

# PTC INC.

## FORM 10-Q (Quarterly Report)

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Address	140 KENDRICK STREET NEEDHAM, MA 02494
Telephone	7813705000
CIK	0000857005
Symbol	PTC
SIC Code	7372 - Prepackaged Software
Industry	Software & Programming
Sector	Technology
Fiscal Year	09/30

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

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**FORM 10-Q**

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

**For the quarterly period ended July 2, 2016**

**Commission File Number: 0-18059**

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**PTC Inc.**

(Exact name of registrant as specified in its charter)

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**Massachusetts**

(State or other jurisdiction of  
incorporation or organization)

**04-2866152**

(I.R.S. Employer  
Identification Number)

**140 Kendrick Street, Needham, MA 02494**  
(Address of principal executive offices, including zip code)

**(781) 370-5000**  
(Registrant's telephone number, including area code)

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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 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   
(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 Exchange Act). Yes  No

There were 114,956,077 shares of our common stock outstanding on August 8, 2016 .

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**For the Quarter Ended July 2, 2016**

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PART I—FINANCIAL INFORMATION

ITEM 1. UNAUDITED CONDENSED FINANCIAL STATEMENTS

PTC Inc.  
**CONSOLIDATED BALANCE SHEETS**  
(in thousands, except per share data)  
(unaudited)

	July 2, 2016	September 30, 2015
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$ 294,626	\$ 273,417
Short term marketable securities	11,380	—
Accounts receivable, net of allowance for doubtful accounts of \$999 and \$998 at July 2, 2016 and September 30, 2015, respectively	151,718	197,275
Prepaid expenses	56,986	56,365
Other current assets	120,576	140,819
Deferred tax assets	—	36,803
Total current assets	635,286	704,679
Property and equipment, net	62,909	65,162
Goodwill	1,169,660	1,069,041
Acquired intangible assets, net	323,382	291,301
Long term marketable securities	33,226	—
Deferred tax assets	71,467	38,936
Other assets	43,216	40,794
Total assets	\$ 2,339,146	\$ 2,209,913
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>		
Current liabilities:		
Accounts payable	\$ 16,250	\$ 13,361
Accrued expenses and other current liabilities	77,003	97,613
Accrued compensation and benefits	91,861	82,414
Accrued income taxes	7,784	4,010
Deferred tax liabilities	—	1,622
Current portion of long term debt	—	50,000
Deferred revenue	410,996	368,240
Total current liabilities	603,894	617,260
Long term debt, net of current portion	778,125	618,125
Deferred tax liabilities	20,342	42,361
Deferred revenue	14,436	18,610
Other liabilities	59,688	53,386
Total liabilities	1,476,485	1,349,742
Commitments and contingencies (Note 13)		
Stockholders' equity:		
Preferred stock, \$0.01 par value; 5,000 shares authorized; none issued	—	—
Common stock, \$0.01 par value; 500,000 shares authorized; 114,952 and 113,745 shares issued and outstanding at July 2, 2016 and September 30, 2015, respectively	1,150	1,137
Additional paid-in capital	1,584,675	1,553,390
Accumulated deficit	(628,606)	(602,614)
Accumulated other comprehensive loss	(94,558)	(91,742)
Total stockholders' equity	862,661	860,171
Total liabilities and stockholders' equity	\$ 2,339,146	\$ 2,209,913

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



**PTC Inc.**  
**CONSOLIDATED STATEMENTS OF OPERATIONS**  
(in thousands, except per share data)  
(unaudited)

	Three months ended		Nine months ended	
	July 2, 2016	July 4, 2015	July 2, 2016	July 4, 2015
<b>Revenue:</b>				
Subscription	\$ 31,822	\$ 17,155	\$ 77,657	\$ 47,143
Support	161,881	165,687	494,262	516,042
Total recurring software revenue	193,703	182,842	571,919	563,185
Perpetual license	44,648	66,771	132,100	201,707
Total software revenue	238,351	249,613	704,019	764,892
Professional services	50,301	53,500	148,277	177,782
Total revenue	288,652	303,113	852,296	942,674
<b>Cost of revenue:</b>				
Cost of software revenue	38,864	33,282	114,291	102,525
Cost of professional services revenue	43,606	46,094	128,518	155,847
Total cost of revenue	82,470	79,376	242,809	258,372
Gross margin	206,182	223,737	609,487	684,302
<b>Operating expenses:</b>				
Sales and marketing	94,874	88,353	264,480	261,702
Research and development	57,118	54,078	171,397	175,333
General and administrative	35,485	46,201	107,968	113,725
Amortization of acquired intangible assets	8,294	9,105	25,040	27,691
Restructuring charges	2,815	4,393	44,541	42,625
Total operating expenses	198,586	202,130	613,426	621,076
Operating income (loss)	7,596	21,607	(3,939)	63,226
Interest and other expense, net	(8,300)	(3,668)	(19,880)	(10,492)
Income (loss) before income taxes	(704)	17,939	(23,819)	52,734
Provision (benefit) for income taxes	(3,777)	504	2,173	(377)
Net income (loss)	\$ 3,073	\$ 17,435	\$ (25,992)	\$ 53,111
Earnings (loss) per share—Basic	\$ 0.03	\$ 0.15	\$ (0.23)	\$ 0.46
Earnings (loss) per share—Diluted	\$ 0.03	\$ 0.15	\$ (0.23)	\$ 0.46
Weighted average shares outstanding—Basic	114,795	114,764	114,499	115,021
Weighted average shares outstanding—Diluted	115,698	116,025	114,499	116,330

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

**PTC Inc.**  
**CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)**  
(in thousands)  
(unaudited)

	Three months ended		Nine months ended	
	July 2, 2016	July 4, 2015	July 2, 2016	July 4, 2015
Net income (loss)	\$ 3,073	\$ 17,435	\$ (25,992)	\$ 53,111
Other comprehensive income (loss), net of tax:				
Unrealized hedge gain (loss) arising during the period	361	—	(3,633)	—
Net hedge loss reclassified into earnings	(1,560)	—	(727)	—
Unrealized gain (loss) on hedging instruments	1,921	—	(2,906)	—
Foreign currency translation adjustment, net of tax of \$0 for each period	(5,961)	1,201	(1,219)	(41,695)
Unrealized gain on marketable securities	7	—	7	—
Amortization of net actuarial pension loss included in net income, net of tax of \$0.2 million and \$0.1 million in the third quarter of 2016 and 2015, respectively, and \$0.5 million and \$0.4 million in the first nine months of 2016 and 2015, respectively	417	1,003	1,220	3,081
Change in unamortized pension loss during the period related to changes in foreign currency	413	(190)	82	2,915
Total other comprehensive income (loss)	(3,203)	2,014	(2,816)	(35,699)
Comprehensive income (loss)	<u>\$ (130)</u>	<u>\$ 19,449</u>	<u>\$ (28,808)</u>	<u>\$ 17,412</u>

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

**PTC Inc.**  
**CONSOLIDATED STATEMENTS OF CASH FLOWS**  
(in thousands)  
(unaudited)

	Nine months ended	
	July 2, 2016	July 4, 2015
<b>Cash flows from operating activities:</b>		
Net income (loss)	\$ (25,992)	\$ 53,111
<b>Adjustments to reconcile net income (loss) to net cash provided by operating activities:</b>		
Depreciation and amortization	64,721	63,455
Stock-based compensation	51,821	38,135
Excess tax benefits from stock-based awards	(94)	71
Other non-cash items, net	246	(53)
<b>Changes in operating assets and liabilities, excluding the effects of acquisitions:</b>		
Accounts receivable	58,499	44,906
Accounts payable, accrued expenses and other current liabilities	(17,303)	17,433
Accrued compensation and benefits	7,442	(27,462)
Deferred revenue	44,592	51,393
Accrued and deferred income taxes	(17,470)	(25,608)
Other current assets and prepaid expenses	4,249	(5,109)
Other noncurrent assets and liabilities	(1,115)	(17,809)
<b>Net cash provided by operating activities</b>	<b>169,596</b>	<b>192,463</b>
<b>Cash flows from investing activities:</b>		
Additions to property and equipment	(16,632)	(20,637)
Purchases of investments	(44,605)	(11,000)
Acquisitions of businesses, net of cash acquired	(164,191)	(98,411)
<b>Net cash used by investing activities</b>	<b>(225,428)</b>	<b>(130,048)</b>
<b>Cash flows from financing activities:</b>		
Borrowings	670,000	135,000
Repayments of borrowings under credit facility	(560,000)	(122,500)
Repurchases of common stock	—	(49,962)
Proceeds from issuance of common stock	19	38
Excess tax benefits from stock-based awards	94	(71)
Credit facility origination costs	(6,759)	—
Contingent consideration	(10,621)	—
Payments of withholding taxes in connection with vesting of stock-based awards	(20,636)	(29,117)
<b>Net cash provided (used) by financing activities</b>	<b>72,097</b>	<b>(66,612)</b>
Effect of exchange rate changes on cash and cash equivalents	4,944	(14,397)
Net increase (decrease) in cash and cash equivalents	21,209	(18,594)
Cash and cash equivalents, beginning of period	273,417	293,654
Cash and cash equivalents, end of period	<b>\$ 294,626</b>	<b>\$ 275,060</b>

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



**PTC Inc.**  
**NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS**  
**(unaudited)**

**1. Basis of Presentation**

***General***

The accompanying unaudited condensed consolidated financial statements include the accounts of PTC Inc. and its wholly owned subsidiaries and have been prepared by management in accordance with accounting principles generally accepted in the United States of America and in accordance with the rules and regulations of the Securities and Exchange Commission regarding interim financial reporting. Accordingly, they do not include all of the information and footnotes required by generally accepted accounting principles for complete financial statements. While we believe that the disclosures presented are adequate in order to make the information not misleading, these unaudited quarterly financial statements should be read in conjunction with our annual consolidated financial statements and related notes included in our Annual Report on Form 10-K for the fiscal year ended September 30, 2015. In the opinion of management, the accompanying unaudited condensed consolidated financial statements contain all adjustments, consisting only of those of a normal recurring nature, necessary for a fair statement of our financial position, results of operations and cash flows at the dates and for the periods indicated. Unless otherwise indicated, all references to a year mean our fiscal year, which ends on September 30. The September 30, 2015 Consolidated Balance Sheet included herein is derived from our audited consolidated financial statements.

The results of operations for the three and nine months ended July 2, 2016 are not necessarily indicative of the results expected for the remainder of the fiscal year.

***Income Statement Presentation***

In 2015, we classified revenue in three categories: 1) license and subscription solutions; 2) support; and 3) professional services. Effective with the beginning of the first quarter of 2016, we are reporting perpetual license revenue separately from subscription revenue and are presenting revenue in four categories: 1) subscription; 2) support; 3) perpetual license; and 4) professional services.

Effective with the beginning of the first quarter of 2016, we reclassified certain expenses related to management of our product lines from general and administrative to marketing.

Revenue and costs and expenses in the accompanying Consolidated Statements of Operations have been reclassified to conform to the current period presentation.

***Segments***

Through the second quarter of 2016, we had two operating and reportable segments: (1) Software Products, which included license and related support revenue (including updates and technical support) for all our products except training-related products; and (2) Services, which included consulting, implementation, training, cloud services, computer-based training products, including support on these products, and other services revenue.

With a change in our organizational structure in an effort to create more effective and efficient operations and to improve customer and product focus, during the three months ended July 2, 2016, we revised the information that our chief executive officer, who is also our chief operating decision maker (“CODM”), regularly reviews for purposes of allocating resources and assessing performance. As a result, effective with the beginning of the third quarter of 2016, we changed our operating and reportable segments from two to three: (1) the Solutions Group, which includes license, subscription, support and cloud services revenue for our core CAD, SLM and ePLM products; (2) the Technology Platform Group, which includes license, subscription, support and cloud services revenue for our IoT, analytics and augmented reality solutions; and (3) Professional Services, which includes consulting, implementation and training revenue.

Revenue and operating income in Note 11. *Segment Information* have been reclassified to conform to the current period presentation.

***Recent Accounting Pronouncements***

***Financial Instruments - Credit Losses***

In June 2016, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) No. 2016-13, Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments. This update introduces a current expected credit loss model for measuring expected credit losses for certain types of financial instruments held at the reporting date based on historical experience, current conditions and reasonable supportable forecasts. ASU 2016-13 replaces the current incurred loss model for measuring expected credit losses, requires expected losses on available-for-sale debt securities to be recognized through an allowance for credit losses rather than as reductions in the

amortized cost of the securities, and provides for additional disclosure requirements. ASU 2016-13 is effective for interim and annual reporting periods beginning after December 15, 2019, our fiscal 2021, with early adoption permitted for interim and annual reporting periods beginning after December 15, 2018. We are currently evaluating the impact of the new guidance on our consolidated financial statements.

#### *Stock Compensation*

In March 2016, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) No. 2016-09, Compensation - Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting. The ASU includes multiple provisions intended to simplify various aspects of the accounting for share-based payments, including accounting for income taxes, earnings per share, and forfeitures, as well as certain practical expedients for nonpublic entities. The ASU is effective for public companies in annual periods beginning after December 15, 2016, our fiscal 2018, and interim periods within those years. Early adoption is permitted in any interim period, with all adjustments applied as of the beginning of the fiscal year of adoption. We are currently evaluating the impact of the new guidance on our consolidated financial statements.

#### *Leases*

In February 2016, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) No. 2016-02, Leases (Topic 842), which will replace the existing guidance in ASC 840, Leases. The updated standard aims to increase transparency and comparability among organizations by requiring lessees to recognize lease assets and lease liabilities on the balance sheet and to disclose important information about leasing arrangements. ASU 2016-02 is effective for annual periods beginning after December 15, 2018, our fiscal 2020, and interim periods within those annual periods. Early adoption is permitted and modified retrospective application is required. We are currently evaluating the impact of the new guidance on our consolidated financial statements.

#### *Financial Instruments*

In January 2016, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) No. 2016-01, Financial Instruments-Overall: Recognition and Measurement of Financial Assets and Financial Liabilities, which requires equity investments to be measured at fair value with changes in fair value recognized in net income and simplifies the impairment assessment of equity investments without readily determinable fair values by requiring a qualitative assessment to identify impairment. Entities may choose a practical expedient, to estimate the fair value of certain equity securities that do not have readily determinable fair values. If the practical expedient is elected, these investments would be recorded at cost, less impairment and subsequently adjusted for observable price changes. The guidance also updates certain presentation and disclosure requirements. ASU 2016-01 is effective for financial statements issued for fiscal years beginning after December 15, 2017, our fiscal 2019, and interim periods within those fiscal years. We are currently evaluating the impact of the new guidance on our consolidated financial statements.

#### *Deferred Taxes*

In November 2015, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) No. 2015-17, Balance Sheet Classification of Deferred Taxes (Topic 740), to simplify the presentation of deferred income taxes. The amendments in this Update require that all deferred tax assets and liabilities, along with any related valuation allowance, be classified as noncurrent on the balance sheet. As a result, each jurisdiction will now only have one net noncurrent deferred tax asset or liability. The guidance does not change the existing requirement that permits offsetting only within a jurisdiction and companies are still prohibited from offsetting deferred tax liabilities from one jurisdiction against deferred tax assets of another jurisdiction. ASU 2015-17 is effective for public companies for fiscal years beginning after December 15, 2016, with early adoption permitted for all entities as of the beginning of an interim or annual reporting period. This guidance may be applied either prospectively or retrospectively (by reclassifying the comparative balance sheet). We adopted this new guidance in our first quarter ended January 2, 2016 and applied this guidance prospectively. As a result, the deferred tax assets and deferred tax liabilities on the Consolidated Balance Sheet as of September 30, 2015 have not been reclassified to conform to the July 2, 2016 presentation.

#### *Revenue Recognition*

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 2014-09), to supersede nearly all existing revenue recognition guidance under U.S. GAAP. The core principle of ASU 2014-09 is to recognize revenues when promised goods or services are transferred to customers in an amount that reflects the consideration that is expected to be received for those goods or services. ASU 2014-09 defines a five step process to achieve this core principle and, in doing so, it is possible more judgment and estimates may be required within the revenue recognition process than required under existing U.S. GAAP including identifying performance obligations in the contract, estimating the amount of variable consideration to include in the transaction price and allocating the transaction price to each separate performance obligation. In July 2015, the FASB approved

a one-year delay in the effective date. ASU 2014-09 is effective for us in our first quarter of fiscal 2019 using either of two methods: (i) retrospective to each prior reporting period presented with the option to elect certain practical expedients as defined within ASU 2014-09; or (ii) retrospective with the cumulative effect of initially applying ASU 2014-09 recognized at the date of initial application and providing certain additional disclosures as defined per ASU 2014-09. Subsequently, the FASB has issued the following standards to provide additional clarification and implementation guidance on ASU 2014-09: ASU 2016-08, Revenue from Contracts with Customers (Topic 606): Principal versus Agent Considerations; ASU 2016-10, Revenue from Contracts with Customers (Topic 606): Identifying Performance Obligations and Licensing; and ASU 2016-12, Revenue from Contracts with Customers (Topic 606): Narrow-Scope Improvements and Practical Expedients. We are currently evaluating the impact of these new standards on our consolidated financial statements.

#### *Debt Issuance Costs*

In April 2015, the FASB issued ASU No. 2015-03, Interest-Imputation of Interest (Subtopic 835-30), to simplify the required presentation of debt issuance costs. The amended guidance requires that debt issuance costs be presented in the balance sheet as a direct reduction from the carrying amount of the related debt liability rather than as an asset. It is effective for financial statements issued for fiscal years beginning after December 15, 2015, our fiscal 2017, with early adoption permitted. The new guidance will be applied retrospectively to each prior period presented. We are currently evaluating the impact of the new guidance on our consolidated financial statements.

## **2. Deferred Revenue and Financing Receivables**

### *Deferred Revenue*

Deferred revenue primarily relates to software agreements billed to customers for which the services have not yet been provided. The liability associated with performing these services is included in deferred revenue and, if not yet paid, the related customer receivable is included in prepaid expenses and other current assets. Billed but uncollected support and subscription-related amounts included in other current assets at July 2, 2016 and September 30, 2015 were \$111.1 million and \$129.3 million, respectively.

### *Financing Receivables*

We periodically provide extended payment terms to credit-worthy customers for software purchases with payment terms up to 24 months. The determination of whether to offer such payment terms is based on the size, nature and credit-worthiness of the customer, and the history of collecting amounts due, without concession, from the customer and customers generally. This determination is based on an internal credit assessment. In making this assessment, we use the Standard & Poor's (S&P) credit rating as our primary credit quality indicator, if available. If a customer, whether commercial or the U.S. Federal government, has an S&P bond rating of BBB- or above, we designate the customer as Tier 1. If a customer does not have an S&P bond rating, or has an S&P bond rating below BBB-, we base our assessment on an internal credit assessment which considers selected balance sheet, operating and liquidity measures, historical payment experience, and current business conditions within the industry or region. We designate these customers as Tier 2 or Tier 3, with Tier 3 being lower credit quality than Tier 2.

