualized value of standalone SMS agreements purchased in conjunction with term license agreements. Comparing annual spend for different dates can provide insight into the growth and retention rates of our business, and since annual spend represents the estimated annualized billings associated with our active term license agreements, it provides insight into the future value of subscription and software revenue.

Annual spend increases as a result of:

• New term license agreements with new or existing customers;

•

Renewals or modifications of existing term license agreements that result in higher license fees due to price escalation or an increase in the number of tokens (units of software usage) or products licensed; and

Escalation of annual payments in our active term license contracts.

Annual spend is adversely affected by term license and standalone SMS agreements that are not renewed.



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We estimate that annual spend grew by approximately 1.1% and 1.0% during the first quarter of fiscal 2017 and fiscal 2016, from \$441.4 million at June 30, 2016 to \$446.2 million at September 30, 2016 and from \$419.3 million at June 30, 2015 to \$423.4 million at September 30, 2015, respectively.

## Free Cash Flow

We use a non-GAAP measure of free cash flow to analyze cash flows generated from our operations. Management believes that this financial measure is useful to investors because it permits investors to view our performance using the same tools that management uses to gauge progress in achieving our goals. We believe this measure is also useful to investors because it is an indication of cash flow that may be available to fund investments in future growth initiatives or to repay borrowings under the credit agreement, and it is a basis for comparing our performance with that of our competitors. The presentation of free cash flow is not meant to be considered in isolation or as an alternative to cash flows from operating activities as a measure of liquidity.

Free cash flow is calculated as net cash provided by operating activities adjusted for the net impact of (a) purchases of property, equipment and leasehold improvements, (b) capitalized computer software development costs, (c) excess tax benefits from stock-based compensation, (d) non-capitalized acquired technology, and (e) other nonrecurring items, such as acquisition and litigation related payments.

The following table provides a reconciliation of net cash flows provided by operating activities to free cash flow for the indicated periods:

|  | Three Months Ended     |           |
|--|------------------------|-----------|
|  | September 30,          |           |
|  | 2016                   | 2015      |
|  | (Dollars in Thousands) |           |
| Net cash provided by operating activities                    | \$ 26,250              | \$ 18,446 |
| Purchases of property, equipment, and leasehold improvements | (898 )                 | (1,119 )  |
| Capitalized computer software development costs              | (51 )                  | —         |
| Excess tax benefits from stock-based compensation            | 584                    | 1,577     |
| Non-capitalized acquired technology                          | 846                    | 1,250     |
| Free cash flows (non-GAAP)                                   | \$ 26,731              | \$ 20,154 |

Total free cash flow on a non-GAAP basis increased by \$6.6 million during the three months ended September 30, 2016 as compared to the same period of the prior fiscal year primarily due to changes in working capital.

Excess tax benefits are related to stock-based compensation tax deductions in excess of book compensation expense and reduce our income taxes payable. We have included the impact of excess tax benefits in free cash flow to be consistent with the treatment of other tax activity.

In the three months ended September 30, 2016 and September 30, 2015, we acquired technology that did not meet the accounting requirements for capitalization and therefore the cost of the acquired technology was expensed as research and development. We have excluded the payment for the acquired technology from free cash flow to be consistent with transactions where the acquired technology assets were capitalized.

## Non-GAAP Operating Income

Non-GAAP income from operations excludes certain non-cash and non-recurring expenses, and is used as a supplement to operating income presented on a GAAP basis. We believe that non-GAAP operating income is a useful

financial measure because excluding non-recurring and certain non-cash items, provides additional insight into recurring profitability and cash flow from operations.

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The following table presents our operating income, as adjusted for stock-based compensation expense, non-capitalized acquired technology and amortization of purchased technology intangibles, and other nonrecurring items, such as acquisition related expenses, for the indicated periods:

|  | Three Months Ended |                    | 2016 Compared to 2015 |         |   |
|--|--------------------|--------------------|-----------------------|---------|---|
|  | September 30, 2016 | September 30, 2015 | \$                    | %       |   |
| GAAP income from operations                      | \$54,730           | \$55,429           | \$ (699 )             | (1.3 )  | % |
| Plus:  |                    |                    |                       |         |   |
| Stock-based compensation                         | 4,958              | 4,423              | 535                   | 12.1    | % |
| Non-capitalized acquired technology              | 350                | 250                | 100                   | 40.0    | % |
| Amortization of purchased technology intangibles | 55                 | 113                | (58 )                 | (51.3 ) | % |
| Acquisition related fees                         | 362                | —                  | 362                   | 100.0   | % |
| Non-GAAP income from operations                  | \$60,455           | \$60,215           | \$ 240                | 0.4     | % |

Non-GAAP operating income increased by \$0.2 million or approximately 0.4% in the three months ended September 30, 2016 as compared to the same period of the prior fiscal year.