As of July 2, 2016 and September 30, 2015, amounts due from customers for contracts with original payment terms greater than twelve months (financing receivables) totaled \$12.1 million and \$27.4 million, respectively. Accounts receivable and prepaid expenses and other current assets in the accompanying Consolidated Balance Sheets included current receivables from such contracts totaling \$9.1 million and \$21.8 million at July 2, 2016 and September 30, 2015, respectively, and other assets in the accompanying Consolidated Balance Sheets included long-term receivables from such contracts totaling \$3.0 million and \$5.6 million at July 2, 2016 and September 30, 2015, respectively. As of July 2, 2016 and September 30, 2015, \$2.1 million and \$0.5 million, respectively, of these receivables were past due. Our credit risk assessment for financing receivables was as follows:

	<b>July 2, 2016</b>	<b>September 30, 2015</b>
	<b>(in thousands)</b>	
S&P bond rating BBB-1 and above-Tier 1	\$ 9,447	\$ 16,841
Internal Credit Assessment-Tier 2	2,623	10,593
Internal Credit Assessment-Tier 3	—	—
<b>Total financing receivables</b>	<b>\$ 12,070</b>	<b>\$ 27,434</b>

We evaluate the need for an allowance for doubtful accounts for estimated losses resulting from the inability of these customers to make required payments. As of July 2, 2016 and September 30, 2015, we concluded that all financing receivables were collectible and no reserve for credit losses was recorded. We did not provide a reserve for credit losses or write off any

uncollectible financing receivables in the nine months ended July 2, 2016 or July 4, 2015 . We write off uncollectible trade and financing receivables when we have exhausted all collection avenues.

We periodically transfer future payments under certain of these contracts to third-party financial institutions on a non-recourse basis. We record such transfers as sales of the related accounts receivable when we surrender control of such receivables. We did not sell any financing receivables to third-party financing institutions in the nine months ended July 2, 2016 . We sold \$3 million of financing receivables to third-party financial institutions in the nine months ended July 4, 2015 .

### 3. Restructuring Charges

On October 23, 2015, we initiated a plan to restructure our workforce and consolidate select facilities in order to reduce our cost structure and to realign our investments with what we believe to be our higher growth opportunities. The restructuring is expected to result in a charge of \$50 million to \$70 million , the upper range of which has increased from our original estimate of \$50 million . In the first three quarters of 2016, we recorded charges of \$37.0 million , \$4.4 million and \$2.6 million respectively, attributable to termination benefits associated with 518 employees. The majority of the remaining charges are expected to be recorded in the fourth quarter of 2016. Additionally, in the first nine months of 2016, we recorded charges of \$0.5 million related to the closure of excess facilities. In the first, second and third quarters of 2016, we made cash disbursements of \$16.7 million , \$25.1 million and \$8.1 million , respectively, associated with restructuring charges.

On April 4, 2015, we committed to a plan to restructure our workforce and consolidate select facilities to realign our global workforce to increase investment in our Internet of Things business and to reduce our cost structure through organizational efficiencies in the face of significant foreign currency depreciation relative to the U.S. Dollar and a more cautious outlook on global macroeconomic conditions. In the second and third quarter of 2015, we recorded charges of \$38.5 million and \$3.3 million , respectively, attributable to termination benefits associated with 411 employees and in the first nine months of 2015, we recorded charges of \$1.1 million related to the closure of excess facilities. In the first, second and third quarters of 2015, we made cash disbursements of \$17.3 million , \$5.5 million and \$25.0 million , respectively, associated with restructuring charges.

Additionally, in the first nine months of 2015, we recorded a credit of \$0.3 million related to prior year restructuring actions.

The following table summarizes restructuring accrual activity for the nine months ended July 2, 2016 :

	Employee severance and related benefits	Facility closures and related costs	Total
	(in thousands)		
October 1, 2015	\$ 14,086	\$ 1,168	\$ 15,254
Charge to operations	44,010	531	44,541
Cash disbursements	(49,059)	(834)	(49,893)
Foreign exchange impact	103	(11)	92
Accrual, July 2, 2016	<u>\$ 9,140</u>	<u>\$ 854</u>	<u>\$ 9,994</u>

The accrual for facility closures and related costs is included in accrued expenses and other liabilities in the Consolidated Balance Sheets, and the accrual for employee severance and related benefits is included in accrued compensation and benefits in the Consolidated Balance Sheets.

### 4. Stock-based Compensation

We measure the cost of employee services received in exchange for restricted stock unit (RSU) awards based on the fair value of RSU awards on the date of grant. That cost is recognized over the period during which an employee is required to provide service in exchange for the award.

Our equity incentive plan provides for grants of nonqualified and incentive stock options, common stock, restricted stock, RSUs and stock appreciation rights to employees, directors, officers and consultants. We award RSUs as the principal equity incentive awards, including certain performance-based awards that are earned based on achievement of performance criteria established by the Compensation Committee of our Board of Directors. Each RSU represents the contingent right to receive one share of our common stock.

Restricted stock unit activity for the nine months ended July 2, 2016	Shares	Weighted Average Grant Date Fair Value (Per Share)
	(in thousands)	
Balance of outstanding restricted stock units October 1, 2015	3,654	\$ 33.64
Granted	2,465	\$ 37.20
Vested	(1,794)	\$ 30.06
Forfeited or not earned	(500)	\$ 36.53
Balance of outstanding restricted stock units July 2, 2016	3,825	\$ 37.23

Grant Period	Restricted Stock Units		
	TSR Units (1)	Performance-based RSUs (2)	Service-based RSUs (2)
	(Number of Units in thousands)		
First nine months of 2016	326	343	1,795

(1) The TSR units were granted to our executive officers pursuant to the terms described below.

(2) The service-based RSUs were issued to employees, our executive officers and our directors. Executive officers may earn up to one or, for our CEO, two times the number of time-based RSUs (up to a maximum of 343,000 shares) if certain performance conditions are met. Of the service-based RSUs, approximately 64,000 shares will vest in one installment on or about the anniversary of the date of grant. Approximately 121,000 shares will vest in two substantially equal annual installments on or about the anniversary of the date of grant. All other service-based RSUs will vest in three substantially equal annual installments on or about the anniversary of the date of grant. The performance-based RSUs will vest in three substantially equal installments on the later of November 15, 2016, November 15, 2017 and November 15, 2018, or the date the Compensation Committee determines the extent to which the applicable performance criteria have been achieved.

In the first quarter of 2016, we granted the target performance-based TSR units ("target RSUs") shown in the table above to our executive officers. These RSUs are eligible to vest based upon our total shareholder return relative to a peer group (the "TSR units"), measured annually over a three year period. The number of TSR units to vest over the three year period will be determined based on the performance of PTC stock relative to the stock performance of an index of PTC peer companies established as of the grant date, as determined at the end of three measurement periods ending on September 30, 2016, 2017 and 2018, respectively. The shares earned for each period will vest on November 15 following each measurement period, up to a maximum of two times the number of target RSUs (up to a maximum of 652,000 shares). No vesting will occur in a period unless an annual threshold requirement is achieved. The employee must remain employed by PTC through the applicable vest date for any RSUs to vest. If the return to PTC shareholders is negative but still meets or exceeds the peer group indexed return, a maximum of 100% of the target RSUs will vest for the measurement period. TSR units not earned in either of the first two measurement periods are eligible to be earned in the third measurement period.

The weighted average fair value of the TSR units was \$46.96 per target RSU on the grant date. The fair value of the TSR units was determined using a Monte Carlo simulation model, a generally accepted statistical technique used to simulate a range of possible future stock prices for PTC and the peer group. The method uses a risk-neutral framework to model future stock price movements based upon the risk-free rate of return, the volatility of each entity, and the pairwise correlations of each entity being modeled. The fair value for each simulation is the product of the payout percentage determined by PTC's TSR rank against the peer group, the projected price of PTC stock, and a discount factor based on the risk-free rate.

The significant assumptions used in the Monte Carlo simulation model were as follows:

Average volatility of peer group	28.1%
Risk free interest rate	1.05%
Dividend yield	—%

Compensation expense recorded for our stock-based awards was classified in our Consolidated Statements of Operations as follows:

	Three months ended		Nine months ended	
	July 2, 2016	July 4, 2015	July 2, 2016	July 4, 2015
	(in thousands)			
Cost of software revenue	\$ 1,158	\$ 1,133	\$ 4,163	\$ 3,158
Cost of professional services revenue	1,342	1,317	4,072	4,510
Sales and marketing	3,195	4,075	11,254	10,821
Research and development	2,531	2,928	7,578	9,015
General and administrative	5,570	4,618	24,754	10,631
Total stock-based compensation expense	\$ 13,796	\$ 14,071	\$ 51,821	\$ 38,135

The stock-based compensation expense in the first quarter of 2016 included \$10 million of expense related to modifications of certain performance-based RSUs previously granted under our long-term incentive programs. The Compensation Committee of our Board of Directors amended these equity awards due to the impact of changes in our business model and strategy and foreign currency on our financial results.

## 5. Earnings per Share (EPS) and Common Stock

### EPS

Basic EPS is calculated by dividing net income by the weighted average number of shares outstanding during the period. Unvested restricted stock, although legally issued and outstanding, is not considered outstanding for purposes of calculating basic EPS. Diluted EPS is calculated by dividing net income by the weighted average number of shares outstanding plus the dilutive effect, if any, of outstanding stock options, restricted shares and RSUs using the treasury stock method. The calculation of the dilutive effect of outstanding equity awards under the treasury stock method includes consideration of proceeds from the assumed exercise of stock options, unrecognized compensation expense and any tax benefits as additional proceeds.

Calculation of Basic and Diluted EPS	Three months ended		Nine months ended	
	July 2, 2016	July 4, 2015	July 2, 2016	July 4, 2015
	(in thousands, except per share data)			
Net income (loss)	\$ 3,073	\$ 17,435	\$ (25,992)	\$ 53,111
Weighted average shares outstanding—Basic	114,795	114,764	114,499	115,021
Dilutive effect of employee stock options, restricted shares and restricted stock units	903	1,261	—	1,309
Weighted average shares outstanding—Diluted	115,698	116,025	114,499	116,330
Earnings (loss) per share—Basic	\$ 0.03	\$ 0.15	\$ (0.23)	\$ 0.46
Earnings (loss) per share—Diluted	\$ 0.03	\$ 0.15	\$ (0.23)	\$ 0.46

For the nine months ended July 2, 2016, diluted net loss per share is the same as basic net loss per share as the effects of our potential common stock equivalents are antidilutive. Total antidilutive shares were 1.7 million for the nine months ended July 2, 2016.

### Common Stock Repurchases

Our Articles of Organization authorize us to issue up to 500 million shares of our common stock. Our Board of Directors has periodically authorized the repurchase of shares of our common stock. On August 4, 2014, our Board of Directors authorized us to repurchase up to \$600 million of our common stock through September 30, 2017. In the third quarter and first nine months of 2016, we did not repurchase any shares. In the first quarter of 2015, we received 1.1 million shares as the final settlement of the accelerated share repurchase ("ASR") agreement described below. In the third quarter of 2015, we repurchased 1.2 million shares at a cost of \$50.0 million. All shares of our common stock repurchased are automatically restored to the status of authorized and unissued.

On August 14, 2014, we entered into an accelerated share repurchase ("ASR") agreement with a major financial institution ("Bank"). The ASR allowed us to buy a large number of shares immediately at a purchase price determined by an average market price over a period of time. Under the ASR, we agreed to purchase \$125 million of our common stock, in total, with an initial delivery to us in August 2014 of 2.3 million shares.

## 6. Acquisitions

Acquisition-related costs were \$0.9 million and \$3.2 million for the third quarter and first nine months of 2016, respectively and \$2.8 million and \$8.7 million for the third quarter and first nine months of 2015, respectively. Acquisition-related costs include direct costs of potential and completed acquisitions (e.g., investment banker fees, professional fees, including legal and valuation services) and expenses related to acquisition integration activities (e.g., professional fees and severance). In addition, subsequent adjustments to our initial estimated amount of contingent consideration associated with specific acquisitions are included within acquisition-related charges. These costs have been classified in general and administrative expenses in the accompanying Consolidated Statements of Operations.

### *Kepware*

On January 12, 2016, we acquired all of the ownership interest in Kepware, Inc., for \$99.4 million in cash (net of cash acquired of \$0.6 million ) and, \$16.9 million representing the fair value of contingent consideration payable upon achievement of targets described below. We borrowed \$100.0 million under our existing credit facility in January of 2016 to fund the acquisition.

The results of operations of Kepware have been included in our consolidated financial statements beginning on the acquisition date. Our results of operations prior to this acquisition, if presented on a pro forma basis, would not differ materially from our reported results.

The acquisition of Kepware has been accounted for as a business combination. Assets acquired and liabilities assumed have been recorded at their estimated fair values as of January 12, 2016, the acquisition date. The fair values of intangible assets were based on valuations using an income approach, with estimates and assumptions provided by management of Kepware and PTC. The process for estimating the fair values of identifiable intangible assets and the contingent consideration liability requires the use of significant estimates and assumptions, including estimating future cash flows and developing appropriate discount rates. The excess of the purchase price over the tangible assets, identifiable intangible assets and assumed liabilities was recorded as goodwill. The former shareholders of Kepware are eligible to receive additional consideration of up to \$18.0 million , which is contingent on the achievement of certain Financial Performance, Product Integration and Business Integration targets (as defined in the Stock Purchase Agreement) within 24 months from April 3, 2016 to April 2, 2018. If such targets are achieved within the defined 12 month, 18 month and 24 month earn-out periods, the consideration corresponding to each target will be earned and payable in cash. Up to \$9.6 million of the total contingent consideration will become payable in 2017, and the remainder, if subsequently earned, will become payable in 2018.

In connection with accounting for the business combination, we recorded a liability of \$16.9 million representing the fair value of the contingent consideration. The liability was valued using a discounted cash flow method and a probability weighted estimate of achievement of the targets. The estimated undiscounted range of outcomes for the contingent consideration is \$16.9 million to \$18.0 million . We assess the probability that the targets will be met and at what level each reporting period. Subsequent changes in the estimated fair value of the liability are reflected in earnings until the liability is fully settled.

The purchase price allocation resulted in \$77.1 million of goodwill, which will be deductible for income tax purposes. All of the acquired goodwill was allocated to our software products segment. Intangible assets of \$34.5 million includes purchased software of \$28.7 million , customer relationships of \$5.2 million and trademarks of \$0.6 million , which are being amortized over weighted average useful lives of 10 years, 10 years and 6 years, respectively, based upon the pattern in which economic benefits related to such assets are expected to be realized.

The resulting amount of goodwill reflects our expectations of the following benefits: 1) Kepware's protocol translators and connectivity platform strengthen the ThingWorx technology platform and accelerate our entry into the factory setting and Industrial IoT (IIoT); 2) cross-selling opportunities for our integrated technology platforms in the critical infrastructure markets to drive revenue growth; and 3) Kepware's 20 years of manufacturing experience strengthens our manufacturing talent and domain expertise and provides support for our manufacturing strategy initiatives.

### *Vuforia*

On November 3, 2015 , pursuant to an Asset Purchase Agreement, PTC acquired the Vuforia business from Qualcomm Connected Experiences, Inc., a subsidiary of Qualcomm Incorporated, for \$64.8 million in cash (net of cash acquired of \$4.5 million ). We borrowed \$50 million under our credit facility to finance this acquisition. At the time of the acquisition, Vuforia had approximately 80 employees and historical annualized revenues were not material.

The acquisition of Vuforia has been accounted for as a business combination. Assets acquired and liabilities assumed have been recorded at their estimated fair values as of the acquisition date. The fair values of intangible assets were based on valuations using a cost approach which requires the use of significant estimates and assumptions, including estimating costs to reproduce an asset. The excess of the purchase price over the tangible assets, identifiable intangible assets and assumed liabilities was recorded as goodwill.

The purchase price allocation resulted in \$23.3 million of goodwill, \$41.2 million of technology and \$4.7 million of net tangible assets. The acquired technology is being amortized over a useful life of 6 years. All of the acquired goodwill was allocated to our software products segment and will be deductible for income tax purposes. The resulting amount of goodwill reflects the value of the synergies created by integrating Vuforia's augmented technology platform into PTC's Technology Platform solutions.

### *ColdLight*

In the third quarter of 2015, we acquired ColdLight Solutions, LLC, for approximately \$98.6 million in cash (net of cash acquired of \$1.3 million). The former shareholders of ColdLight are eligible to receive additional consideration (the earn-out) of up to \$5 million which is contingent upon achievement of certain technology milestones within two years of the acquisition. If an earn-out milestone is achieved, a portion of the contingent consideration becomes earned and payable in cash after each six-month period. In connection with accounting for the business combination, we recorded a liability \$3.8 million, representing the fair value of the contingent consideration. The liability was valued using a discounted cash flow method and a probability weighted estimate of achievement of the technology milestones. The estimated undiscounted range of outcomes for the contingent consideration was \$3.8 million to \$5.0 million at the acquisition date. Changes in the estimated liability are reflected in earnings until the liability is fully settled. As of July 2, 2016, our estimate of the liability was \$2.5 million, after a total of \$2.5 million payments made in December 2015 and May 2016. \$1.9 million of the total payments represents the fair value of the liability recorded at acquisition date and is included in financing activities in the Consolidated Statements of Cash Flows. The remaining \$0.6 million of the total payments represents changes in the estimated liability recorded at acquisition date and is included in operating activities in the Consolidated Statements of Cash Flow.

### *ThingWorx*

The ThingWorx contingent earn-out second year payment criteria were attained in the first quarter of fiscal 2016. We paid the remaining \$9.0 million of the total contingent consideration in April 2016. Of this payment, \$8.7 million represents the fair value of the liability recorded at the acquisition date and is included in financing activities in the Consolidated Statements of Cash Flows. The remaining \$0.3 million of this payment represents changes in the estimated liability recorded since the acquisition date and is included in operating activities in the Consolidated Statements of Cash Flows.

## **7. Goodwill and Intangible Assets**

Through the second quarter of 2016, we had two operating and reportable segments: (1) Software Products and (2) Services. Effective with the beginning of the third quarter of 2016, we changed our operating and reportable segments from two to three: (1) Solutions Group, (2) Technology Platform Group and (3) Professional Services. We assess goodwill for impairment at the reporting unit level. Our reporting units are determined based on the components of our operating segments that constitute a business for which discrete financial information is available and for which operating results are regularly reviewed by segment management. Our reporting units are the same as our operating segments.

As of July 2, 2016, goodwill and acquired intangible assets in the aggregate attributable to our solutions group, technology platform group and professional services segment were \$1,206.4 million, \$255.8 million and \$30.9 million, respectively. As of September 30, 2015, goodwill and acquired intangible assets in the aggregate attributable to our software products segment and services segment were \$1,297.9 million, and \$62.4 million, respectively. Acquired intangible assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying value of the asset may not be recoverable. We evaluate goodwill for impairment in the third quarter of our fiscal year, or on an interim basis if an event occurs or circumstances change that would, more likely than not, reduce the fair value of a reporting segment below its carrying value. Factors we consider important, on an overall company basis and segment basis, when applicable, that could trigger an impairment review include significant under-performance relative to historical or projected future operating results, significant changes in our use of the acquired assets or the strategy for our overall business, significant negative industry or economic trends, a significant decline in our stock price for a sustained period and a reduction of our market capitalization relative to net book value. We completed our annual goodwill impairment review as of July 2, 2016 and concluded that no impairment charge was required as of that date.

To conduct these tests of goodwill, the fair value of the reporting unit is compared to its carrying value. If the reporting unit's carrying value exceeds its fair value, we record an impairment loss equal to the difference between the carrying value of goodwill and its implied fair value. We estimate the fair values of our reporting units using discounted cash flow valuation models. Those models require estimates of future revenues, profits, capital expenditures, working capital, terminal values based on revenue multiples, and discount rates for each reporting unit. We estimate these amounts by evaluating historical trends, current budgets, operating plans and industry data. The estimated fair value of each reporting unit was at least approximately twice its carrying value as of July 2, 2016.

Goodwill and acquired intangible assets consisted of the following:



	July 2, 2016			September 30, 2015		
	Gross Carrying Amount	Accumulated Amortization	Net Book Value	Gross Carrying Amount	Accumulated Amortization	Net Book Value
	(in thousands)					
Goodwill (not amortized)			\$ 1,169,660			\$ 1,069,041
Intangible assets with finite lives (amortized)						
(1):						
Purchased software	\$ 352,782	\$ 192,509	\$ 160,273	\$ 284,257	\$ 174,887	\$ 109,370
Capitalized software	22,877	22,877	—	22,877	22,877	—
Customer lists and relationships	355,504	198,335	157,169	349,938	174,017	175,921
Trademarks and trade names	19,012	13,151	5,861	18,534	12,759	5,775
Other	3,941	3,862	79	3,946	3,711	235
	<u>\$ 754,116</u>	<u>\$ 430,734</u>	<u>\$ 323,382</u>	<u>\$ 679,552</u>	<u>\$ 388,251</u>	<u>\$ 291,301</u>
Total goodwill and acquired intangible assets			<u>\$ 1,493,042</u>			<u>\$ 1,360,342</u>

(1) The weighted average useful lives of purchased software, customer lists and relationships, trademarks and trade names and other intangible assets with a remaining net book value are 7 years, 10 years, 9 years, and 3 years, respectively.

#### Goodwill

Changes in goodwill presented by reportable segments were as follows:

	Software Products Segment	Services Segment	Total	
	(in thousands)			
Balance, October 1, 2015	\$ 1,016,413	\$ 52,628	\$ 1,069,041	
Acquisition of Vuforia	23,316	—	23,316	
Acquisition of Kepware	77,081	—	77,081	
Foreign currency translation adjustments	228	(6)	222	
Balance, July 2, 2016 prior to reallocation	<u>\$ 1,117,038</u>	<u>\$ 52,622</u>	<u>\$ 1,169,660</u>	
	Solutions Group	Technology Platform Group	Professional Services	Total
	(in thousands)			
Balance, July 2, 2016 after reallocation	\$ 1,050,013	\$ 90,053	\$ 29,594	\$ 1,169,660

#### Amortization of Intangible Assets

The aggregate amortization expense for intangible assets with finite lives was classified in our Consolidated Statements of Operations as follows:

	Three months ended		Nine months ended	
	July 2, 2016	July 4, 2015	July 2, 2016	July 4, 2015
	(in thousands)			
Amortization of acquired intangible assets	\$ 8,294	\$ 9,105	\$ 25,040	\$ 27,691
Cost of software revenue	6,383	4,957	18,235	14,438
Total amortization expense	<u>\$ 14,677</u>	<u>\$ 14,062</u>	<u>\$ 43,275</u>	<u>\$ 42,129</u>

#### 8. Fair Value Measurements

Fair value is defined as the price that would be received from selling an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. When determining the fair value measurements for assets and

liabilities required to be recorded at fair value, we consider the principal or most advantageous market in which we would transact and consider assumptions that market participants would use when pricing the asset or liability, such as inherent risk, transfer restrictions, and risk of nonperformance. Generally accepted accounting principles prescribe a fair value hierarchy that requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. A financial instrument's categorization within the fair value hierarchy is based upon the lowest level of input that is significant to the fair value measurement. Three levels of inputs that may be used to measure fair value:

- Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities;
- Level 2: inputs other than Level 1 that are observable, either directly or indirectly, such as quoted prices in active markets for similar assets or liabilities, quoted prices for identical or similar assets or liabilities in markets that are not active, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities; or
- Level 3: unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

A financial instrument's level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement.

Money market funds, time deposits and corporate notes/bonds are classified within Level 1 of the fair value hierarchy because they are valued based on quoted market prices in active markets.

Certificates of deposit, commercial paper and certain U.S. government agency securities are classified within Level 2 of the fair value hierarchy. These instruments are valued based on quoted prices in markets that are not active or based on other observable inputs consisting of market yields, reported trades and broker/dealer quotes.

The principal market in which we execute our foreign currency contracts is the institutional market in an over-the-counter environment with a relatively high level of price transparency. The market participants usually are large financial institutions. Our foreign currency contracts' valuation inputs are based on quoted prices and quoted pricing intervals from public data sources and do not involve management judgment. These contracts are typically classified within Level 2 of the fair value hierarchy.

The fair value of our contingent consideration arrangements are determined based on our evaluation as to the probability and amount of any earn-out that will be achieved based on expected future performances by the acquired entities. These arrangements are classified within Level 3 of the fair value hierarchy.

Our significant financial assets and liabilities measured at fair value on a recurring basis as of July 2, 2016 and September 30, 2015 were as follows:

	<b>July 2, 2016</b>			
	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Total</b>
	<b>(in thousands)</b>			
<b>Financial assets:</b>				
Cash equivalents	\$ 72,829	\$ —	\$ —	\$ 72,829
<b>Marketable securities</b>				
Certificates of deposit	—	680	—	680
Commercial paper	—	9,930	—	9,930
Corporate notes/bonds	31,590	—	—	31,590
U.S. government agency securities	—	2,406	—	2,406
Forward contracts	—	1,739	—	1,739
	<u>\$ 104,419</u>	<u>\$ 14,755</u>	<u>\$ —</u>	<u>\$ 119,174</u>
<b>Financial liabilities:</b>				
Contingent consideration related to acquisitions	\$ —	\$ —	\$ 19,497	\$ 19,497
Forward contracts	—	6,150	—	6,150
	<u>\$ —</u>	<u>\$ 6,150</u>	<u>\$ 19,497</u>	<u>\$ 25,647</u>

	September 30, 2015			
	Level 1	Level 2	Level 3	Total
	(in thousands)			
Financial assets:				
Cash equivalents	\$ 91,216	\$ —	\$ —	\$ 91,216
Forward contracts	—	507	—	507
	<u>\$ 91,216</u>	<u>\$ 507</u>	<u>\$ —</u>	<u>\$ 91,723</u>
Financial liabilities:				
Contingent consideration related to acquisitions	\$ —	\$ —	\$ 13,000	\$ 13,000
Forward contracts	—	46	—	46
	<u>\$ —</u>	<u>\$ 46</u>	<u>\$ 13,000</u>	<u>\$ 13,046</u>

Changes in the fair value of Level 3 contingent consideration liability associated with our acquisitions of ThingWorx, ColdLight and Kepware were as follows:

	Contingent Consideration			
	(in thousands)			
	ThingWorx	ColdLight	Kepware	Total
Balance, October 1, 2015	\$ 9,000	\$ 4,000	\$ —	\$ 13,000
Addition to contingent consideration	—	—	16,900	16,900
Change in present value of contingent consideration	—	1,000	97	1,097
Payment of contingent consideration	(9,000)	(2,500)	—	(11,500)
Balance, July 2, 2016	<u>\$ —</u>	<u>\$ 2,500</u>	<u>\$ 16,997</u>	<u>\$ 19,497</u>

Of the total, \$11.8 million of the contingent consideration liabilities is included in accrued expenses and other current liabilities, with the remaining \$7.7 million in other liabilities in the Consolidated Balance Sheet as of July 2, 2016 .

## 9. Marketable Securities

The amortized cost and fair value of marketable securities as of July 2, 2016 were as follows:

	July 2, 2016			
	Amortized cost	Gross unrealized gains	Gross unrealized losses	Fair value
	(in thousands)			
Certificates of deposit	\$ 680	\$ —	\$ —	\$ 680
Commercial paper	9,934	—	(4)	9,930
Corporate notes/bonds	31,579	11	—	31,590
US government agency securities	2,406	—	—	2,406
	<u>\$ 44,599</u>	<u>\$ 11</u>	<u>\$ (4)</u>	<u>\$ 44,606</u>

Our investment portfolio consists of certificates of deposit, commercial paper, corporate notes/bonds and government securities that have a maximum maturity of three years. The longer the duration of these securities, the more susceptible they are to changes in market interest rates and bond yields. All unrealized losses are due to changes in market interest rates, bond yields and/or credit ratings.

The following table presents our available-for-sale marketable securities by contractual maturity date, as of July 2, 2016.

	July 2, 2016	
	Amortized cost	Fair value
	(in thousands)	
Due in one year or less	\$ 11,387	\$ 11,380
Due after one year through three years	33,212	33,226
	<u>\$ 44,599</u>	<u>\$ 44,606</u>

## 10. Derivative Financial Instruments

Our earnings and cash flows are subject to fluctuations due to changes in foreign currency exchange rates. Our most significant foreign currency exposures relate to Western European countries, Japan, China and Canada. Our foreign currency risk management strategy is principally designed to mitigate the future potential financial impact of changes in the U.S. dollar value of anticipated transactions and balances denominated in foreign currency, resulting from changes in foreign currency exchange rates. We enter into derivative transactions, specifically foreign currency forward contracts, to manage the exposures to foreign currency exchange risk to reduce earnings volatility. We do not enter into derivatives transactions for trading or speculative purposes.

### Non-Designated Hedges

We hedge our net foreign currency monetary assets and liabilities primarily resulting from foreign currency denominated receivables and payables with foreign exchange forward contracts to reduce the risk that our earnings and cash flows will be adversely affected by changes in foreign currency exchange rates. These contracts have maturities of up to approximately 3 months. Generally, we do not designate these foreign currency forward contracts as hedges for accounting purposes and changes in the fair value of these instruments are recognized immediately in earnings. Because we enter into forward contracts only as an economic hedge, any gain or loss on the underlying foreign-denominated balance would be offset by the loss or gain on the forward contract. Gains and losses on forward contracts and foreign denominated receivables and payables are included in other income (expense), net.

As of July 2, 2016 and September 30, 2015, we had outstanding forward contracts with notional amounts equivalent to the following:

Currency Hedged	July 2, 2016	September 30, 2015
	(in thousands)	
Canadian / U.S. Dollar	\$ 16,148	\$ 17,448
Euro / U.S. Dollar	145,317	82,917
British Pound / Euro	—	9,409
Israeli New Sheqel / U.S. Dollar	6,147	4,607
Japanese Yen / Euro	30,900	25,133
Japanese Yen / U.S. Dollar	6,716	—
Swiss Franc / U.S. Dollar	229	5,149
Swedish Krona / U.S. Dollar	5,111	3,128
All other	7,933	9,464
Total	\$ 218,501	\$ 157,255

The following table shows the effect of our non-designated hedges in the Consolidated Statements of Operations for the three and nine months ended July 2, 2016 and July 4, 2015:

Derivatives Not Designated as Hedging Instruments	Location of Gain or (Loss) Recognized in Income	Net realized and unrealized gain or (loss) (excluding the underlying foreign currency exposure being hedged)	
		Three months ended	
		July 2, 2016	July 4, 2015
		(in thousands)	
Forward Contracts	Other Income (Expense)	\$ (1,059)	\$ (741)
		Nine months ended	
		July 2, 2016	July 4, 2015
		(in thousands)	
Forward Contracts	Other Income (Expense)	\$ (1,645)	\$ (1,122)

### Cash Flow Hedges

Our foreign exchange risk management program objective is to identify foreign exchange exposures and implement appropriate hedging strategies to minimize earnings fluctuations resulting from foreign exchange rate movements. We

designate certain foreign exchange forward contracts as cash flow hedges of Euro, Yen and SEK denominated intercompany forecasted revenue transactions (supported by third party sales). All foreign exchange forward contracts are carried at fair value on the Consolidated Balance Sheets and the maximum duration of foreign exchange forward contracts does not exceed 13 months.

Cash flow hedge relationships are designated at inception, and effectiveness is assessed prospectively and retrospectively using regression analysis on a monthly basis. As the forward contracts are highly effective in offsetting changes to future cash flows on the hedged transactions, we record the effective portion of changes in these cash flow hedges in accumulated other comprehensive income and subsequently reclassify into earnings in the same period during which the hedged transactions are recognized in earnings. Changes in the fair value of foreign exchange forward contracts due to changes in time value are included in the assessment of effectiveness. Our derivatives are not subject to any credit contingent features. We manage credit risk with counterparties by trading among several counterparties and we review our counterparties' credit at least quarterly.

As of July 2, 2016 and September 30, 2015, we had outstanding forward contracts designed as cash flow hedges with notional amounts equivalent to the following:

Currency Hedged	July 2, 2016	September 30, 2015
	(in thousands)	
Euro / U.S. Dollar	\$ 60,742	\$ —
Japanese Yen / U.S. Dollar	20,488	—
SEK / U.S. Dollar	9,267	—
Total	\$ 90,497	\$ —

The following table shows the effect of our derivative instruments designated as cash flow hedges in the Consolidated Statements of Operations for the three and nine months ended July 2, 2016 and July 4, 2015 (in thousands):

Derivatives Designated as Hedging Instruments	Gain or (Loss) Recognized in OCI-Effective Portion		Location of Gain or (Loss) Reclassified from OCI into Income-Effective Portion	Gain or (Loss) Reclassified from OCI into Income-Effective Portion		Location of Gain or (Loss) Recognized-Ineffective Portion	Gain or (Loss) Recognized-Ineffective Portion	
	Three Months Ended			Three Months Ended			Three Months Ended	
	July 2, 2016	July 4, 2015		July 2, 2016	July 4, 2015		July 2, 2016	July 4, 2015
Forward Contracts	\$ 361	\$ —	Software Revenue	\$ (1,560)	\$ —	Other Income (Expense)	\$ 9	\$ —
	Nine months ended			Nine months ended			Nine months ended	
	July 2, 2016	July 4, 2015		July 2, 2016	July 4, 2015		July 2, 2016	July 4, 2015
Forward Contracts	\$ (3,633)	\$ —	Software Revenue	\$ (727)	\$ —	Other Income (Expense)	\$ (28)	\$ —

As of July 2, 2016, we estimated that approximately all values reported in accumulated other comprehensive income will be reclassified to income within the next twelve months.

In the event the underlying forecast transaction does not occur, or it becomes probable that it will not occur, the related hedge gains and losses on the cash flow hedge would be immediately reclassified to "Other Income (Expense)" on the Consolidated Statements of Operations. For the three and nine months ended July 2, 2016, there were no such gains or losses.

The following table shows our derivative instruments measured at gross fair value as reflected in the Consolidated Balance Sheets:

	Fair Value of Derivatives Designated As Hedging Instruments		Fair Value of Derivatives Not Designated As Hedging Instruments	
	July 2, 2016	September 30, 2015	July 2, 2016	September 30, 2015
	(in thousands)		(in thousands)	
<b>Derivative assets (a):</b>				
Forward Contracts	\$ 95	\$ —	\$ 1,644	\$ 507
<b>Derivative liabilities (b):</b>				
Forward Contracts	\$ 3,022	\$ —	\$ 3,128	\$ 46

(a) All derivative assets are recorded in "other current assets" in the Consolidated Balance Sheets.

(b) All derivative liabilities are recorded in "accrued expenses and other current liabilities" in the Consolidated Balance Sheets.

### Offsetting Derivative Assets and Liabilities

We have entered into master netting arrangements which allow net settlements under certain conditions. Although netting is permitted, it is currently our policy and practice to record all derivative assets and liabilities on a gross basis in the Consolidated Balance Sheets.

The following table sets forth the offsetting of derivative assets as of July 2, 2016 :

As of July 2, 2016	Gross Amounts Offset in the Consolidated Balance Sheets		Net Amounts of Assets Presented in the Consolidated Balance Sheets	Gross Amounts Not Offset in the Consolidated Balance Sheets		Net Amount
	Gross Amount of Recognized Assets	Gross Amounts Offset in the Consolidated Balance Sheets		Financial Instruments	Cash Collateral Received	
	(in thousands)					
Forward Contracts	\$ 1,739	\$ —	\$ 1,739	\$ (1,739)	\$ —	\$ —

The following table sets forth the offsetting of derivative liabilities as of July 2, 2016 :

As of July 2, 2016	Gross Amounts Offset in the Consolidated Balance Sheets		Net Amounts of Liabilities Presented in the Consolidated Balance Sheets	Gross Amounts Not Offset in the Consolidated Balance Sheets		Net Amount
	Gross Amount of Recognized Liabilities	Gross Amounts Offset in the Consolidated Balance Sheets		Financial Instruments	Cash Collateral Pledged	
	(in thousands)					
Forward Contracts	\$ 6,150	\$ —	\$ 6,150	\$ (1,739)	\$ —	\$ 4,411

## 11. Segment Information

We operate within a single industry segment-computer software and related services. Operating segments as defined under GAAP are components of an enterprise about which separate financial information is available that is evaluated regularly by the chief operating decision maker, or decision-making group, in deciding how to allocate resources and in assessing performance. Our chief operating decision maker is our President and Chief Executive Officer. We have three operating and reportable segments: (1) the Solutions Group, which includes license, subscription, support and cloud services revenue for our core CAD, SLM and ePLM products; (2) the Technology Platform Group, which includes license, subscription, support and cloud services revenue for our IoT, analytics and augmented reality solutions, and (3) Professional Services, which includes consulting, implementation and training revenue. Our reported segment profit includes revenue from third party sales of our products and services, less direct controllable segment costs. Direct costs of the segments include certain costs of revenue, research and development and certain marketing costs. Costs excluded from segment margin include cost of revenue, selling expenses, corporate marketing and general and administrative costs that are incurred in support of all of our segments and are not specifically allocated to our segments for management reporting. Additionally, the segment profit does not include stock-based compensation, amortization of intangible assets, restructuring charges and certain other identified costs that we do not allocate to the segments for purposes of evaluating their operational performance.