In the three months ended September 30, 2016 and September 30, 2015, we acquired technology that did not meet the accounting requirements for capitalization and therefore the cost of the acquired technology was expensed as research and development. We have excluded the expense of the acquired technology from non-GAAP operating income to be consistent with transactions where the acquired assets were capitalized.

#### Critical Accounting Estimates and Judgments

Note 2, "Significant Accounting Policies" to the audited consolidated financial statements in our Annual Report on Form 10-K for the fiscal year ended June 30, 2016 describes the significant accounting policies and methods used in the preparation of the consolidated financial statements appearing in this report. The accounting policies that reflect our more significant estimates, judgments and assumptions in the preparation of our consolidated financial statements are described in "Management's Discussion and Analysis of Financial Condition and Results of Operations" in Item 7 of our Annual Report on Form 10-K for the fiscal year ended June 30, 2016, and include the following:

• revenue recognition;

• accounting for income taxes; and

• loss contingencies.

There were no significant changes to our critical accounting policies and estimates during the three months ended September 30, 2016.

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## Results of Operations

## Comparison of the Three Months Ended September 30, 2016

The following table sets forth the results of operations and the period-over-period percentage change in certain financial data for the three months ended September 30, 2016:

|  | Three Months Ended<br>September 30, |           | Increase /<br>(Decrease)<br>Change |   |
|--|-------------------------------------|-----------|------------------------------------|---|
|  | 2016                                | 2015      | %                                  |   |
|  | (Dollars in<br>Thousands)           |           |                                    |   |
| Revenue:                                 |                                     |           |                                    |   |
| Subscription and software                | \$113,444                           | \$111,859 | 1.4                                | % |
| Services and other                       | 6,606                               | 8,437     | (21.7)                             | % |
| Total revenue                            | 120,050                             | 120,296   | (0.2)                              | % |
| Cost of revenue:                         |                                     |           |                                    |   |
| Subscription and software                | 5,069                               | 5,242     | (3.3)                              | % |
| Services and other                       | 6,437                               | 7,730     | (16.7)                             | % |
| Total cost of revenue                    | 11,506                              | 12,972    | (11.3)                             | % |
| Gross profit                             | 108,544                             | 107,324   | 1.1                                | % |
| Operating expenses:                      |                                     |           |                                    |   |
| Selling and marketing                    | 22,025                              | 22,436    | (1.8)                              | % |
| Research and development                 | 18,632                              | 16,597    | 12.3                               | % |
| General and administrative               | 13,157                              | 12,862    | 2.3                                | % |
| Total operating expenses, net            | 53,814                              | 51,895    | 3.7                                | % |
| Income from operations                   | 54,730                              | 55,429    | (1.3)                              | % |
| Interest income                          | 272                                 | 82        | 231.7                              | % |
| Interest expense                         | (869)                               | (1)       | *                                  |   |
| Other income, net                        | 646                                 | 896       | (27.9)                             | % |
| Income before provision for income taxes | 54,779                              | 56,406    | (2.9)                              | % |
| Provision for income taxes               | 19,779                              | 19,635    | 0.7                                | % |
| Net income                               | \$35,000                            | \$36,771  | (4.8)                              | % |

\* Percentage is not meaningful.

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The following table sets forth the results of operations as a percentage of net revenue for certain financial data for the three months ended September 30, 2016:

|  | Three Months Ended |   |       |   |
|--|--------------------|---|-------|---|
|  | September 30, 2016 |   | 2015  |   |
| Revenue:                                 |                    |   |       |   |
| Subscription and software                | 94.5               | % | 93.0  | % |
| Services and other                       | 5.5                |   | 7.0   |   |
| Total revenue                            | 100.0              |   | 100.0 |   |
| Cost of revenue:                         |                    |   |       |   |
| Subscription and software                | 4.2                |   | 4.4   |   |
| Services and other                       | 5.4                |   | 6.4   |   |
| Total cost of revenue                    | 9.6                |   | 10.8  |   |
| Gross profit                             | 90.4               |   | 89.2  |   |
| Operating expenses:                      |                    |   |       |   |
| Selling and marketing                    | 18.3               |   | 18.7  |   |
| Research and development                 | 15.5               |   | 13.8  |   |
| General and administrative               | 11.0               |   | 10.6  |   |
| Total operating expenses, net            | 44.8               |   | 43.0  |   |
| Income from operations                   | 45.6               |   | 46.1  |   |
| Interest income                          | 0.2                |   | 0.1   |   |
| Interest expense                         | (0.7               | ) | (0.0  | ) |
| Other income, net                        | 0.5                |   | 0.7   |   |
| Income before provision for income taxes | 45.6               |   | 46.9  |   |
| Provision for income taxes               | 16.5               |   | 16.4  |   |
| Net income                               | 29.2               | % | 30.6  | % |

## Revenue

Total revenue decreased by \$0.2 million during the three months ended September 30, 2016 as compared to the corresponding period of the prior fiscal year. The decrease was primarily attributable to a decrease in services and other revenue of \$1.8 million, partially offset by an increase in subscription and software revenue of \$1.6 million.