The revenue and profit attributable to our operating segments are summarized below. We do not produce asset information by reportable segment; therefore, it is not reported.

	Three months ended		Nine months ended	
	July 2, 2016	July 4, 2015	July 2, 2016	July 4, 2015
(in thousands)				
<b>Solutions Group</b>				
Revenue	\$ 217,673	\$ 229,157	\$ 652,985	\$ 726,679
Direct costs	44,882	54,583	140,465	174,109
Profit	172,791	174,574	512,520	552,570
<b>Technology Platform Group</b>				
Revenue	20,678	20,456	51,034	38,213
Direct costs	22,255	7,479	61,478	20,340
Profit (loss)	(1,577)	12,977	(10,444)	17,873
<b>Professional Services</b>				
Revenue	50,301	53,500	148,277	177,782
Direct costs	42,393	44,703	124,832	151,521
Profit	7,908	8,797	23,445	26,261
Total segment revenue	288,652	303,113	852,296	942,674
Total segment costs	109,530	106,765	326,775	345,970
Total segment profit	179,122	196,348	525,521	596,704
Other unallocated operating expenses	168,711	170,348	484,919	490,853
Restructuring charges	2,815	4,393	44,541	42,625
Total operating income (loss)	7,596	21,607	(3,939)	63,226
Interest and other expense, net	8,300	3,668	19,880	10,492
Income (loss) before income taxes	\$ (704)	\$ 17,939	\$ (23,819)	\$ 52,734

- (1) We recorded restructuring charges of \$2.8 million and \$44.5 million, respectively, in the third quarter and first nine months of 2016. Solutions Group included \$1.4 million and \$16.3 million, respectively; Technology Platform Group included \$0.6 million and \$1.3 million, respectively; Professional Services included \$0.3 million and \$4.8 million, respectively; and unallocated departments included \$0.5 million and \$22.1 million, respectively, of these restructuring charges. We recorded restructuring charges of \$4.4 million and \$42.6 million, respectively, in the third quarter and first nine months of 2015. Solutions Group included \$1.0 million and \$8.5 million, respectively; Technology Platform Group included \$0.1 million and \$0.3 million, respectively; Professional Services included \$0.3 million and \$10.9 million, and unallocated departments included \$3.0 million and \$22.9 million, respectively, of these restructuring charges.

## 12. Income Taxes

In the third quarter and first nine months of 2016, our effective tax rate was 537% on a pre-tax loss of \$0.7 million and (9)% on a pre-tax loss of \$23.8 million, respectively, compared to 3% on pre-tax income of \$17.9 million and (1)% on pretax income of \$52.7 million in the third quarter and first nine months of 2015, respectively. In the third quarter and first nine months of 2016 and 2015, our effective tax rate was lower than the 35% statutory federal income tax rate due to our corporate structure in which our foreign taxes are at a net effective tax rate lower than the U.S. rate. A significant amount of our foreign earnings is generated by our subsidiaries organized in Ireland. In 2016 and 2015, the foreign rate differential predominantly relates to these Irish earnings. Our foreign rate differential in 2016 and 2015 includes a rate benefit from a business realignment completed on September 30, 2014 in which intellectual property was transferred between two wholly-owned foreign subsidiaries. The realignment allows us to more efficiently manage the distribution of our products to European customers. For the third quarter and first nine months of 2016 and 2015, this realignment resulted in a tax benefit of approximately \$9 million and \$16 million, and \$6 million and \$14 million, respectively. Additionally, in the first nine months of 2016 and 2015,

our provision reflects a tax benefit of \$2.6 million and \$2.1 million, respectively, related to a retroactive extension of the U.S. research and development tax credit enacted in the first quarter of each of 2016 and 2015. In the first nine months of 2016 and 2015, this benefit was offset by a corresponding provision to increase our U.S. valuation allowance. In addition, in the first nine months of 2015, we recorded a tax benefit of \$3.1 million related to the reassessment of our reserve requirements, and a benefit of \$1.4 million in conjunction with the reorganization of our Atego U.S. subsidiaries.

As of July 2, 2016 and September 30, 2015, we had unrecognized tax benefits of \$15.5 million and \$14.1 million, respectively. If all of our unrecognized tax benefits as of July 2, 2016 were to become recognizable in the future, we would record a benefit to the income tax provision of \$13.9 million, which would be partially offset by an increase in the U.S. valuation allowance of \$4.8 million.

Although we believe our tax estimates are appropriate, the final determination of tax audits and any related litigation could result in favorable or unfavorable changes in our estimates. We believe it is reasonably possible that within the next 12 months the amount of unrecognized tax benefits related to the resolution of multi-jurisdictional tax positions could be reduced by up to \$5.0 million as audits close and statutes of limitations expire.

In the fourth quarter of 2016, we received an assessment from the tax authorities in Korea related to an ongoing tax audit of approximately \$12 million. The assessment relates to various tax issues but primarily to foreign withholding taxes. We intend to appeal and will vigorously defend our positions. We believe that it is more likely than not that our positions will be sustained upon appeal. Accordingly, we have not recorded a tax reserve for this matter. We have not yet determined whether it will be necessary to pay the assessment while our appeal is pending. If we do not pay the assessment while our appeal is pending and we lose our appeal, we could be subject to substantial additional penalties.

### 13. Debt

At July 2, 2016 and September 30, 2015, we had the following long-term borrowing obligations:

	July 2, 2016	September 30, 2015
(in thousands)		
6.000% Senior notes due 2024	\$ 500,000	\$ —
Credit facility-revolver	278,125	193,125
Credit facility-term loan	—	475,000
Total debt	778,125	668,125
Unamortized debt issuance costs	(11,254)	(7,587)
Total debt, net of issuance costs	\$ 766,871	\$ 660,538
Reported as		
Current portion of long-term debt	\$ —	\$ 50,000
Long-term debt	778,125	618,125
Total debt	\$ 778,125	\$ 668,125

#### Senior Notes

In May 2016, we issued \$500 million in aggregate principal amount of 6.0% senior, unsecured long-term debt at par value, due in 2024. We used the net proceeds from the sale of the notes to repay a portion of our outstanding revolving loan under our current credit facility. Interest is payable semi-annually on November 15 and May 15. The debt indenture includes covenants that limit our ability to, among other things, incur additional debt, grant liens on our properties or capital stock, enter into sale and leaseback transactions or asset sales, and make capital distributions. We were in compliance with all of the covenants as of July 2, 2016.

On and after May 15, 2019, we may redeem the senior notes at any time in whole or from time to time in part at specified redemption prices. In certain circumstances constituting a change of control, we will be required to make an offer to repurchase the senior notes at a purchase price equal to 101% of the aggregate principal amount of the notes, plus accrued and unpaid interest. Our ability to repurchase the senior notes in such event may be limited by law, by the indenture associated with the senior notes, by our then-available financial resources or by the terms of other agreements to which we may be party at such time. If we fail to repurchase the senior notes as required by the indenture, it would constitute an event of default under the indenture governing the senior notes which, in turn, may also constitute an event of default under other obligations.



As of July 2, 2016, the total estimated fair value of the Notes was approximately \$517.5 million, which is based on quoted prices for the notes on that date.

#### *Credit Agreement*

In November 2015, we entered into a multi-currency credit facility with a syndicate of sixteen banks for which JPMorgan Chase Bank, N.A. acts as Administrative Agent. This credit facility amended and restated in its entirety our credit facility described in Note H of our Annual Report on Form 10-K for the fiscal year ended September 30, 2015. We expect to use the credit facility for general corporate purposes, including acquisitions of businesses, share repurchases and working capital requirements. As of July 2, 2016, the fair value of our credit facility approximates its book value.

The credit facility initially consisted of a \$1 billion revolving loan commitment, which was reduced to \$900 million in June 2016 pursuant to an amendment to the Credit Agreement. The loan commitment may be increased by an additional \$500 million (in the form of revolving loans or term loans, or a combination thereof) if the existing or additional lenders are willing to make such increased commitments. The revolving loan commitment does not require amortization of principal and may be repaid in whole or in part prior to the scheduled maturity date at our option without penalty or premium. The credit facility matures on September 15, 2019, when all remaining amounts outstanding will be due and payable in full.

PTC and certain eligible foreign subsidiaries are eligible borrowers under the credit facility. Any borrowings by PTC Inc. under the credit facility would be guaranteed by PTC Inc.'s material domestic subsidiaries that become parties to the subsidiary guaranty, if any. As of the filing of this Form 10-Q, there are no subsidiary guarantors of the obligations under the credit facility. Any borrowings by eligible foreign subsidiary borrowers would be guaranteed by PTC Inc. and any subsidiary guarantors. As of the filing of this Form 10-Q, no amounts under the credit facility have been borrowed by an eligible foreign subsidiary borrower. In addition, PTC and certain of its material domestic subsidiaries' owned property (including equity interests) is subject to first priority perfected liens in favor of the lenders of this credit facility. 100% of the voting equity interests of certain of PTC's domestic subsidiaries and 65% of its material first-tier foreign subsidiaries are pledged as collateral for the obligations under the credit facility.

As of July 2, 2016, we had \$278.1 million in loans outstanding under the credit facility. Loans under the credit facility bear interest at variable rates which reset every 30 to 180 days depending on the rate and period selected by PTC as described below. As of July 2, 2016, the annual interest rate for borrowing outstanding was 2.44%. Interest rates on borrowings outstanding under the credit facility range from 1.25% to 1.75% above an adjusted LIBO rate for Euro currency borrowings or would range from 0.25% to 0.75% above the defined base rate (the greater of the Prime Rate, the FRBNY rate plus 0.5%, or an adjusted LIBO rate plus 1%) for base rate borrowings, in each case based upon PTC's total leverage ratio. Additionally, PTC may borrow certain foreign currencies at rates set in the same range above the respective London interbank offered interest rates for those currencies, based on PTC's total leverage ratio. A quarterly commitment fee on the undrawn portion of the credit facility is required, ranging from 0.175% to 0.30% per annum, based upon PTC's total leverage ratio.

The credit facility limits PTC's and its subsidiaries' ability to, among other things: incur liens or guarantee obligations; pay dividends (other than to PTC) and make other distributions; make investments and enter into joint ventures; dispose of assets; and engage in transactions with affiliates, except on an arms-length basis. Under the credit facility, PTC and its material domestic subsidiaries may not invest cash or property in, or loan to, PTC's foreign subsidiaries in aggregate amounts exceeding \$75.0 million for any purpose and an additional \$200.0 million for acquisitions of businesses. In addition, under the credit facility, PTC and its subsidiaries must maintain the following financial ratios:

- a total leverage ratio, defined as consolidated total indebtedness to the consolidated trailing four quarters EBITDA, not to exceed 4.00 to 1.00 as of the last day of any fiscal quarter;
- a senior secured leverage ratio, defined as senior consolidated total indebtedness (which excludes unsecured indebtedness) to the consolidated trailing four quarters EBITDA, not to exceed 3.00 to 1.00 as of the last day of any fiscal quarter; and
- a fixed charge coverage ratio, defined as the ratio of consolidated trailing four quarters EBITDA less consolidated capital expenditures to consolidated fixed charges, of not less than 3.50 to 1.00 as of the last day of any fiscal quarter.

As of July 2, 2016, our total leverage ratio was 3.15 to 1.00, our senior secured leverage ratio was 1.09 to 1 and our fixed charge coverage ratio was 8.45 to 1.00 and we were in compliance with all financial and operating covenants of the credit facility.

Any failure to comply with the financial or operating covenants of the credit facility would prevent PTC from being able to borrow additional funds, and would constitute a default, permitting the lenders to, among other things, accelerate the amounts outstanding, including all accrued interest and unpaid fees, under the credit facility and to terminate the credit facility. A change in control of PTC, as defined in the agreement, also constitutes an event of default, permitting the lenders to accelerate the indebtedness and terminate the credit facility.

## 14. Commitments and Contingencies

### *Legal and Regulatory Matters*

#### *Korean Tax Audit*

In July 2016, we received an assessment from the tax authorities in Korea related to an ongoing tax audit of approximately \$12 million . See Note 12. *Income Taxes* for additional information.

#### *China Investigation*

The China Administration for Industry and Commerce (the “Agency”) recently initiated an investigation at our China subsidiary related to the investigation concerning expenditures by our business partners in China and our China business that we recently settled with the U.S. Securities and Exchange Commission (“SEC”) and the U.S. Department of Justice (“DOJ”), but not necessarily limited to the scope of that investigation. The Agency is authorized to issue fines and assess other civil penalties. We are unable to predict the outcome of this matter, which could include fines or other sanctions that could be material.

#### *Legal Proceedings*

On March 7, 2016, a lawsuit was filed against us and certain of our current and former officers and directors in the U.S. District Court for the District of Massachusetts by a shareholder on behalf of himself and purportedly on behalf of other shareholders who purchased our stock during the period November 24, 2011 through July 29, 2015. An amended complaint was filed on July 11, 2016. The lawsuit, which seeks unspecified damages, alleges that, during that period, PTC’s public disclosures concerning the SEC and DOJ investigation described above were false and/or misleading and/or failed to disclose certain alleged facts. We intend to contest the action vigorously. We cannot predict the outcome of this action nor when it will be resolved. If the plaintiff(s) were to prevail in the litigation, we could be liable for damages, which could be material and could adversely affect our financial condition or results of operations.

We are subject to various other legal proceedings and claims that arise in the ordinary course of business. We do not believe that resolving the legal proceedings and claims that we are currently subject to will have a material adverse impact on our financial condition, results of operations or cash flows. However, the results of legal proceedings cannot be predicted with certainty. Should any of these legal proceedings and claims be resolved against us, the operating results for a particular reporting period could be adversely affected.

#### *Accruals*

With respect to legal proceedings and claims, we record an accrual for a contingency when it is probable that a liability has been incurred and the amount of the loss can be reasonably estimated. For legal proceedings and claims for which the likelihood that a liability has been incurred is more than remote but less than probable, we estimate the range of possible outcomes. As of July 2, 2016 , we had a legal proceedings and claims accrual of \$0.4 million .

#### *Guarantees and Indemnification Obligations*

We enter into standard indemnification agreements in the ordinary course of our business. Pursuant to such agreements with our business partners or customers, we indemnify, hold harmless, and agree to reimburse the indemnified party for losses suffered or incurred by the indemnified party, generally in connection with patent, copyright or other intellectual property infringement claims by any third party with respect to our products, as well as claims relating to property damage or personal injury resulting from the performance of services by us or our subcontractors. The maximum potential amount of future payments we could be required to make under these indemnification agreements is unlimited. Historically, our costs to defend lawsuits or settle claims relating to such indemnity agreements have been minimal and we accordingly believe the estimated fair value of liabilities under these agreements is immaterial.

We warrant that our software products will perform in all material respects in accordance with our standard published specifications in effect at the time of delivery of the licensed products for a specified period of time. Additionally, we generally warrant that our consulting services will be performed consistent with generally accepted industry standards. In most cases, liability for these warranties is capped. If necessary, we would provide for the estimated cost of product and service warranties based on specific warranty claims and claim history; however, we have not incurred significant cost under our product or services warranties. As a result, we believe the estimated fair value of these liabilities is immaterial.

## 15. Pension Plans

Our pension plans are described in more detail in Note M to the Consolidated Financial Statements included in our Annual Report on Form 10-K for the fiscal year ended September 30, 2015. In the first nine months of 2015, we contributed \$20 million to a non-U.S. pension plan.

## 16. Subsequent Events

*Employee Stock Purchase Plan*

The first offering period under our employee stock purchase plan (ESPP) began on August 1, 2016 and will end on January 31, 2017. The ESPP allows eligible employees to contribute up to 10% of their base salary, up to a maximum of \$25,000 per year and subject to any other plan limitations, toward the purchase of our common stock at a discounted price. The purchase price of the shares on each purchase date is equal to 85% of the lower of the fair market value of our common stock on the first and last trading days of each offering period. The ESPP is qualified under Section 423 of the Internal Revenue Code. We will estimate the fair value of each purchase right under the ESPP on the date of grant using the Black-Scholes option valuation model and use the straight-line attribution approach to record the expense over the six-month offering period.

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

### Forward-Looking Statements

Statements in this Quarterly Report on Form 10-Q that are not historic facts, including statements about our future financial and growth expectations, the development of our products and markets, adoption of subscription licensing by our customers, and adoption of our solutions and future purchases by customers, are forward-looking statements that involve risks and uncertainties that could cause actual results to differ materially from those projected. These risks include: macroeconomic and/or global manufacturing climates may not improve or may deteriorate; customers may not purchase our solutions when or at the rates we expect; our businesses, including our Technology Platform and SLM businesses, may not expand and/or generate the revenue we expect; our market size and growth estimates may be incorrect and that we may be unable to grow our business at or in excess of market growth rates; new products released and planned products, including Technology Platform-enabled core products, may not generate the revenue we expect or be released as we expect; foreign currency exchange rates may vary from our expectations and thereby affect our reported revenue and expense; the mix of revenue between license, subscription, support and professional services could be different than we expect, which could impact our earnings per share results and cash flows; our customers may purchase more of our solutions as subscriptions than we expect, which would adversely affect near-term revenue, operating margins and earnings per share; customers may not purchase subscriptions at the rate we expect, which could affect our longer-term business projections; sales of our solutions as subscriptions may not have the longer-term positive effect on revenue that we expect; our workforce realignment may adversely affect our operations and may not achieve the expense savings we expect; we may be unable to generate sufficient operating cash flow to return 40% of free cash flow to shareholders and other uses of cash and debt covenants could preclude share repurchases; our substantial indebtedness could adversely affect our business, financial condition and results of operations, as well as our ability to meet our payment obligations under our debt; we may incur material damages in connection with a recently-filed securities law lawsuit concerning disclosures about the SEC and DOJ investigation in China that we recently settled; as well as other risks and uncertainties described below throughout or referenced in Part II, Item 1A. Risk Factors of this report

### Operating and Non-GAAP Measures

Our discussion of results includes discussion of our operating measures (including "subscription bookings" and "license and subscription bookings") and non-GAAP measures. You can find an explanation of these measures in *Results of Operations - Subscription Measures* and *Results of Operations - Non-GAAP Measures* below.

### Business Overview

PTC Inc. develops and delivers technology solutions, comprised of software and services, that transform the way our customers create, operate and service their products for a smart, connected world.