During the three months ended September 30, 2015, we recognized revenue of \$2.9 million related to the completion of customer arrangements recognized under completed contract accounting. This amount was recognized as \$2.0 million of subscription and software revenue and \$0.9 million of services and other revenue. No such events occurred during the three months ended September 30, 2016.

## Subscription and Software Revenue

|                                   | Three Months Ended     |            | Period-to-Period |       |
|-----------------------------------|------------------------|------------|------------------|-------|
|                                   | September 30,          |            | Change           |       |
|                                   | 2016                   | 2015       | \$               | %     |
|                                   | (Dollars in Thousands) |            |                  |       |
| Subscription and software revenue | \$ 113,444             | \$ 111,859 | \$ 1,585         | 1.4 % |
| As a percent of revenue           | 94.5                   | % 93.0     |                  | %     |

The increase in subscription and software revenue during the three months ended September 30, 2016 as compared to the corresponding period of the prior fiscal year was primarily the result of the growth of our base of license arrangements being recognized on a ratable basis. In the three months ended September 30, 2015, we recognized revenue of \$2.0 million related to the completion of customer arrangements recognized under completed contract accounting, as noted above. No such events occurred during the three months ended September 30, 2016. Adjusting for the impact of the \$2.0 million of revenue from

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completed customer contracts in the three months ended September 30, 2016, revenue increased by \$2.6 million or 2.3%, period over period.

We expect subscription and software revenue to continue to increase during fiscal 2017 as a result of: (i) having a larger base of license arrangements recognized on a ratable basis; (ii) increased customer usage of our software; (iii) adding new customers; and (iv) escalating annual payments.

## Services and Other Revenue

|                            | Three Months Ended     |                    | Period-to-Period Change |         |
|----------------------------|------------------------|--------------------|-------------------------|---------|
|                            | September 30, 2016     | September 30, 2015 | \$                      | %       |
|                            | (Dollars in Thousands) |                    |                         |         |
| Services and other revenue | \$6,606                | \$8,437            | \$(1,831)               | (21.7)% |
| As a percent of revenue    | 5.5                    | % 7.0              | %                       |         |

Services and other revenue consists primarily of revenue related to professional services and training.

Services and other revenue decreased by \$1.8 million during the three months ended September 30, 2016 as compared to the corresponding period of the prior fiscal year. The decrease was primarily attributable to the timing of professional service arrangements.

Professional services revenue for the three months ended September 30, 2015 included recognition of \$0.9 million of revenue related to customer contracts recognized under completed contract accounting, as noted above, no such events occurred during the three months ended September 30, 2016.

Under the aspenONE licensing model, revenue from committed professional service arrangements that are sold as a single arrangement with, or in contemplation of, a new aspenONE licensing transaction is deferred and recognized on a ratable basis over the longer of (a) the period the services are performed or (b) the term of the related software arrangement. As our typical contract term approximates five years, professional services revenue on these types of arrangements will usually be recognized over a longer period than the period over which the services are performed.

## Gross Profit

Gross profit increased from \$107.3 million million during the three months ended September 30, 2015 to \$108.5 million during the corresponding period of the current fiscal year. The period-over-period increase in gross profit was primarily attributable to the growth of our subscription and software revenue of \$1.6 million.

Gross profit margin increased from 89.2% during the three months ended September 30, 2015 to 90.4% during the corresponding period of the current fiscal year. For further discussion of subscription and software gross profit and services and other gross profit, please refer to the “Cost of Subscription and Software Revenue” and “Cost of Services and Other Revenue” sections below.

## Expenses

## Cost of Subscription and Software Revenue

|   | Three Months Ended     |                    | Period-to-Period Change |        |
|---|------------------------|--------------------|-------------------------|--------|
|   | September 30, 2016     | September 30, 2015 | \$                      | %      |
|   | (Dollars in Thousands) |                    |                         |        |
| Cost of subscription and software revenue | \$5,069                | \$5,242            | \$(173)                 | (3.3)% |
| As a percent of revenue                   | 4.2                    | % 4.4              | %                       |        |



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Cost of subscription and software revenue was consistent for the three months ended September 30, 2016 as compared to the corresponding period of the prior fiscal year.

Subscription and software gross profit margin was 95.5% and 95.3% during the three months ended September 30, 2016 and 2015, respectively.

## Cost of Services and Other Revenue

|                                    | Three Months Ended September 30, |         | Period-to-Period Change |         |
|------------------------------------|----------------------------------|---------|-------------------------|---------|
|                                    | 2016                             | 2015    | \$                      | %       |
|                                    | (Dollars in Thousands)           |         |                         |         |
| Cost of services and other revenue | \$6,437                          | \$7,730 | \$(1,293)               | (16.7)% |
| As a percent of revenue            | 5.4                              | % 6.4   |                         | %       |

Cost of services and other revenue includes the cost of providing professional services and training.

The period-over-period decrease in cost of services and other revenue of \$1.3 million during the three months ended September 30, 2016 was primarily attributable to the timing of professional service arrangements and cost of revenue for projects accounted for under the completed contract method.

Cost of services and other revenue during the three months ended September 30, 2015 included the recognition of \$0.6 million of costs related to customer contracts recognized under completed contract accounting, as noted above, no such events occurred during the three months ended September 30, 2016.

The timing of revenue and expense recognition on professional service arrangements can impact the comparability of cost and gross profit margin of professional services revenue from year to year.

Gross profit margin on services and other revenue of 2.6% for the three months ended September 30, 2016 decreased from the 8.4% for the corresponding period of the prior fiscal year, primarily due to lower revenue of \$1.8 million.

## Selling and Marketing Expense

|                               | Three Months Ended September 30, |          | Period-to-Period Change |        |
|-------------------------------|----------------------------------|----------|-------------------------|--------|
|                               | 2016                             | 2015     | \$                      | %      |
|                               | (Dollars in Thousands)           |          |                         |        |
| Selling and marketing expense | \$22,025                         | \$22,436 | \$(411)                 | (1.8)% |
| As a percent of revenue       | 18.3                             | % 18.7   |                         | %      |

The period-over-period decrease of \$0.4 million in selling and marketing expense during the three months ended September 30, 2016 was primarily attributable to lower compensation costs of \$0.5 million.

## Research and Development Expense

|  | Three Months Ended September 30, |      | Period-to-Period Change |   |
|--|----------------------------------|------|-------------------------|---|
|  | 2016                             | 2015 | \$                      | % |

(Dollars in Thousands)

|                                  |          |          |         |        |
|----------------------------------|----------|----------|---------|--------|
| Research and development expense | \$18,632 | \$16,597 | \$2,035 | 12.3 % |
| As a percent of revenue          | 15.5     | %        | 13.8    | %      |

The period-over-period increase of \$2.0 million in research and development expense during the three months ended September 30, 2016 was primarily attributable to higher compensation costs of \$0.9 million and higher overhead allocations of \$0.8 million.

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In the three months ended September 30, 2016 and September 30, 2015, we acquired technology for \$0.4 million and \$0.3 million, respectively. At the time we acquired the technology, the projects to develop commercially available products did not meet the accounting definition of having reached technological feasibility and therefore the cost of the acquired technology was expensed as a research and development expense.

## General and Administrative Expense

|                                    | Three Months Ended     |          | Period-to-Period |       |
|------------------------------------|------------------------|----------|------------------|-------|
|                                    | September 30,          |          | Change           |       |
|                                    | 2016                   | 2015     | \$               | %     |
|                                    | (Dollars in Thousands) |          |                  |       |
| General and administrative expense | \$13,157               | \$12,862 | \$ 295           | 2.3 % |
| As a percent of revenue            | 11.0                   | % 10.6   | %                |       |

The period-over-period increase of \$0.3 million in general and administrative expense during the three months ended September 30, 2016 was primarily attributable to higher consulting costs of \$0.8 million and higher stock-based compensation of \$0.2 million, partially offset by lower compensation costs of \$0.8 million. The consulting costs incurred during the three months ended September 30, 2016, are primarily related to our evaluation and implementation of Accounting Standards Update (ASU) No. 2014-09, Revenue from Contracts with Customers (Topic 606).

## Interest Income

|                         | Three Months           |       | Period-to-Period |         |
|-------------------------|------------------------|-------|------------------|---------|
|                         | Ended                  |       | Change           |         |
|                         | September 30,          |       |                  |         |
|                         | 2016                   | 2015  | \$               | %       |
|                         | (Dollars in Thousands) |       |                  |         |
| Interest income         | \$272                  | \$82  | \$ 190           | 231.7 % |
| As a percent of revenue | 0.2                    | % 0.1 | %                |         |

The period-over-period increase of \$0.2 million in interest income during the three months ended September 30, 2016 was attributable to a higher level of interest income from investments.