Our solutions and software products address the challenges our customers face in the following areas:

#### Technology Platform Group

- **Internet of Things (IoT)**  
Enabling connectivity, development, analysis, and augmented reality software applications for smart, connected products and environments.

#### Solutions Group

- **Computer-Aided Design (CAD)**  
Effective and collaborative product design across the globe.
- **Product Lifecycle Management (PLM)**  
Efficient and consistent management of product development from concept to retirement across functional processes and distributed teams.
- **Application Lifecycle Management (ALM)**  
Management of global software development from concept to delivery.
- **Service Lifecycle Management (SLM)**

Planning and delivery of service, and analysis of product intelligence at the point of service.

## Executive Overview

In the third quarter of 2016, we saw an acceleration in the adoption of subscription licensing by our customers, including the conversion by some customers of their support contracts into subscriptions. Subscription bookings as a percentage of license and subscription bookings grew to 58% for the third quarter of 2016, up from 54% in the second quarter of 2016 and up from 16% in the third quarter of 2015. License and subscription bookings grew 21% in the third quarter over the second quarter of 2016, with license and subscription bookings of \$105 million in the third quarter of 2016, and grew 32% over the third quarter of 2015. Our success with our subscription initiative contributed to the decline in both revenue, including perpetual license revenue, and earnings in the third quarter of 2016.

Approximately 67% of our revenue in both the third quarter and first nine months of 2016 came from recurring revenue streams, compared to 60% in both the third quarter and first nine months of 2015. Approximately 81% of our software revenue in both the third quarter and first nine months of 2016 came from recurring revenue streams, compared to 73% and 74% in the comparable year-ago periods.

### Results for the Third Quarter

Revenue was down year over year, despite growth in license and subscription bookings, due to:

- a higher mix of subscription revenue in 2016 compared to 2015 as we transition from selling perpetual licenses to a subscription-based licensing model;
- a decline in professional services revenue of 6%, consistent with our strategy to migrate more service engagements to our partners;
- a challenging macroeconomic environment; and
- the impact of foreign currency exchange rates on our reported revenue due to an increase in the strength of the U.S. Dollar relative to international currencies, most notably the Euro and the Yen.

Revenue	Three Months Ended			Constant Currency Change	Nine Months Ended			Constant Currency Change
	July 2, 2016	July 4, 2015	Change		July 2, 2016	July 4, 2015	Change	
(in millions)								
Subscription	\$ 31.8	\$ 17.2	85 %	84 %	\$ 77.7	\$ 47.1	65 %	68 %
Support	161.9	165.7	(2)%	(3)%	494.3	516.0	(4)%	(1)%
Total recurring software revenue	193.7	182.8	6 %	5 %	571.9	563.2	2 %	5 %
Perpetual license	44.6	66.8	(33)%	(32)%	132.1	201.7	(35)%	(32)%
Total software revenue	238.4	249.6	(5)%	(5)%	704.0	764.9	(8)%	(5)%
Professional services	50.3	53.5	(6)%	(6)%	148.3	177.8	(17)%	(13)%
Total revenue	\$ 288.7	\$ 303.1	(5)%	(5)%	\$ 852.3	\$ 942.7	(10)%	(7)%

Earnings Measures	Three Months Ended			Constant Currency Change	Nine Months Ended			Constant Currency Change
	July 2, 2016	July 4, 2015	Change		July 2, 2016	July 4, 2015	Change	
Operating Margin	2.6%	7.1%			(0.5)%	6.7%		
Earnings (Loss) Per Share	\$ 0.03	\$ 0.15	(82)%	(86)%	\$ (0.23)	\$ 0.46	(150)%	(139)%
Non-GAAP Operating Margin <sup>(1)</sup>	14.1%	24.1%			16.5 %	22.9%		
Non-GAAP EPS <sup>(1)</sup>	\$ 0.26	\$ 0.53	(51)%	(52)%	\$ 1.00	\$ 1.57	(36)%	(31)%

(1) Non-GAAP measures are reconciled to GAAP results under *Results of Operations - Non-GAAP Measures* below.

Operating margins reflect lower revenue, higher incentive-based compensation and costs from acquired businesses, partially offset by reductions in operating expenses driven by cost savings from restructuring actions. Our GAAP earnings also reflect

restructuring charges of \$45 million for the nine months ended July 2, 2016, compared to \$43 million for the nine months ended July 2, 2015.

We ended the quarter with a cash balance of \$295 million. We generated \$59 million of cash from operations in the third quarter of 2016, which included \$8 million of restructuring payments. At July 2, 2016, the balance outstanding under our credit facility was \$278 million and total debt outstanding was \$778 million (reflecting the note issuance described below).

#### *Debt Offering*

In May 2016, we issued \$500 million 6.0% senior, unsecured long-term debt at par value, due in 2024. We used the net proceeds from the issuance of the notes to repay a portion of our outstanding revolving loan under our credit facility. Because the interest rate on the notes is higher than the variable rate we now pay under our credit facility, our annual interest expense will increase by about \$20 million. The first interest payment on the notes is due in November 2016.

#### *Restructuring*

On October 23, 2015, we initiated a plan to restructure our workforce and consolidate select facilities in order to reduce our cost structure and to realign our investments with our identified growth opportunities. The restructuring resulted in a charge of \$37 million in the first quarter of 2016, \$4 million in the second quarter of 2016, and \$3 million in the third quarter of 2016, which is primarily attributable to termination benefits associated with 518 employees. In the third quarter and first nine months of 2015, we recorded charges of \$4 million and \$43 million, respectively, attributable to termination benefits associated with 411 employees.

#### *Acquisitions*

We closed two acquisitions in the first nine months of 2016, both of which enhanced our Technology Platform portfolio.

On November 3, 2015, we acquired the Vuforia business from Qualcomm Connected Experiences, Inc., a subsidiary of Qualcomm Incorporated, for approximately \$65 million in cash (net of cash acquired of \$4.5 million). At the time of the acquisition, Vuforia had approximately 80 employees and historical annualized revenues were not material.

On January 12, 2016, we acquired Kepware Inc., a software development company that provides communications connectivity to industrial automation environments, for approximately \$99 million in cash, net of cash acquired, and up to \$18 million of contingent earn-out. At the time of the acquisition, Kepware had approximately 115 employees and historical annualized revenues of approximately \$20 million.

#### *Future Expectations, Strategies and Risks*

The slowdown in the global manufacturing industry, uncertainty about the economic environment, the strong U.S. Dollar, and our transition to a subscription model were headwinds for revenue and earnings growth in the third quarter and first nine months of 2016. We anticipate that the macroeconomic conditions impacting spending among discrete manufacturing customers, particularly in the Americas and China, will persist in 2016.

Our 2016 initiatives are to: 1) drive sustainable growth, 2) expand our subscription-based licensing, and 3) continue to control costs and improve margins.

#### *Sustainable Growth*

Our goals for overall growth are predicated on continuing to expand our Technology Platform footprint and making structural changes to our business to improve operational performance and increase growth potential for both our Technology Platform solutions and our core solutions. For 2016, we reorganized the company into two main business units: the Solutions Group (comprised of our core CAD, ePLM and SLM business) and the Technology Platform Group (comprised of our IoT, analytics and augmented reality business). This new structure facilitates appropriate focus on both our core business and the Technology Platform business. We expect to continue to invest in our businesses, particularly the Technology Platform Group, to support their growth.

#### *Subscription*

A majority of our software sales to date have been perpetual licenses, under which customers license our software in perpetuity and revenue is recognized at the time of sale. Due to evolving customer preferences, our plan to increase our recurring revenue base, and acquisitions we have made in the Technology Platform and cloud services space, we began offering our products under a subscription license model in 2015. A growing percentage of our business now consists of subscription licenses for which revenue is recognized ratably over time. Under a subscription, customers pay a periodic fee to license our software over a specified period of time, including access to technical support. Beginning October 1, 2015 we launched the second phase of our subscription program with the goal of accelerating our transition to a predominantly subscription-based licensing model. To drive that acceleration, we launched new pricing and packaging for subscriptions and new sales incentive compensation plans. We also launched a program for our existing customers to convert their support contracts to subscription

contracts. We expect there will be greater opportunities for the remainder of 2016 and into 2017 than in subsequent years to convert existing support and term license contracts into subscription contracts due to the cyclical nature of certain of those contracts.

We are targeting that by 2018 a significant majority of our license and solutions (L&S) bookings could be subscription. In 2016, we expect subscription bookings as a percentage of L&S bookings will be approximately 48%, up from 17% in 2015. If a greater percentage of our customers elect our subscription offering in 2016 than our base case assumption, it will have an adverse impact on revenue, operating margin, cash flow and EPS growth relative to our expectations. In addition, subscription orders may be smaller in size than perpetual deals.

#### *Cost Controls and Margin Expansion*

We continue to proactively manage our cost structure and invest in what we believe are the highest return opportunities in our business. Our goal is to drive continued margin expansion over the long term. To that end, in October 2015, we committed to a plan to restructure approximately 8% of our workforce and consolidate select facilities in order to reduce our cost structure and to realign our investments with our identified growth opportunities. The restructuring is expected to result in a charge of \$50 million to \$70 million, the upper range of which has increased from our original estimate of \$50 million. We recorded \$44 million in the first nine months of 2016, with the majority of the remainder expected to be recorded in the fourth quarter of 2016. We expect that the expense reductions will be offset by planned cost increases, investments in our business and the anticipated effects of foreign currency fluctuations, which effect is contemplated in our most recent financial targets for fiscal 2016.

#### **Results of Operations**

The following table shows the financial measures that we consider the most significant indicators of the performance of our business. In addition to operating income, operating margin, and diluted earnings per share as calculated under GAAP, the table also includes non-GAAP operating income, operating margin, and diluted earnings per share for the reported periods. We discuss the non-GAAP measures in detail, including items excluded from the measures, and provide a reconciliation to the comparable GAAP measures under *Non-GAAP Measures* below.

	Three months ended		Percent Change 2015 to 2016		Nine months ended		Percent Change 2015 to 2016	
	July 2, 2016	July 4, 2015	Actual	Constant Currency	July 2, 2016	July 4, 2015	Actual	Constant Currency
(Dollar amounts in millions, except per share data)								
Subscription	\$ 31.8	\$ 17.2	85 %	84 %	\$ 77.7	\$ 47.1	65 %	68 %
Support	161.9	165.7	(2)%	(3)%	494.3	516.0	(4)%	(1)%
Total recurring software revenue	193.7	182.8	6 %	5 %	571.9	563.2	2 %	5 %
Perpetual license	44.6	66.8	(33)%	(32)%	132.1	201.7	(35)%	(32)%
Total software revenue	238.4	249.6	(5)%	(5)%	704.0	764.9	(8)%	(5)%
Professional services	50.3	53.5	(6)%	(6)%	148.3	177.8	(17)%	(13)%
Total revenue	288.7	303.1	(5)%	(5)%	852.3	942.7	(10)%	(7)%
Total cost of revenue	82.5	79.4	4 %		242.8	258.4	(6)%	
Gross margin	206.2	223.7	(8)%		609.5	684.3	(11)%	
Operating expenses	198.6	202.1	(2)%		613.4	621.1	(1)%	
Total costs and expenses	281.1	281.5	— %	— %	856.2	879.4	(3)%	— %
Operating income (loss)	\$ 7.6	\$ 21.6	(65)%	(64)%	\$ (3.9)	\$ 63.2	(106)%	(98)%
Non-GAAP operating income <sup>(1)</sup>	\$ 40.7	\$ 73.2	(44)%	(45)%	\$ 141.1	\$ 216.8	(35)%	(31)%
Operating margin	2.6%	7.1%			(0.5)%	6.7%		
Non-GAAP operating margin <sup>(1)</sup>	14.1%	24.1%			16.5 %	22.9%		
Diluted earnings (loss) per share	\$0.03	\$ 0.15			\$ (0.23)	\$ 0.46		
Non-GAAP diluted earnings per share <sup>(2)</sup>	\$0.26	\$ 0.53			\$ 1.00	\$ 1.57		
Cash flow from operations	\$59.5	\$ 86.8			\$ 169.6	\$ 192.5		

(1) See *Non-GAAP Measures* below for a reconciliation of our GAAP results to our non-GAAP measures.

(2) We have recorded a full valuation allowance against our U.S. net deferred tax assets and a valuation allowance against net deferred tax assets in certain foreign jurisdictions. As we are profitable on a non-GAAP basis, the 2016 and 2015 non-GAAP tax provisions are calculated assuming there is no valuation allowance. Income tax adjustments for the three and nine months ended July 4, 2015 reflect the tax effects of non-GAAP adjustments which are calculated by applying the applicable tax rate by jurisdiction to the non-GAAP adjustments listed above. However, for the nine months ended July 2, 2016, because of low expected full year GAAP earnings combined with the relatively large year-to-date GAAP loss, the non-GAAP provision for the third quarter and first nine months of 2016 calculated based on our historical methodology is not reflective of our full year expected non-GAAP tax rate. As a result, in the second quarter we changed our methodology for calculating our non-GAAP tax provision. For the nine months ended July 2, 2016, our non-GAAP tax provision is based on our annual expected non-GAAP tax rate applied to our year-to-date non-GAAP earnings.

### ***Subscription Measures***

Given the difference in revenue recognition between the sale of a perpetual software license (revenue is recognized at the time of sale) and a subscription (revenue is deferred and recognized ratably over the subscription term), we use bookings for internal planning, forecasting and reporting of new license and cloud services transactions.

### ***Bookings***

In order to normalize between perpetual and subscription licenses, we define subscription bookings as the subscription annualized contract value (subscription ACV) of new subscription bookings multiplied by a conversion factor of 2. We arrived at the conversion factor of 2 by considering a number of variables, including pricing, support, length of term, and renewal rates. We define subscription ACV as the total value of a new subscription booking divided by the term of the contract (in days), multiplied by 365. If the term of the subscription contract is less than a year, the ACV is equal to the total contract value.

License and subscription bookings equal subscription bookings (as described above) plus perpetual license bookings plus any monthly software rental bookings during the period. Total ACV equals subscription ACV (as described above) plus the annualized value of incremental monthly software rental bookings during the period.

Because subscription bookings is a metric we use to approximate the value of subscription sales if sold as perpetual licenses, it does not represent the actual revenue that will be recognized with respect to subscription sales or that would be



recognized if the sales had been perpetual licenses, nor does the annualized value of monthly software rental bookings represent the value of any such booking.

Subscription bookings were 58% and 49% of license and subscription bookings in the third quarter and first nine months of 2016, respectively, compared to 16% in both the year-ago periods.

#### *Annualized Recurring Revenue (ARR)*

Annualized Recurring Revenue (ARR) for a given quarter is calculated by dividing the non-GAAP subscription and support software revenue for the quarter by the number of days in the quarter and multiplying by 365. ARR should be viewed independently of revenue and deferred revenue as it is an operating measure and is not intended to be combined with or to replace either of those items. ARR is not a forecast and does not include perpetual license or professional services revenues.

ARR was approximately \$780 million for the third quarter of 2016, which increased approximately 6% on a constant currency basis compared to the third quarter of fiscal 2015.

#### *Impact of Foreign Currency Exchange on Results of Operations*

Approximately two-thirds of our revenue and half of our expenses are transacted in currencies other than the U.S. Dollar. Because we report our results of operations in U.S. Dollars, currency translation, particularly changes in the Euro and Yen relative to the U.S. Dollar, affects our reported results. If actual results for the third quarter and first nine months of 2016 had been converted into U.S. Dollars based on the foreign currency exchange rates in effect for the third quarter and first nine months of 2015, revenue would have been lower by \$1.9 million and higher by \$28.1 million, respectively, costs and expenses would have been lower by \$0.5 million and higher by \$23.6 million, respectively, and operating income would have been lower by \$1.4 million and higher by \$4.5 million, respectively. Our constant currency disclosures are calculated by multiplying the actual results for the third quarter and first nine months of 2016 by the exchange rates in effect for the comparable periods of 2015.

#### *Revenue from Acquired Businesses*

The results of operations of acquired businesses have been included in our consolidated financial statements beginning on their respective acquisition dates. Kepware contributed approximately \$5.6 million to our revenue in the third quarter of 2016 and approximately \$10.3 million in the first nine months of 2016.

#### *Reclassifications*

In 2015, we classified revenue in three categories: 1) license and subscription solutions; 2) support; and 3) professional services. Effective with the beginning of the first quarter of 2016, we are reporting perpetual license revenue separately from subscription revenue and are presenting revenue in four categories: 1) subscription; 2) support; 3) perpetual license; and 4) professional services. Effective with the beginning of the first quarter of 2016, we reclassified certain expenses related to management of our product lines from general and administrative to marketing. The discussion that follows reflects our revised reporting structure.

#### *Revenue*

We report our revenue by line of business (as described above), by product area (Solutions and Technology Platform Groups) and by geographic region (Americas, Europe, Pacific Rim and Japan). Results include combined revenue from direct sales and our channel.

#### *Revenue by Line of Business*

	% of Total Revenue			
	Three months ended		Nine months ended	
	July 2, 2016	July 4, 2015	July 2, 2016	July 4, 2015
Subscription	11%	6%	9%	5%
Support	56%	55%	58%	55%
Perpetual license	15%	22%	15%	21%
Professional services	17%	18%	17%	19%

**Revenue by Group**

	Three months ended				Nine months ended			
	July 2, 2016	July 4, 2015	Percent Change		July 2, 2016	July 4, 2015	Percent Change	
			Actual	Constant Currency			Actual	Constant Currency
(Dollar amounts in millions)								
<b>Solutions Group</b>								
Subscription	\$ 20.8	\$ 8.9	134 %	132 %	\$ 45.8	\$ 26.2	75 %	80 %
Support	159.1	164.3	(3)%	(4)%	486.7	512.6	(5)%	(2)%
Total recurring software revenue	179.9	173.2	4 %	3 %	532.5	538.8	(1)%	2 %
Perpetual license	37.7	55.9	(32)%	(31)%	120.5	187.9	(36)%	(33)%
Total software revenue	217.7	229.2	(5)%	(5)%	653.0	726.7	(10)%	(7)%
Professional services	48.7	52.6	(7)%	(8)%	142.7	175.6	(19)%	(15)%
Total revenue	\$ 266.4	\$ 281.7	(5)%	(6)%	\$ 795.6	\$ 902.3	(12)%	(9)%
<b>Technology Platform Group</b>								
Subscription	\$ 11.0	\$ 8.3	33 %	32 %	\$ 31.9	\$ 20.9	52 %	53 %
Support	2.8	1.3	109 %	109 %	7.6	3.5	119 %	121 %
Total recurring software revenue	13.8	9.6	43 %	43 %	39.5	24.4	62 %	63 %
Perpetual license	6.9	10.9	(36)%	(36)%	11.6	13.8	(16)%	(16)%
Total software revenue	20.7	20.5	1 %	1 %	51.0	38.2	34 %	34 %
Professional services	1.6	0.9	72 %	71 %	5.6	2.1	163 %	168 %
Total revenue	\$ 22.3	\$ 21.4	4 %	4 %	\$ 56.7	\$ 40.3	40 %	41 %

**Software Revenue Performance**

Software revenue consists of subscription, support, and perpetual license revenue. Subscription revenue includes time-based licenses whereby customers use our software and receive related support for a specified term, and for which revenue is recognized ratably over the term of the contract. Support revenue is composed of contracts to maintain new and/or previously purchased perpetual licenses, for which revenue is recognized ratably over the term of the contract. Perpetual licenses include a perpetual right to use the software, for which revenue is generally recognized up front upon shipment to the customer.