## Interest Expense

|                         | Three Months           |       | Period-to-Period |   |
|-------------------------|------------------------|-------|------------------|---|
|                         | Ended                  |       | Change           |   |
|                         | September 30,          |       |                  |   |
|                         | 2016                   | 2015  | \$               | % |
|                         | (Dollars in Thousands) |       |                  |   |
| Interest expense        | \$(869)                | \$(1) | \$ (868 )        | * |
| As a percent of revenue | (0.7 )                 | % —   | %                |   |

\* Percentage is not meaningful.

The period-over-period increase of \$0.9 million in interest expense during the three months ended September 30, 2016 was attributable to interest expense related to our Credit Agreement, which we entered into in February 2016, as

described in the Liquidity and Capital Resources section below.

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## Other Income, net

|                         | Three Months Ended     |                    | Period-to-Period Change |         |
|-------------------------|------------------------|--------------------|-------------------------|---------|
|                         | September 30, 2016     | September 30, 2015 | \$                      | %       |
|                         | (Dollars in Thousands) |                    |                         |         |
| Other income, net       | \$646                  | \$896              | \$(250)                 | (27.9)% |
| As a percent of revenue | 0.5 %                  | 0.7 %              |                         |         |

Other income, net is comprised primarily of unrealized and realized foreign currency exchange gains and losses generated from the settlement and remeasurement of transactions denominated in currencies other than the functional currency of our operating units. Other income, net also includes miscellaneous non-operating gains and losses.

During the three months ended September 30, 2016 and 2015, other income, net was comprised of \$0.6 million and \$0.9 million of net currency gains, respectively.

## Provision for Income Taxes

|                            | Three Months Ended     |                    | Period-to-Period Change |       |
|----------------------------|------------------------|--------------------|-------------------------|-------|
|                            | September 30, 2016     | September 30, 2015 | \$                      | %     |
|                            | (Dollars in Thousands) |                    |                         |       |
| Provision for income taxes | \$19,779               | \$19,635           | \$ 144                  | 0.7 % |
| Effective tax rate         | 36.1 %                 | 34.8 %             |                         |       |

The effective tax rate for the periods presented is primarily the result of income earned in the U.S. taxed at U.S. federal and state statutory income tax rates, income earned in foreign tax jurisdictions taxed at the applicable rates, as well as the impact of permanent differences between book and tax income.

Our effective tax rate increased to 36.1% for the three months ended September 30, 2016 compared to 34.8% for the corresponding period of the prior fiscal year primarily due to an increase in the uncertain tax positions liability.

## Liquidity and Capital Resources

## Resources

In recent years, we have financed our operations with cash generated from operating activities. As of September 30, 2016, our principal sources of liquidity consisted of \$48.4 million in cash and cash equivalents and \$143.2 million of marketable securities. As of September 30, 2015, our principal sources of liquidity consisted of \$129.7 million in cash and cash equivalents and \$51.8 million of marketable securities.

We believe our existing cash and cash equivalents and marketable securities, together with our cash flows from operating activities, will be sufficient to meet our anticipated cash needs for at least the next twelve months. We may need to raise additional funds in the event we decide to make one or more acquisitions of businesses, technologies or products. If additional funding is required beyond existing resources and our Credit Agreement described below, we may not be able to effect a receivable, equity or debt financing on terms acceptable to us or at all.

## Credit Agreement

On February 26, 2016, we entered into a \$250.0 million Credit Agreement (the “Credit Agreement”) with various lenders. The Credit Agreement matures on February 26, 2021. Prior to the maturity of the Credit Agreement, any amounts borrowed may be repaid and, subject to the terms and conditions of the Credit Agreement, borrowed again whole or in part without penalty. As of September 30, 2016, we had \$140.0 million in outstanding borrowings under the Credit Agreement.

For a more detailed description of the Credit Agreement, see Note 11, Credit Agreement, to our Unaudited Consolidated Financial Statements in Item 1 of this Form 10-Q.

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## Cash Equivalents and Cash Flows

Our cash equivalents of \$30.8 million consist primarily of money market funds as of September 30, 2016. Our investments in marketable securities of \$143.2 million as of September 30, 2016 consist primarily of investment grade fixed income corporate debt securities with maturities ranging from less than 1 month to 8 months. The fair value of our portfolio is affected by interest rate movements, credit and liquidity risks. The objective of our investment policy is to manage our cash and investments to preserve principal and maintain liquidity, while earning a return on our investment portfolio by investing available funds. We diversify our investment portfolio by investing in multiple types of investment-grade securities and attempt to mitigate a risk of loss by using a third-party investment manager.

The following table summarizes our cash flow activities for the periods indicated:

|   | Three Months Ended<br>September 30, |            |
|---|-------------------------------------|------------|
|   | 2016                                | 2015       |
|   | (Dollars in Thousands)              |            |
| Cash flow provided by (used in):          |                                     |            |
| Operating activities                      | \$26,250                            | \$18,446   |
| Investing activities                      | (146,913 )                          | 9,251      |
| Financing activities                      | (149,245 )                          | (53,970 )  |
| Effect of exchange rates on cash balances | (51 )                               | (237 )     |
| Decrease in cash and cash equivalents     | \$(269,959)                         | \$(26,510) |

## Operating Activities

Our primary source of cash is from the annual installments associated with our software license arrangements and related software support services, and to a lesser extent from professional services and training. We believe that cash inflows from our term license business will grow as we benefit from the continued growth of our portfolio of term license contracts.

During fiscal 2016 and 2015, we utilized our tax credits and net operating losses to offset U.S. corporate income taxes payable. We became a U.S. corporate tax payer in fiscal year 2016.

Cash from operating activities provided \$26.3 million during the three months ended September 30, 2016. This amount resulted from net income of \$35.0 million, adjusted for non-cash items of \$6.0 million and net uses of cash of \$14.8 million related to changes in working capital.

Non-cash items consisted primarily of stock-based compensation expense of \$5.0 million, depreciation and amortization expense of \$1.8 million, net foreign currency gains of \$0.7 million, and other net items of \$0.1 million.

Cash used by working capital of \$14.8 million was primarily attributable to cash outflows related to decreases in deferred revenue of \$27.8 million (cash flows related to deferred revenue vary due to the timing of invoicing, in particular the anniversary dates of annual installments associated with multi-year software license arrangements) and increases in accounts receivable of \$1.4 million, partially offset by cash inflows related to increases in accounts payable, accrued expenses and other current liabilities of \$12.5 million and decreases in prepaid expenses, prepaid income taxes, and other assets of \$1.9 million.

### Investing Activities

During the three months ended September 30, 2016, we used \$146.9 million of cash for investing activities. We used \$193.7 million for purchases of marketable securities, \$5.4 million for acquisition related payments, \$0.9 million for capital expenditures and \$0.1 million for capitalized computer software development costs, partially offset by sources of cash of \$53.2 million resulting from the maturities of marketable securities.



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Financing Activities

During the three months ended September 30, 2016, we used \$149.2 million of cash for financing activities. We used \$151.6 million for repurchases of our common stock and \$1.3 million for withholding taxes on vested and settled restricted stock units, partially offset by proceeds of \$3.1 million from the exercise of employee stock options and \$0.6 million in excess tax benefits from stock-based compensation.

Contractual Obligations

Standby letters of credit for \$3.0 million as of September 30, 2016 secure our performance on professional services contracts, certain facility leases and potential liabilities. This is a decrease from \$3.5 million as of June 30, 2016. The letters of credit expire at various dates through fiscal 2018.

Recently Issued Accounting Pronouncements

Refer to Note 2 (g), “Recently Issued Accounting Pronouncements,” in the Notes to the Unaudited Consolidated Financial Statements for information about recent accounting pronouncements.

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Item 3. Quantitative and Qualitative Disclosures About Market Risk.

In the ordinary course of conducting business, we are exposed to certain risks associated with potential changes in market conditions. These market risks include changes in currency exchange rates and interest rates which could affect operating results, financial position and cash flows. We manage our exposure to these market risks through our regular operating and financing activities and, if considered appropriate, we may enter into derivative financial instruments such as forward currency exchange contracts.

Foreign Currency Risk

During the three months ended September 30, 2016 and 2015, 9.9% and 14.0% of our total revenue was denominated in a currency other than the U.S. dollar, respectively. In addition, certain of our operating costs incurred outside the United States are denominated in currencies other than the U.S. dollar. We conduct business on a worldwide basis and as a result, a portion of our revenue, earnings, net assets, and net investments in foreign affiliates is exposed to changes in foreign currency exchange rates. We measure our net exposure for cash balance positions and for cash inflows and outflows in order to evaluate the need to mitigate our foreign exchange risk. We may enter into foreign currency forward contracts to minimize the impact related to unfavorable exchange rate movements, although we have not done so during the three months ended September 30, 2016 and 2015. Our largest exposures to foreign currency exchange rates exist primarily with the Euro, Pound Sterling, Canadian Dollar, and Japanese Yen.

During the three months ended September 30, 2016 and 2015, we recorded \$0.6 million and \$0.9 million of net foreign currency exchange gains related to the settlement and remeasurement of transactions denominated in currencies other than the functional currency of our operating units. Our analysis of operating results transacted in various foreign currencies indicated that a hypothetical 10% change in the foreign currency exchange rates could have increased or decreased the consolidated results of operations by approximately \$1.2 million and \$1.3 million for the three months ended September 30, 2016 and 2015, respectively.

Interest Rate Risk

We place our investments in money market instruments and high quality, investment grade, fixed-income corporate debt securities that meet high credit quality standards, as specified in our investment guidelines.