*Solutions Group*

The decline in software revenue for the first nine months was driven primarily by a higher mix of subscription bookings, as well as by unfavorable foreign currency rate changes and macroeconomic conditions, particularly in the U.S. and China.

*Technology Platform Group*

The Technology Platform group delivered revenue growth in the third quarter and first nine months of 2016, including a \$5.6 million contribution from Kepware, which we acquired on January 12, 2016.

**Professional Services Revenue Performance**

Consulting and training services engagements typically result from sales of new perpetual licenses and subscriptions, particularly of our ePLM and SLM solutions. The decline in professional services revenue in the third quarter and first nine months of 2016 was due in part to strong growth in bookings by our service partners, which is in line with our strategy for professional services revenue to trend flat-to-down over time as we expand our service partner program under which service engagements are referred to third party service providers. Additionally, over time, we anticipate offering solutions that require less service. As a result, we do not expect that professional services revenue will increase proportionately with software revenue. Foreign currency exchange rates positively impacted professional services revenue by \$0.2 million and negatively by \$6.6 million in the third quarter of 2016 and first nine months of 2016, respectively.

**Revenue by Geographic Region**

	Three months ended		Percent Change		Nine months ended		Percent Change	
	July 2, 2016	July 4, 2015	Actual	Constant Currency	July 2, 2016	July 4, 2015	Actual	Constant Currency

(Dollar amounts in millions)

Software revenue by region:

Americas	\$ 104.9	\$ 111.9	(6)%	(6)%	\$ 311.5	\$ 325.3	(4)%	(4)%
Europe	\$ 83.1	\$ 87.2	(5)%	(5)%	\$ 249.5	\$ 277.1	(10)%	(4)%
Pacific Rim	\$ 29.2	\$ 28.5	2 %	7 %	\$ 78.2	\$ 86.9	(10)%	(5)%
Japan	\$ 21.2	\$ 22.0	(4)%	(10)%	\$ 64.7	\$ 75.6	(14)%	(13)%

	Three months ended		Nine months ended	
	July 2, 2016	July 4, 2015	July 2, 2016	July 4, 2015
Total revenue by region as a % of total revenue:				
Americas		42%	44%	43%
Europe		38%	36%	37%
Pacific Rim		12%	11%	11%
Japan		9%	9%	10%

A significant percentage of our annual revenue comes from large customers in the broader manufacturing space. As a result, software revenue growth in our core CAD and ePLM products historically has correlated to growth in broader measures of the global manufacturing economy, including GDP, industrial production and manufacturing PMI.

The decreases in revenue in the third quarter and first nine months of 2016, compared to the third quarter and first nine months of 2015, were driven primarily by a higher mix of subscription bookings as well as the impact of currency movements on reported revenue, particularly the Euro and Yen. We believe that continued macroeconomic headwinds in the U.S. and China also contributed to a decrease in revenue performance year over year.

*Americas*

The decrease in revenue in the Americas in the third quarter of 2016 compared to the third quarter of 2015 consisted of decreases of 38% and 4% in perpetual license revenue and support revenue (primarily PLM), respectively, partially offset by an increase in subscription revenue of 49%. The decrease in revenue in Americas in the first nine months of 2016 compared to the first nine months of 2015 consisted of decreases of 35% and 2% in perpetual license revenue and support revenue (primarily PLM), respectively, partially offset by an increase in subscription revenue of 50%.

*Europe*

Revenue in Europe in the third quarter of 2016 compared to the third quarter of 2015 consisted of a decrease in perpetual license revenue of 47%, partially offset by an increase in subscription revenue of 100% (98% on a constant currency basis). Revenue in Europe in the first nine months of 2016 compared to the first nine months of 2015 consisted of decreases in perpetual license revenue of 41% (37% on a constant currency basis) and in support revenue of 6% (flat on a constant currency basis), partially offset by an increase in subscription revenue of 66% (74% on a constant currency basis).

Total software revenue declined primarily in PLM and CAD.

Year-over-year changes in foreign currency exchange rates, particularly the Euro, increased software revenue in Europe by \$1.4 million and decreased software revenue by \$16.0 million in the third quarter and first nine months of 2016, respectively.

*Pacific Rim*

Revenue in the Pacific Rim in the third quarter of 2016 compared to the third quarter of 2015 reflected an increase of 5% in perpetual license revenue (10% on a constant currency basis) and a decrease of 7% in support revenue (3% on a constant currency basis), partially offset by an increase of 456% in subscription revenue. Revenue in the Pacific Rim in the first nine months of 2016 compared to the first nine months of 2015 consisted of a decrease in perpetual license revenue of 15% (11% on a constant currency basis) and a decrease of 8% in support revenue (4% on a constant currency basis), partially offset by an increase of 326% in subscription revenue.

Total Pacific Rim bookings were up year over year, particularly in the Technology Platform business. The challenging macro environment continues in the region, most notably in China.

Revenue from China was 4% of revenue in both the first nine months of 2016 and the first nine months of 2015, and increased 16% and decreased 7% in the third quarter and first nine months of 2016, respectively, as compared to the third quarter and first nine months of 2015.

Changes in foreign currency exchange rates unfavorably impacted software revenue in the Pacific Rim by \$1.4 million in the third quarter of 2016 and \$4.1 million for the first nine months of 2016.

#### Japan

Revenue in Japan in the third quarter of 2016 compared to the third quarter of 2015 reflected an increase of 597% in subscriptions (554% on a constant currency basis), offset by a decrease of 55% in perpetual license revenue (57% on a constant currency basis) and a decrease of 1% in support revenue (decrease of 7% on a constant currency basis). Revenue in Japan in the first nine months of 2016 compared to the first nine months of 2015 consisted of an increase of 273% in subscription revenue (261% on a constant currency basis), offset by a decrease of 49% in perpetual license revenue (48% on a constant currency basis) and a decrease of 2% in support revenue (flat on a constant currency basis). Software revenue in Japan was down 14% from the first nine months of 2015 with declines in CAD and PLM, partially offset by an increase in SLM.

Year-over-year changes in the Yen to U.S. Dollar exchange rate increased software revenue in Japan by \$2.0 million in the third quarter of 2016 (immaterial impact on a year-to-date basis).

#### Gross Margin

	Three months ended			Nine months ended		
	July 2, 2016	July 4, 2015	Percent Change	July 2, 2016	July 4, 2015	Percent Change
(Dollar amounts in millions)						
Gross margin	\$ 206.2	\$ 223.7	(8)%	\$ 609.5	\$ 684.3	(11)%
Non-GAAP gross margin	216.0	231.8	(7)%	638.2	709.3	(10)%
Gross margin as a % of revenue:						
Software	83.7%	86.7%		83.8%	86.6%	
Professional services	13.3%	13.8%		13.3%	12.3%	
Gross margin as a % of total revenue	71.4%	73.8%		71.5%	72.6%	
Non-GAAP gross margin as a % of total revenue	74.6%	76.3%		74.7%	75.0%	

Gross margin as a percentage of total revenue in the third quarter and first nine months of 2016 compared to the third quarter and first nine months of 2015 reflects lower perpetual license revenue. Support revenue comprised 56% of our total revenue in the third quarter of 2016 and 58% for the first nine months of 2016 compared to 55% in the third quarter and first nine months of 2015.

	Three months ended			Nine months ended		
	July 2, 2016	July 4, 2015	Percent Change	July 2, 2016	July 4, 2015	Percent Change
(Dollar amounts in millions)						
<b>Costs and expenses:</b>						
Cost of software revenue	\$ 38.9	\$ 33.3	17 %	\$ 114.3	\$ 102.5	11 %
Cost of professional services revenue	43.6	46.1	(5)%	128.5	155.8	(18)%
Sales and marketing	94.9	88.4	7 %	264.5	261.7	1 %
Research and development	57.1	54.1	6 %	171.4	175.3	(2)%
General and administrative	35.5	46.2	(23)%	108.0	113.7	(5)%
Amortization of acquired intangible assets	8.3	9.1	(9)%	25.0	27.7	(10)%
Restructuring charges	2.8	4.4	(36)%	44.5	42.6	4 %
Total costs and expenses (1)	\$ 281.1	\$ 281.5	— %	\$ 856.2	\$ 879.4	(3)%
Total headcount at end of period	5,761	5,965	(3)%			

(1) On a constant currency basis, compared to the year-ago period, total costs and expenses for both the third quarter and first nine months of 2016 remained flat.

Costs and expenses in the third quarter and first nine months of 2016 compared to the third quarter and first nine months of 2015 decreased primarily as a result of the following:

- cost savings from restructuring actions in 2016 and 2015;

- acquisition and pension termination-related costs, which were \$3.9 million and \$10.9 million lower in the third quarter and first nine months of 2016, respectively, compared to the third quarter and first nine months of 2015;
- a \$13.6 million accrual recorded in the third quarter of 2015 related to the SEC and DOJ investigation in China; and
- foreign currency rates which favorably impacted costs and expenses in the first nine months of 2016 by \$23.6 million.

The decreases above were partially offset by increases due to:

- cash-based incentive compensation expense (as a result of over performance on subscription mix in 2016 and because 2015 incentive targets were not achieved in full), which was higher by \$9.5 million and \$20.3 million in the third quarter of 2016 and first nine months of 2016, respectively, compared to the third quarter and first nine months of 2015;
- costs from acquired businesses (ColdLight, Vuforia, and Kepware added approximately 255 employees at the date of the acquisitions);
- an increase in stock-based compensation expense of \$13.7 million for the first nine months of 2016 compared to the first nine months of 2015;
- investments we are making in our Technology Platform business; and
- company-wide merit pay increases that were effective July 1, 2015.

#### *Cost of Software Revenue*

	Three months ended			Nine months ended		
	July 2, 2016	July 4, 2015	Percent Change	July 2, 2016	July 4, 2015	Percent Change
	(Dollar amounts in millions)					
Cost of software revenue	\$ 38.9	\$ 33.3	17%	\$ 114.3	\$ 102.5	11%
% of total revenue	13%	11%		13%	11%	
% of total software revenue	16%	13%		16%	13%	
Software headcount at end of period	818	760	8%			

Our cost of software revenue consists of fixed and variable costs associated with reproducing and distributing software and documentation, as well as royalties paid to third parties for technology embedded in or licensed with our software products, amortization of intangible assets associated with acquired products and costs to perform and support our cloud services business. Our cost of software revenue also includes costs such as salaries, benefits, and computer equipment and facilities associated with customer support and the release of support updates (including related royalty costs). Cost of software revenue as a percent of software revenue can vary depending on the subscription mix percentage, the product mix sold, the effect of fixed and variable royalties, and the level of amortization of acquired software intangible assets. Amortization of acquired purchased software totaled \$6.4 million and \$5.0 million in the third quarters of 2016 and 2015, respectively, and \$18.2 million and \$14.4 million in the first nine months of 2016 and 2015, respectively. In the third quarter and first nine months of 2016, compared to the third quarter and first nine months of 2015, total compensation, benefit costs and travel expenses increased 12% (\$2.1 million) and 7% (\$4.0 million), respectively.

#### *Cost of Professional Services Revenue*

	Three months ended			Nine months ended		
	July 2, 2016	July 4, 2015	Percent Change	July 2, 2016	July 4, 2015	Percent Change
	(Dollar amounts in millions)					
Cost of professional services revenue	\$ 43.6	\$ 46.1	(5)%	\$ 128.5	\$ 155.8	(18)%
% of total revenue	15%	15%		15%	17%	
% of total professional services revenue	87%	86%		87%	88%	
Professional services headcount at end of period	987	1,115	(11)%			

Our cost of professional services revenue includes costs such as salaries, benefits, and computer equipment and facilities for our training and consulting personnel, and third-party subcontractor fees. In the third quarter and first nine months of 2016 compared to the third quarter and first nine months of 2015, total compensation, benefit costs and travel expenses were down 9% (\$3.1 million) and 21% (\$23.7 million), respectively, and the cost of third-party consulting services was higher by 13% (\$0.9 million) and lower by 7% (\$1.6 million), respectively. The decrease in both compensation-related costs and third-party consulting services for the first nine months of 2016 is due to lower professional services revenue.

#### *Sales and Marketing*

	Three months ended			Nine months ended		
	July 2, 2016	July 4, 2015	Percent Change	July 2, 2016	July 4, 2015	Percent Change
(Dollar amounts in millions)						
Sales and marketing	\$ 94.9	\$ 88.4	7%	\$ 264.5	\$ 261.7	1%
% of total revenue	33%	29%		31%	28%	
Sales and marketing headcount at end of period	1,417	1,391	2%			

Our sales and marketing expenses primarily include salaries and benefits, sales commissions, advertising and marketing programs, travel and facility costs. In the third quarter and first nine months of 2016, compared to the third quarter and first nine months of 2015, total compensation, benefit costs and travel expenses increased by 7% (\$4.6 million) and decreased by 1% (\$1.5 million), respectively, which reflects lower salaries, offset by higher incentive-based compensation, including commissions. Additionally, in the third quarter and first nine months of 2016, compared to the third quarter and first nine months of 2015, costs related to sales and marketing events and programs increased by \$1.4 million and \$3.0 million, respectively.

#### *Research and Development*

	Three months ended			Nine months ended		
	July 2, 2016	July 4, 2015	Percent Change	July 2, 2016	July 4, 2015	Percent Change
(Dollar amounts in millions)						
Research and development	\$ 57.1	\$ 54.1	6%	\$ 171.4	\$ 175.3	(2)%
% of total revenue	20%	18%		20%	19%	
Research and development headcount at end of period	1,862	2,010	(7)%			

Our research and development expenses consist principally of salaries and benefits, costs of computer equipment and facility expenses. Major research and development activities include developing new products and releases and updates of our software that enhance functionality and add features. In the third quarter and first nine months of 2016, compared to the third quarter and first nine months of 2015, total compensation, benefit costs and travel expenses were higher by 8% (\$3.6 million) and lower by 1% (\$1.5 million), respectively. The decrease in research and development headcount reflects restructuring actions offset by approximately 132 employees added from businesses acquired after the second quarter of 2015.

#### *General and Administrative*

	Three months ended			Nine months ended		
	July 2, 2016	July 4, 2015	Percent Change	July 2, 2016	July 4, 2015	Percent Change
(Dollar amounts in millions)						
General and administrative	\$ 35.5	\$ 46.2	(23)%	\$ 108.0	\$ 113.7	(5)%
% of total revenue	12%	15%		13%	12%	
General and administrative headcount at end of period	677	689	(2)%			

Our general and administrative expenses include the costs of our corporate, finance, information technology, human resources, legal and administrative functions, as well as acquisition-related charges, bad debt expense and outside professional services, including accounting and legal fees. The decrease in general and administrative costs in the third quarter and first nine months of 2016 compared to the third quarter and first nine months of 2015 was primarily attributable to a \$13.6 million accrual recorded in the third quarter of 2015 related to the our previously disclosed investigation in China and a decrease in acquisition and pension plan termination-related costs of \$3.9 million and \$10.9 million, respectively. This decrease was offset by an increase in performance-based bonus and stock-based compensation of \$3.3 million and \$19.2 million, and an increase in costs for outside services of \$1.3 million and \$3.0 million. Salary, benefit costs and travel expenses increased \$0.7 million for the third quarter of 2016 and decreased \$0.7 million for the first nine months of 2016, compared to the third quarter and first

nine months of 2015.

*Amortization of Acquired Intangible Assets*

	Three months ended			Nine months ended		
	July 2, 2016	July 4, 2015	Percent Change	July 2, 2016	July 4, 2015	Percent Change
	(Dollar amounts in millions)					
Amortization of acquired intangible assets	\$ 8.3	\$ 9.1	(9)%	\$ 25.0	\$ 27.7	(10)%
% of total revenue	3%	3%		3%	3%	

Amortization of acquired intangible assets reflects the amortization of acquired non-product related intangible assets, primarily customer and trademark-related intangible assets, recorded in connection with completed acquisitions. The decrease in amortization of acquired intangible assets in the third quarter and first nine months of 2016 is due to certain intangibles becoming fully amortized, partially offset by an increase in amortization related to recent acquisitions.

*Restructuring Charges*

	Three months ended		Nine months ended	
	July 2, 2016	July 4, 2015	July 2, 2016	July 4, 2015
	(in millions)			
Restructuring charges	\$ 2.8	\$ 4.4	\$ 44.5	\$ 42.6

On October 23, 2015, we committed to a plan to restructure our global workforce and consolidate select facilities in order to reduce our cost structure and to realign our investments with our identified growth opportunities. The restructuring is expected to result in a charge of \$50 million to \$70 million, the upper range of which has increased from our original estimate of \$50 million. We recorded \$2.6 million and \$44.0 million in the third quarter and first nine months of 2016, respectively, related to employee termination costs. The remaining charges are expected to be recorded predominantly in the fourth quarter of 2016. We expect that the expense reductions will be offset by planned cost increases, investments in our business and the anticipated effects of foreign currency fluctuations, which effect is contemplated in our most recent financial targets for fiscal 2016. Additionally, in the first nine months of 2016, we recorded charges of \$0.5 million related to the closure of excess facilities in connection with prior restructuring actions.

In the first nine months of 2016, we made cash payments related to restructuring charges of \$49.9 million, compared to \$47.8 million in the first nine months of 2015. At July 2, 2016, accrued restructuring was \$10.0 million, which we expect to pay within the next twelve months.