We mitigate the risks by diversifying our investment portfolio, limiting the amount of investments in debt securities of any single issuer and using a third-party investment manager. Our debt securities are short- to intermediate- term investments with maturities ranging from less than 1 month to 8 months as of September 30, 2016 and from less than 1 month to 11 months as of September 30, 2015, respectively. We do not use derivative financial instruments in our investment portfolio.

Our analysis of our investment portfolio and interest rates at September 30, 2016 and 2015 indicated that a 100 basis point increase or decrease in interest rates would result in a decrease or increase of approximately \$0.3 million and \$0.2 million in the fair value of our investment portfolio at September 30, 2016 and 2015, respectively, determined in accordance with income-based approach utilizing portfolio future cash flows discounted at the appropriate rates.

We maintain a revolving Credit Agreement that allows us to borrow up to \$250.0 million. At September 30, 2016, we had \$140.0 million in outstanding borrowings under our Credit Agreement. A hypothetical 10% increase or decrease in interest rates paid on outstanding borrowings under the Credit Agreement would not have a material impact on our financial position, results of operations or cash flows.



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Item 4. Controls and Procedures

a) Disclosure Controls and Procedures

Our management, with the participation of our chief executive officer and chief financial officer, evaluated the effectiveness of our disclosure controls and procedures as of September 30, 2016. The term “disclosure controls and procedures,” as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act, means controls and other procedures of a company that are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Securities Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the SEC’s rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Securities Exchange Act is accumulated and communicated to the Company’s management, including its principal executive and principal financial officers, as appropriate to allow timely decisions regarding required disclosure. Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives, and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on the evaluation of our disclosure controls and procedures as of September 30, 2016, our chief executive officer and chief financial officer concluded that, as of such date, our disclosure controls and procedures were effective.

b) Changes in Internal Controls Over Financial Reporting

During the three months ended September 30, 2016, no changes were identified in our internal controls over financial reporting that materially affected, or were reasonably likely to materially affect, our internal controls over financial reporting.

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## PART II - OTHER INFORMATION

## Item 1. Legal Proceedings.

Refer to Note 16, "Commitments and Contingencies," in the Notes to the Unaudited Consolidated Financial Statements for information regarding certain legal proceedings, the contents of which are herein incorporated by reference.

## Item 1A. Risk Factors.

The risks described in Item 1A. Risk Factors, in our Annual Report on Form 10-K for the year ended June 30, 2016, could materially and adversely affect our business, financial condition and results of operations. These risk factors do not identify all risks that we face—our operations could also be affected by factors that are not presently known to us or that we currently consider to be immaterial to our operations. The Risk Factors section of our 2016 Annual Report on Form 10-K remains current in material respects, with the exception of the revised risk factors below.

Fluctuations in foreign currency exchange rates could result in declines in our reported revenue and operating results.

During the three months ended September 30, 2016 and 2015, 9.9% and 14.0% of our total revenue was denominated in a currency other than the U.S. dollar, respectively. In addition, certain of our operating expenses incurred outside the United States are denominated in currencies other than the U.S. dollar. Our reported revenue and operating results are subject to fluctuations in foreign exchange rates. Foreign currency risk arises primarily from the net difference between non-U.S. dollar receipts from customers outside the United States and non-U.S. dollar operating expenses for subsidiaries in foreign countries. Currently, our largest exposures to foreign exchange rates exist primarily with the Euro, Pound Sterling, Canadian dollar and Japanese Yen against the U.S. dollar. During the three months ended September 30, 2016 and 2015, we did not enter into, and were not a party to any, derivative financial instruments, such as forward currency exchange contracts, intended to manage the volatility of these market risks. We cannot predict the impact of foreign currency fluctuations, and foreign currency fluctuations in the future may adversely affect our revenue and operating results. Any hedging policies we may implement in the future may not be successful, and the cost of those hedging techniques may have a significant negative impact on our operating results.

## Item 2. Unregistered Sales of Equity Securities and Use of Proceeds.

The following table provides information about purchases by us during the three months ended September 30, 2016 of shares of our common stock:

| Period                  | Total Number of Shares Purchased (2) | Average Price Paid per Share (3) | Total Number of Shares Purchased as Part of Publicly Announced Program (1) | Approximate Dollar Value of Shares that May Yet Be Purchased Under the Program (4) |
|-------------------------|--------------------------------------|----------------------------------|--|--|
| July 1 to 31, 2016      | 374,599                              | \$ 41.69                         | 374,599  |  |
| August 1 to 31, 2016    | 2,165,129                            | \$ 45.24                         | 2,165,129  |  |
| September 1 to 30, 2016 | 356,985                              | \$ 46.00                         | 356,985  |  |
| Total                   | 2,896,713                            | \$ 44.88                         | 2,896,713  | \$ 371,292,667   |

(1) On January 28, 2015, our Board of Directors approved a share repurchase program for up to \$450 million worth of our common stock. On April 26, 2016, the Board of Directors approved a \$400 million increase in the share repurchase plan.

(2) As of September 30, 2016, the total number of shares of common stock repurchased under all programs approved by the Board of Directors was 24,750,723 shares, including purchases under the ASR Program. For a more detailed description of the ASR Program, see Note 13, Stockholders' Deficit, to our Unaudited Consolidated Financial Statements in Item 1 of this Form 10-Q.

(3) The total average price paid per share is calculated as the total amount paid for the repurchase of our common stock during the period divided by the total number of shares repurchased. During the period August 1 to 31, 2016, we received approximately 1.76 million shares of our common stock under the ASR Program, representing 80% of the total shares ultimately expected to be received over the program's term. The 1.76 million shares represented the initial shares received, which had an aggregate cost of \$80.0 million based on the August 29, 2016 closing share price of \$45.51. At the ASR Program's conclusion, the financial institution may be required to deliver additional shares of common stock to us, or, under

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certain circumstances, we may be required to, at our election, deliver shares of our common stock or make a cash payment to the financial institution. Final settlement of the ASR Program is expected to occur during the second quarter of fiscal 2017, with the number of shares to be delivered, or the amount of any cash payment to be made, determined based on the volume-weighted average price per share of our common stock over the term of the ASR Program, less an agreed-upon discount.

(4) As of September 30, 2016, the total remaining value under the share repurchase program approved on January 28, 2015 and amended on April 26, 2016 was approximately \$371.3 million.

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## Item 6. Exhibits.

| Exhibit Number | Description  | Filed with this Form 10-Q | Incorporated by Reference |                      |                |
|----------------|--|---------------------------|---------------------------|----------------------|----------------|
|                |  |                           | Form                      | Filing Date with SEC | Exhibit Number |
| 3.1            | Amended and Restated By-Laws, adopted on October 19, 2016  |                           | 8-K                       | October 24, 2016     | 3.1            |
| 10.1           | Master Confirmation-Accelerated Share Repurchase Dated August 29, 2016, with J.P. Morgan Securities, as agent for JP Morgan Chase Bank   |                           | 8-K                       | August 30, 2016      | 10.1           |
| 10.2           | Stock Purchase Agreement dated October 26, 2016 by and among AspenTech Holding Corporation, Mtelligence Corporation, each of the stockholders and key sellers of Mtelligence Corporation, and Cito Capital Corporation                         | X                         |                           |                      |                |
| 10.3           | Aspen Technology, Inc. Executive Annual Bonus Plan (Fiscal Year 2017)<br>(Correction of the exhibit filed as Exhibit 10.1 of the 8-K filed on July 22, 2016, in which Growth in Annual Spend was referred to as Growth in License Annual Spend | X                         |                           |                      |                |
| 10.4           | Aspen Technology, Inc. 2016 Omnibus Incentive Plan   | X                         |                           |                      |                |
| 31.1           | Certification of Principal Executive Officer pursuant to Exchange Act Rules 13a-14 and 15d-14, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002  | X                         |                           |                      |                |
| 31.2           | Certification of Principal Financial Officer pursuant to Exchange Act Rules 13a-14 and 15d-14, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002  | X                         |                           |                      |                |
| 32.1           | Certification of President and Chief Executive Officer and Executive Vice President and Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002                       | X                         |                           |                      |                |
| 101.INS        | Instance Document  | X                         |                           |                      |                |
| 101.SCH        | XBRL Taxonomy Extension Schema Document  | X                         |                           |                      |                |
| 101.CAL        | XBRL Taxonomy Extension Calculation Linkbase Document  | X                         |                           |                      |                |





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|  |   |
|--|---|
| 101.DEF XBRL Taxonomy Extension Definition Linkbase Document   | X |
| 101.LAB XBRL Taxonomy Extension Label Linkbase Document        | X |
| 101.PRE XBRL Taxonomy Extension Presentation Linkbase Document | X |

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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.

Aspen Technology, Inc.

Date: October 27, 2016 By: /s/ ANTONIO J. PIETRI

Antonio J. Pietri  
President and Chief Executive Officer  
(Principal Executive Officer)

Date: October 27, 2016 By: /s/ KARL E. JOHNSEN

Karl E. Johnsen  
Senior Vice President and Chief Financial Officer  
(Principal Financial and Accounting Officer)

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## EXHIBIT INDEX

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101.LAB XBRL Taxonomy Extension Label Linkbase Document X

101.PRE XBRL Taxonomy Extension Presentation Linkbase Document X

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