*Interest and Other Expense, net*

	Three months ended		Nine months ended	
	July 2, 2016	July 4, 2015	July 2, 2016	July 4, 2015
	(in millions)			
Interest income	\$ 0.8	\$ 0.8	\$ 2.4	\$ 2.8
Interest expense	(8.2)	(3.6)	(19.5)	(10.9)
Other expense, net	(0.9)	(0.9)	(2.8)	(2.5)
Total interest and other expense, net	\$ (8.3)	\$ (3.7)	\$ (19.9)	\$ (10.5)

Interest and other expense, net includes interest income, interest expense, foreign currency net losses and other non-operating gains and losses. Foreign currency net losses include costs of forward contracts, certain realized and unrealized foreign currency transaction gains or losses, and foreign exchange gains or losses resulting from the required period-end currency re-measurement of the assets and liabilities of our subsidiaries that use the U.S. Dollar as their functional currency. Because a large portion of our revenue and expenses is transacted in foreign currencies, we use foreign currency forward contracts, primarily for the Euro and Canadian Dollar, to reduce our exposure to fluctuations in foreign exchange rates.

The increase in interest expense in the third quarter and first nine months of 2016 compared to the third quarter and first nine months of 2015 was due to higher amounts outstanding under our credit facility and the new 6% notes issuance. We had \$778 million total debt at July 2, 2016, compared to \$624 million at July 4, 2015.

Income Taxes	Three months ended		Nine months ended	
	July 2, 2016	July 4, 2015	July 2, 2016	July 4, 2015
	(Dollar amounts in millions)			
Pre-tax income (loss)	\$ (0.7)	\$ 17.9	\$ (23.8)	\$ 52.7
Tax provision (benefit)	(3.8)	0.5	2.2	(0.4)
Effective income tax rate	537%	3%	(9)%	(1)%

In the third quarter and first nine months of 2016 and 2015, our effective tax rate was lower than the 35% statutory federal income tax rate due to our corporate structure in which our foreign taxes are at a net effective tax rate lower than the U.S. rate. A significant amount of our foreign earnings is generated by our subsidiaries organized in Ireland. In 2016 and 2015, the foreign rate differential predominantly relates to these Irish earnings. Our foreign rate differential in 2016 and 2015 includes a rate benefit from a business realignment completed on September 30, 2014 in which intellectual property was transferred between two wholly-owned foreign subsidiaries. The realignment allows us to more efficiently manage the distribution of our products to European customers. We expect this realignment to result in an annual tax benefit of approximately \$15 million to \$20 million for the next several years, declining annually thereafter through 2021. For the third quarter and the first nine months of 2016 and 2015, this realignment resulted in a tax benefit of approximately \$9 million and \$16 million, and \$6 million and \$14 million, respectively. Additionally, in the first nine months of 2016 and 2015 our provision reflects a tax benefit of \$2.6 million and \$2.1 million, respectively, related to a retroactive extension of the U.S. research and development tax credit enacted in each of the first quarter of 2016 and 2015. In the first nine months of 2016 and 2015, this benefit was offset by a corresponding provision to increase our U.S. valuation allowance. In addition, in the first nine months of 2015, we recorded a tax benefit of \$3.1 million related to the reassessment of our reserve requirements, and a benefit of \$1.4 million in conjunction with the reorganization of our Atego U.S. subsidiaries.

We have concluded, based on the weight of available evidence, that a full valuation allowance continues to be required against our U.S. net deferred tax assets as they are not more likely than not to be realized in the future. We will continue to reassess our valuation allowance requirements each financial reporting period.

In the normal course of business, PTC and its subsidiaries are examined by various taxing authorities, including the Internal Revenue Service in the U.S. We regularly assess the likelihood of additional assessments by tax authorities and provide for these matters as appropriate. We are currently under audit by tax authorities in several jurisdictions. Audits by tax authorities typically involve examination of the deductibility of certain permanent items, limitations on net operating losses and tax credits. Although we believe our tax estimates are appropriate, the final determination of tax audits and any related litigation could result in material changes in our estimates.

In the fourth quarter of 2016, we received an assessment from the tax authorities in Korea related to an ongoing tax audit of approximately \$12 million. The assessment relates to various tax issues but primarily to foreign withholding taxes. We intend to appeal and will vigorously defend our positions. We believe that it is more likely than not that our positions will be sustained upon appeal. Accordingly, we have not recorded a tax reserve for this matter. We have not yet determined whether it will be necessary to pay the assessment while our appeal is pending. If we do not pay the assessment while our appeal is pending and we lose our appeal, we could be subject to substantial additional penalties.

#### **Non-GAAP Measures**

The non-GAAP measures presented in the discussion of our results of operations and the respective most directly comparable GAAP measures are:

- non-GAAP revenue—GAAP revenue
- non-GAAP gross margin—GAAP gross margin
- non-GAAP operating income—GAAP operating income
- non-GAAP operating margin—GAAP operating margin
- non-GAAP net income—GAAP net income
- non-GAAP diluted earnings per share—GAAP diluted earnings per share

The non-GAAP measures exclude fair value adjustments related to acquired deferred revenue and deferred costs, stock-based compensation expense, amortization of acquired intangible assets expense, acquisition-related charges, pension plan termination-related costs, a legal settlement accrual, restructuring charges, non-operating credit facility refinancing costs, identified discrete charges included in non-operating other expense, net and the related tax effects of the preceding items, and any other identified tax items.



These items are normally included in the comparable measures calculated and presented in accordance with GAAP. Our management excludes these items when evaluating our ongoing performance and/or predicting our earnings trends, and therefore excludes them when presenting non-GAAP financial measures. Management uses, and investors should consider, non-GAAP measures in conjunction with our GAAP results.

*Fair value of acquired deferred revenue* is a purchase accounting adjustment recorded to reduce acquired deferred revenue to the fair value of the remaining obligation, so our GAAP revenue for the one year period after an acquisition does not reflect the full amount of revenue that would have been reported if the acquired deferred revenue was not written down to fair value. We believe excluding these adjustments to revenue from these contracts (and associated costs in *fair value adjustment to deferred services cost*) is useful to investors as an additional means to assess revenue trends of our business.

*Stock-based compensation* is a non-cash expense relating to stock-based awards issued to executive officers, employees and outside directors, consisting of restricted stock, stock options and restricted stock units. We exclude this expense as it is a non-cash expense and we assess our internal operations excluding this expense and believe it facilitates comparisons to the performance of other companies in our industry.

*Amortization of acquired intangible assets* is a non-cash expense that is impacted by the timing and magnitude of our acquisitions. We believe the assessment of our operations excluding these costs is relevant to our assessment of internal operations and comparisons to the performance of other companies in our industry.

*Acquisition-related charges included in general and administrative costs* are direct costs of potential and completed acquisitions and expenses related to acquisition integration activities, including transaction fees, due diligence costs, severance and professional fees. Subsequent adjustments to our initial estimated amount of contingent consideration associated with specific acquisitions are also included within acquisition-related charges. These costs are not considered part of our normal operations as the occurrence and amount will vary depending on the timing and size of acquisitions.

*U.S. pension plan termination-related costs* include charges related to our plan that we began terminating in the second quarter of 2014. Costs associated with termination of the plan are not considered part of our regular operations.

*Legal settlement accrual* is the amount accrued to settle our SEC and DOJ FCPA investigation in China, which was ultimately settled and paid in the second quarter of 2016 for \$28.2 million. We view this as a non-ordinary course event and exclude it when reviewing our operating performance and believe it assists comparisons to the performance of other companies in our industry.

*Restructuring charges* include excess facility restructuring charges and severance costs resulting from reductions of personnel driven by modifications to our business strategy and not considered part of our normal operations. These costs may vary in size based on our restructuring plan.

*Non-operating credit facility refinancing costs* are non-operating charges we record as a result of the refinancing of our credit facility. We assess our internal operations excluding these costs and believe it facilitates comparisons to the performance of other companies in our industry.

*Income tax adjustments* are non-ordinary course, non-cash tax gains and losses, elimination of the effect of the valuation allowance recorded against our net deferred tax assets, and adjustments related to the elimination of the items listed above from non-GAAP measures.

We use these non-GAAP measures, and we believe that they assist our investors, to make period-to-period comparisons of our operational performance because they provide a view of our operating results without items that are not, in our view, indicative of our core operating results. We believe that these non-GAAP measures help illustrate underlying trends in our business, and we use the measures to establish budgets and operational goals (communicated internally and externally) for managing our business and evaluating our performance. We believe that providing non-GAAP measures affords investors a view of our operating results that may be more easily compared to the results of peer companies.

The items excluded from the non-GAAP measures often have a material impact on our financial results and such items often recur. Accordingly, the non-GAAP measures included in this Quarterly Report should be considered in addition to, and not as a substitute for or superior to, the comparable measures prepared in accordance with GAAP. The following tables reconcile each of these non-GAAP measures to its most closely comparable GAAP measure on our financial statements.

	Three months ended		Nine months ended	
	July 2, 2016	July 4, 2015	July 2, 2016	July 4, 2015
	(in millions, except per share amounts)			
GAAP revenue	\$ 288.7	\$ 303.1	\$ 852.3	\$ 942.7
Fair value of acquired deferred revenue	1.0	0.8	2.6	3.3
Non-GAAP revenue	\$ 289.7	\$ 303.9	\$ 854.9	\$ 946.0
GAAP gross margin	\$ 206.2	\$ 223.7	\$ 609.5	\$ 684.3
Fair value of acquired deferred revenue	1.0	0.8	2.6	3.3
Fair value of acquired deferred costs	(0.1)	(0.1)	(0.4)	(0.4)
Stock-based compensation	2.5	2.5	8.2	7.7
Amortization of acquired intangible assets included in cost of revenue	6.4	5.0	18.2	14.4
Non-GAAP gross margin	\$ 216.0	\$ 231.8	\$ 638.2	\$ 709.3
GAAP operating income (loss)	\$ 7.6	\$ 21.6	\$ (3.9)	\$ 63.2
Fair value of acquired deferred revenue	1.0	0.8	2.6	3.3
Fair value of acquired deferred costs	(0.1)	(0.1)	(0.4)	(0.4)
Stock-based compensation	13.8	14.1	51.8	38.1
Amortization of acquired intangible assets included in cost of revenue	6.4	5.0	18.2	14.4
Amortization of acquired intangible assets	8.3	9.1	25.0	27.7
Acquisition-related charges included in general and administrative expenses	0.9	2.8	3.2	8.7
US pension plan termination-related costs	—	2.0	—	5.4
Legal settlement accrual	—	13.6	—	13.6
Restructuring charge	2.8	4.4	44.5	42.6
Non-GAAP operating income	\$ 40.7	\$ 73.2	\$ 141.1	\$ 216.8
GAAP net income (loss)	\$ 3.1	\$ 17.4	\$ (26.0)	\$ 53.1
Fair value of acquired deferred revenue	1.0	0.8	2.6	3.3
Fair value of acquired deferred costs	(0.1)	(0.1)	(0.4)	(0.4)
Stock-based compensation	13.8	14.1	51.8	38.1
Amortization of acquired intangible assets included in cost of revenue	6.4	5.0	18.2	14.4
Amortization of acquired intangible assets	8.3	9.1	25.0	27.7
Acquisition-related charges included in general and administrative expenses	0.9	2.8	3.2	8.7
U.S. pension plan termination-related costs	—	2.0	—	5.4
Legal settlement accrual	—	13.6	—	13.6
Restructuring charges	2.8	4.4	44.5	42.6
Non-operating credit facility refinancing costs	—	—	2.4	—
Income tax adjustments <sup>(1)</sup>	(6.2)	(7.3)	(6.5)	(24.6)
Non-GAAP net income	\$ 30.0	\$ 61.7	\$ 114.9	\$ 182.1
GAAP diluted earnings (loss) per share	\$ 0.03	\$ 0.15	\$ (0.23)	\$ 0.46
Fair value of acquired deferred revenue	0.01	0.01	0.02	0.03
Fair value of acquired deferred costs	—	—	—	—
Stock-based compensation	0.12	0.12	0.45	0.33
Amortization of acquired intangible assets	0.13	0.12	0.38	0.36
Acquisition-related charges included in general and administrative expenses	0.01	0.02	0.03	0.07
U.S. pension plan termination-related costs	—	0.02	—	0.05
Legal settlement accrual	—	0.12	—	0.12
Restructuring charges	0.02	0.04	0.39	0.37

Non-operating credit facility refinancing costs	—	—	0.02	—
Income tax adjustments <sup>(1)</sup>	(0.05)	(0.06)	(0.06)	(0.21)
Non-GAAP diluted earnings per share	\$ 0.26	\$ 0.53	\$ 1.00	\$ 1.57

Operating margin impact of non-GAAP adjustments:

	Three months ended		Nine months ended	
	July 2, 2016	July 4, 2015	July 2, 2016	July 4, 2015
GAAP operating margin	2.6%	7.1%	(0.5)%	6.7%
Fair value of acquired deferred revenue	0.4%	0.3%	0.3 %	0.4%
Fair value of acquired deferred costs	—%	—%	— %	—%
Stock-based compensation	4.8%	4.6%	6.1 %	4.0%
Amortization of acquired intangible assets	5.1%	4.6%	5.1 %	4.5%
Acquisition-related charges included in general and administrative expenses	0.3%	0.9%	0.4 %	0.9%
U.S. pension plan termination-related costs	—%	0.7%	— %	0.6%
Legal settlement accrual	—%	4.5%	— %	1.4%
Restructuring charges	1.0%	1.4%	5.2 %	4.5%
Non-GAAP operating margin	14.1%	24.1%	16.5 %	22.9%

- (1) We have recorded a full valuation allowance against our U.S. net deferred tax assets and a valuation allowance against net deferred tax assets in certain foreign jurisdictions. As we are profitable on a non-GAAP basis, the 2016 and 2015 non-GAAP tax provisions are calculated assuming there is no valuation allowance. Income tax adjustments for the three and nine months ended July 4, 2015 reflect the tax effects of non-GAAP adjustments which are calculated by applying the applicable tax rate by jurisdiction to the non-GAAP adjustments listed above. However, for the nine months ended July 2, 2016, because of low expected full year GAAP earnings combined with the relatively large year-to-date GAAP loss, the non-GAAP provision for the third quarter and first nine months of 2016 calculated based on our historical methodology is not reflective of our full year expected non-GAAP tax rate. As a result, in the second quarter we changed our methodology for calculating our non-GAAP tax provision. For the nine months ended July 2, 2016, our non-GAAP tax provision is based on our annual expected non-GAAP tax rate applied to our year-to-date non-GAAP earnings.

### Critical Accounting Policies and Estimates

The financial information included in Item 1 reflects no material changes in our critical accounting policies and estimates as set forth under the heading Critical Accounting Policies and Estimates in Part II, Item 7: Management's Discussion and Analysis of Financial Condition and Results of Operations of our 2015 Annual Report on Form 10-K.

### Recent Accounting Pronouncements

In accordance with recently issued accounting pronouncements, we will be required to comply with certain changes in accounting rules and regulations.

#### Financial Instruments - Credit Losses

In June 2016, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) No. 2016-13, Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments. This update introduces a current expected credit loss model for measuring expected credit losses for certain types of financial instruments held at the reporting date based on historical experience, current conditions and reasonable supportable forecasts. ASU 2016-13 replaces the current incurred loss model for measuring expected credit losses, requires expected losses on available-for-sale debt securities to be recognized through an allowance for credit losses rather than as reductions in the amortized cost of the securities, and provides for additional disclosure requirements. ASU 2016-13 is effective for interim and annual reporting periods beginning after December 15, 2019, our fiscal 2021, with early adoption permitted for interim and annual reporting periods beginning after December 15, 2018. We are currently evaluating the impact of the new guidance on our consolidated financial statements.

#### Stock Compensation

In March 2016, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) No. 2016-09, Compensation - Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting.

The ASU includes multiple provisions intended to simplify various aspects of the accounting for share-based payments, including accounting for income taxes, earnings per share, and forfeitures, as well as certain practical expedients for nonpublic entities. The ASU is effective for public companies in annual periods beginning after December 15, 2016, our fiscal 2018, and interim periods within those years. Early adoption is permitted in any interim period, with all adjustments applied as of the beginning of the fiscal year of adoption. We are currently evaluating the impact of the new guidance on our consolidated financial statements.

#### *Leases*

In February 2016, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) No. 2016-02, Leases (Topic 842), which will replace the existing guidance in ASC 840, Leases. The updated standard aims to increase transparency and comparability among organizations by requiring lessees to recognize lease assets and lease liabilities on the balance sheet and to disclose important information about leasing arrangements. ASU 2016-02 is effective for annual periods beginning after December 15, 2018, our fiscal 2020, and interim periods within those annual periods. Early adoption is permitted and modified retrospective application is required. We are currently evaluating the impact of the new guidance on our consolidated financial statements.

#### *Financial Instruments*

In January 2016, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) No. 2016-01, Financial Instruments-Overall: Recognition and Measurement of Financial Assets and Financial Liabilities, which requires equity investments to be measured at fair value with changes in fair value recognized in net income and simplifies the impairment assessment of equity investments without readily determinable fair values by requiring a qualitative assessment to identify impairment. Entities may choose a practical expedient, to estimate the fair value of certain equity securities that do not have readily determinable fair values. If the practical expedient is elected, these investments would be recorded at cost, less impairment and subsequently adjusted for observable price changes. The guidance also updates certain presentation and disclosure requirements. ASU 2016-01 is effective for financial statements issued for fiscal years beginning after December 15, 2017, our fiscal 2019, and interim periods within those fiscal years. We are currently evaluating the impact of the new guidance on our consolidated financial statements.

#### *Deferred Taxes*

In November 2015, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) No. 2015-17, Balance Sheet Classification of Deferred Taxes (Topic 740), to simplify the presentation of deferred income taxes. The amendments in this Update require that all deferred tax assets and liabilities, along with any related valuation allowance, be classified as noncurrent on the balance sheet. As a result, each jurisdiction will now only have one net noncurrent deferred tax asset or liability. The guidance does not change the existing requirement that permits offsetting only within a jurisdiction and companies are still prohibited from offsetting deferred tax liabilities from one jurisdiction against deferred tax assets of another jurisdiction. ASU 2015-17 is effective for public companies for fiscal years beginning after December 15, 2016, with early adoption permitted for all entities as of the beginning of an interim or annual reporting period. This guidance may be applied either prospectively or retrospectively (by reclassifying the comparative balance sheet). We adopted this new guidance in our first quarter ended January 2, 2016 and applied this guidance prospectively. As a result, the deferred tax assets and deferred tax liabilities on the Consolidated Balance Sheet as of September 30, 2015 have not been reclassified to conform to the July 2, 2016 presentation.

#### *Revenue Recognition*

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 2014-09), to supersede nearly all existing revenue recognition guidance under U.S. GAAP. The core principle of ASU 2014-09 is to recognize revenues when promised goods or services are transferred to customers in an amount that reflects the consideration that is expected to be received for those goods or services. ASU 2014-09 defines a five step process to achieve this core principle and, in doing so, it is possible more judgment and estimates may be required within the revenue recognition process than required under existing U.S. GAAP including identifying performance obligations in the contract, estimating the amount of variable consideration to include in the transaction price and allocating the transaction price to each separate performance obligation. In July 2015, the FASB approved a one-year delay in the effective date. ASU 2014-09 is effective for us in our first quarter of fiscal 2019 using either of two methods: (i) retrospective to each prior reporting period presented with the option to elect certain practical expedients as defined within ASU 2014-09; or (ii) retrospective with the cumulative effect of initially applying ASU 2014-09 recognized at the date of initial application and providing certain additional disclosures as defined per ASU 2014-09. Subsequently, the FASB has issued the following standards to provide additional clarification and implementation guidance on ASU 2014-09: ASU 2016-08, Revenue from Contracts with Customers (Topic 606): Principal versus Agent Considerations; ASU 2016-10, Revenue from Contracts with Customers (Topic 606): Identifying Performance Obligations and Licensing; and ASU 2016-12,

Revenue from Contracts with Customers (Topic 606): Narrow-Scope Improvements and Practical Expedients. We are currently evaluating the impact of these new standards on our consolidated financial statements.

#### Debt Issuance Costs

In April 2015, the FASB issued ASU No. 2015-03, Interest-Imputation of Interest (Subtopic 835-30), to simplify the required presentation of debt issuance costs. The amended guidance requires that debt issuance costs be presented in the balance sheet as a direct reduction from the carrying amount of the related debt liability rather than as an asset. It is effective for financial statements issued for fiscal years beginning after December 15, 2015, our fiscal 2017, with early adoption permitted. The new guidance will be applied retrospectively to each prior period presented. We are currently evaluating the impact of the new guidance on our consolidated financial statements.

### Liquidity and Capital Resources

	July 2, 2016	July 4, 2015
	(in thousands)	
Cash and cash equivalents	\$ 294,626	\$ 275,060
Marketable securities	44,606	—
Total	<u>\$ 339,232</u>	<u>\$ 275,060</u>

#### Amounts below are for the nine months ended:

Cash provided by operating activities	\$ 169,596	\$ 192,463
Cash used by investing activities	(225,428)	(130,048)
Cash provided (used) by financing activities	72,097	(66,612)

#### Cash and cash equivalents

We invest our cash with highly rated financial institutions and in diversified domestic and international money market mutual funds. Cash and cash equivalents include highly liquid investments with original maturities of three months or less. In addition, we hold investments on marketable securities totaling approximately \$45 million with average maturity of 18 months. At July 2, 2016, cash and cash equivalents totaled \$295 million, up from \$273 million at September 30, 2015, reflecting \$170 million in operating cash flow, \$110 million of amounts borrowed through our credit facility and debt issuance, offset by \$164 million to acquire Vuforia and Kepware, \$45 million used for the purchase of investment grade securities, \$17 million used for capital expenditures, and \$21 million used to pay withholding taxes on stock-based awards that vested in the period.

#### Cash provided by operating activities

Cash provided by operating activities was \$169.6 million in the first nine months of 2016, compared to \$192.5 million in the first nine months of 2015. The decrease is primarily due to lower earnings and \$28.2 million paid to resolve the SEC and DOJ investigation in China, partially offset by higher accounts receivable collections, lower year-end bonus payments and lower pension contributions. Net (loss) income for the first nine months of 2016 and 2015 was \$(26.0) million and \$53.1 million, respectively.

We periodically provide financing with payment terms up to 24 months to credit-worthy customers for software purchases. As of July 2, 2016 and September 30, 2015, amounts due from customers for contracts with original payment terms greater than twelve months (financing receivables) totaled \$12.1 million and \$27.4 million, respectively, compared to \$28.1 million at July 4, 2015.

#### Cash used by investing activities

	Nine months ended	
	July 2, 2016	July 4, 2015
	(in thousands)	
Cash used by investing activities included the following:		
Additions to property and equipment	\$ (16,632)	\$ (20,637)
Purchases of investments	(44,605)	(11,000)
Acquisitions of businesses, net of cash acquired	(164,191)	(98,411)
	<u>\$ (225,428)</u>	<u>\$ (130,048)</u>

In the first nine months of 2016, we used cash of \$164.2 million (net of cash acquired) to acquire Vuforia and Kepware. We invested \$50 million in investment grade securities, \$5.3 million of which is classified as cash equivalents. In the first nine months of 2015, we used cash of \$98.6 million (net of cash acquired) to acquire ColdLight and made minority investments in preferred stock of strategic companies of \$11 million. Our expenditures for property and equipment consist primarily of computer equipment, software, office equipment and facility improvements.

**Cash used by financing activities**

	Nine months ended	
	July 2, 2016	July 4, 2015
	(in thousands)	
Cash used by financing activities included the following:		
Net borrowings (repayments) of debt	\$ 110,000	\$ 12,500
Payments of withholding taxes in connection with vesting of stock-based awards	(20,636)	(29,117)
Repurchases of common stock	—	(49,962)
Proceeds from issuance of common stock	19	38
Excess tax benefits from stock-based awards	94	(71)
Contingent consideration	(10,621)	—
Credit facility origination costs	(6,759)	—
	\$ 72,097	\$ (66,612)

In the third quarter of 2016, we issued \$500 million in aggregate principal amount of 6.0% senior, unsecured long-term debt. We used the net proceeds from the issuance of the senior notes to repay a portion of our outstanding revolving loan under our current credit facility. In the first nine months of 2016 we also borrowed \$170 million under the credit facility to acquire Vuforia and Kepware. In the first nine months of 2015, we borrowed \$100 million to acquire ColdLight and \$35 million for working capital requirements and we repaid \$123 million of borrowings.

**Credit Agreement**

In November 2015, we entered into a multi-currency credit facility with a syndicate of sixteen banks for which JPMorgan Chase Bank, N.A. acts as Administrative Agent. This credit facility amended and restated in its entirety our credit facility described in Note H of our Annual Report on Form 10-K for the fiscal year ended September 30, 2015. We amended the credit facility in June 2015 to decrease the revolving loan commitment to \$900 million and to make additional administrative adjustments.

We expect to use the credit facility for general corporate purposes, including acquisitions of businesses, share repurchases and working capital requirements. As of July 2, 2016, the fair value of our credit facility approximates its book value.

The credit facility consists of a \$900 million revolving loan commitment, which may be increased by an additional \$500 million (in the form of revolving loans or term loans, or a combination thereof) if the existing or additional lenders are willing to make such increased commitments. The revolving loan commitment does not require amortization of principal and may be repaid in whole or in part prior to the scheduled maturity date at our option without penalty or premium. The credit facility matures on September 15, 2019, when all remaining amounts outstanding will be due and payable in full.

PTC and certain eligible foreign subsidiaries are eligible borrowers under the credit facility. Any borrowings by PTC Inc. under the credit facility would be guaranteed by PTC Inc.'s material domestic subsidiaries that become parties to the subsidiary guaranty, if any. As of the filing of this Form 10-Q, there are no subsidiary guarantors of the obligations under the credit facility. Any borrowings by eligible foreign subsidiary borrowers would be guaranteed by PTC Inc. and any subsidiary guarantors. As of the filing of this Form 10-Q, no amounts under the credit facility have been borrowed by an eligible foreign subsidiary borrower. In addition, PTC and certain of its material domestic subsidiaries' owned property (including equity interests) is subject to first priority perfected liens in favor of the lenders of this credit facility. 100% of the voting equity interests of certain of PTC's domestic subsidiaries and 65% of its material first-tier foreign subsidiaries are pledged as collateral for the obligations under the credit facility.

As of July 2, 2016, we had \$278.1 million in revolving loans outstanding under the credit facility. Loans under the credit facility bear interest at variable rates which reset every 30 to 180 days depending on the rate and period selected by PTC as described below. As of July 2, 2016, the weighted average annual interest rate for borrowing outstanding was 2.4%. Interest rates on borrowings outstanding under the credit facility range from 1.25% to 1.75% above an adjusted LIBO rate for Euro currency borrowings or from 0.25% to 0.75% above the defined base rate (the greater of the Prime Rate, the FRBNY rate plus

0.5% , or an adjusted LIBO rate plus 1% ) for base rate borrowings, in each case based upon our total leverage ratio. Additionally, we may borrow certain foreign currencies at rates set in the same range above the respective London interbank offered interest rates for those currencies, based on our leverage ratio. A quarterly commitment fee on the undrawn portion of the credit facility is required, ranging from 0.175% to 0.30% per annum, based upon our total leverage ratio.

The credit facility limits our and our subsidiaries' ability to, among other things: incur liens or guarantee obligations; pay dividends (other than to PTC) and make other distributions; make investments and enter into joint ventures; dispose of assets; and engage in transactions with affiliates, except on an arms-length basis. Under the credit facility, we and our material domestic subsidiaries may not invest cash or property in, or loan to, our foreign subsidiaries in aggregate amounts exceeding \$75.0 million for any purpose and an additional \$200.0 million for acquisitions of businesses. In addition, under the credit facility, we must maintain the following financial ratios.

	<b>Ratio as of July 2, 2016</b>
<b>Total Leverage Ratio</b>	
Ratio of consolidated total indebtedness to the consolidated trailing four quarters EBITDA, not to exceed 4.00 to 1.00 as of the last day of any fiscal quarter.	<b>3.15 to 1.00</b>
<b>Fixed Charge Coverage Ratio</b>	
Ratio of consolidated trailing four quarters EBITDA less consolidated capital expenditures to consolidated fixed charges as of the last day of any fiscal quarter, to be not less than 3.50 to 1.00.	<b>8.45 to 1.00</b>
<b>Senior Secured Leverage Ratio</b>	
Ratio of senior consolidated total indebtedness (which excludes unsecured indebtedness) to consolidated trailing four quarters EBITDA as of the last day of any fiscal quarter, not to exceed 3.00 to 1.00.	<b>1.09 to 1.00</b>

As of July 2, 2016 , we were in compliance with all financial and operating covenants of the credit facility.

Any failure to comply with the financial or operating covenants of the credit facility would prevent PTC from being able to borrow additional funds, and would constitute a default, permitting the lenders to, among other things, accelerate the amounts outstanding, including all accrued interest and unpaid fees, under the credit facility and to terminate the credit facility. A change in control of PTC, as defined in the agreement, also constitutes an event of default, permitting the lenders to accelerate the indebtedness and terminate the credit facility.

#### ***Outstanding Notes***

We issued \$500 million of 6% senior notes due 2024 on May 12, 2016. Interest will be payable twice a year with the first payment due on November 15, 2016. The note indenture also contains other limitations on our business, including limitations on the incurrence of additional debt and uses of cash.

#### ***Share Repurchases***

Our Articles of Organization authorize us to issue up to 500 million shares of our common stock. Our Board of Directors has periodically authorized the repurchase of shares of our common stock. On August 4, 2014, our Board of Directors authorized us to repurchase \$600 million of our common stock through September 30, 2017. We intend to use cash from operations and borrowings under our credit facility to make such repurchases. In the third quarter and first nine months of 2016, we did not repurchase any shares and do not expect to do so in the fourth quarter of 2016 due to the accelerated pace of our transition to a subscription business model and the near-term implications on free cash flow and EBITDA. In the first quarter of 2015, we received 1.1 million shares as the final settlement of an accelerated share repurchase agreement we entered into in August 2014. All shares of our common stock repurchased are automatically restored to the status of authorized and unissued.

#### ***Future Expectations***

We believe that existing cash and cash equivalents, together with cash generated from operations, and amounts available under our credit facility will be sufficient to meet our working capital and capital expenditure requirements through at least the next twelve months and to meet our known long-term capital requirements. In the remainder of 2016, we expect additional capital expenditures of approximately \$14 million.

We may at any time, from time to time, purchase our outstanding debt in open market purchases, privately negotiated transactions or otherwise. Such purchases or retirement of debt, if any, will depend on prevailing market conditions, our

liquidity requirements, contractual restrictions and other factors and may be commenced or suspended at any time. The amounts involved may be material.

We evaluate possible strategic transactions on an ongoing basis and at any given time may be engaged in discussions or negotiations with respect to possible strategic transactions. Our expected uses of cash could change, our cash position could be reduced and we may incur additional debt obligations to the extent we complete additional acquisitions.

We have substantial cash requirements in the United States and a significant portion of our cash is generated and held outside the U.S. At July 2, 2016, we had cash and cash equivalents of \$22.9 million in the U.S., \$120.1 million in Europe, \$98.0 million in the Pacific Rim (including India), \$28.0 million in Japan and \$25.6 million in other non-U.S. countries. We believe that the combination of our existing U.S. cash and cash equivalents, future U.S. operating cash flows and cash available under our credit facility, are sufficient to meet our ongoing U.S. operating expenses and known capital requirements.

### Contractual Obligations

At September 30, 2015, our contractual obligations were as follows:

Contractual Obligations	Payments due by period				
	Total	Less than 1 year	1-3 years	3-5 years	More than 5 years
	(in millions)				
Credit facility (1)	\$ 719.0	\$ 64.2	\$ 150.7	\$ 504.0	\$ —
Operating leases (2)	144.1	35.8	48.3	33.3	26.7
Purchase obligations (3)	28.0	21.6	5.8	0.7	—
Pension liabilities (4)	20.2	0.8	1.5	1.5	16.4
Unrecognized tax benefits (5)	14.1	—	—	—	—
Total	\$ 925.4	\$ 122.4	\$ 206.3	\$ 539.5	\$ 43.1

- (1) Credit facility amounts above include required principal repayments and interest and commitment fees based on the balance outstanding as of September 30, 2015 and the interest rate in effect as of September 30, 2015, 1.875%. Pursuant to our amended and restated credit facility signed November 4, 2015, the term loan was converted into a revolving loan. The credit facility matures on September 15, 2019, when all remaining amounts outstanding will be due and payable in full.
- (2) The future minimum lease payments above include minimum future lease payments for excess facilities under noncancelable operating leases. These leases qualify for operating lease accounting treatment and, as such, are not included on our balance sheet. See Note I *Commitments and Contingencies* of “Notes to Consolidated Financial Statements” in our 2015 Annual Report on Form 10-K for additional information regarding our operating leases.
- (3) Purchase obligations represent minimum commitments due to third parties, including royalty contracts, research and development contracts, telecommunication contracts, information technology maintenance contracts in support of internal-use software and hardware and other marketing and consulting contracts. Contracts for which our commitment is variable, based on volumes, with no fixed minimum quantities, and contracts that can be canceled without payment penalties have been excluded. The purchase obligations included above are in addition to amounts included in current liabilities and prepaid expenses recorded on our September 30, 2015 consolidated balance sheet.
- (4) These obligations relate to our international pension plans. These liabilities are not subject to fixed payment terms. Payments have been estimated based on the plans’ current funded status, planned employer contributions and actuarial assumptions. In addition, we may, at our discretion, make additional voluntary contributions to the plans. See Note M *Pension Plans* of “Notes to Consolidated Financial Statements” in our 2015 Annual Report on Form 10-K for further discussion.
- (5) As of September 30, 2015, we had recorded total unrecognized tax benefits of \$14.1 million. This liability is not subject to fixed payment terms and the amount and timing of payments, if any, which we will make related to this liability, are not known. See Note G *Income Taxes* of “Notes to Consolidated Financial Statements” in our 2015 Annual Report on Form 10-K for additional information.

As of September 30, 2015, we had letters of credit and bank guarantees outstanding of approximately \$4 million (of which \$1.1 million was collateralized), primarily related to our corporate headquarters lease in Needham, Massachusetts.

As of July 2, 2016, after giving effect for the issuance of the new Senior Notes described above and in Note 13 *Debt* of “Notes to Consolidated Financial Statements” in this Form 10-Q, our debt obligations including principal and interest payments are as follows:



Contractual Obligations	Payments due by period				
	Total	Remainder of 2016	1-3 years	3-5 years	More than 5 years
	(in millions)				
Debt	\$1,044.7	\$2.1	\$76.6	\$346.0	\$620.0

### ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

There have been no significant changes in our market risk exposure as described in Item 7A: *Quantitative and Qualitative Disclosures about Market Risk* of our 2015 Annual Report on Form 10-K.

### ITEM 4. CONTROLS AND PROCEDURES

#### *Evaluation of Effectiveness of Disclosure Controls and Procedures*

Our management maintains disclosure controls and procedures as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the “Exchange Act”) that are designed to provide reasonable assurance that information required to be disclosed in our reports filed or submitted under the Exchange Act is processed, recorded, summarized and reported within the time periods specified in the SEC’s rules and forms, and that such information is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer (our principal executive officer and principal financial officer, respectively), as appropriate, to allow for timely decisions regarding required disclosure.

We evaluated, under the supervision and with the participation of management, including our principal executive and principal financial officers, the effectiveness of the design and operation of our disclosure controls and procedures as of the end of the period covered by this quarterly report. Based on this evaluation, our principal executive officer and principal financial officer concluded that our disclosure controls and procedures were effective at the reasonable assurance level as of July 2, 2016 .

#### *Changes in Internal Control over Financial Reporting*

There was no change in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) that occurred during the quarter ended July 2, 2016 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

## PART II—OTHER INFORMATION

### ITEM 1. LEGAL PROCEEDINGS

On March 7, 2016, a lawsuit was filed against us and certain of our current and former officers and directors in the U.S. District Court for the District of Massachusetts by a shareholder on behalf of himself and purportedly on behalf of other shareholders who purchased our stock during the period November 24, 2011 through July 29, 2015. An amended complaint was filed on July 11, 2016. The lawsuit, which seeks unspecified damages, alleges that, during that period, PTC's public disclosures concerning the SEC and DOJ China FCPA Investigation were false and/or misleading and/or failed to disclose certain alleged facts. We intend to contest the action vigorously. We cannot predict the outcome of this action nor when it will be resolved. If the plaintiff(s) were to prevail in the litigation, we could be liable for damages, which could be material and could adversely affect our financial condition or results of operations.

### ITEM 1A. RISK FACTORS

In addition to other information set forth in this report, you should carefully consider the factors described below and in Part I. Item 1A. Risk Factors in our 2015 Annual Report on Form 10-K, which could materially affect our business, financial condition or future results. The risks described below and in our 2015 Annual Report on Form 10-K are not the only risks we face. Additional risks and uncertainties not currently known to us or that we currently deem to be immaterial also may materially adversely affect our business, financial condition and/or operating results.

**We recently sold \$500 million of senior notes, the proceeds of which we used to repay a portion of the amounts outstanding under our existing credit facility. We will maintain our existing credit facility. Our substantial indebtedness could adversely affect our business, financial condition and results of operations, as well as our ability to meet our payment obligations under our debt.**

We have a significant amount of indebtedness. As of July 2, 2016, our total debt was approximately \$778.1 million (without giving effect to approximately \$4.1 million of outstanding letters of credit supporting leases and certain other obligations, approximately \$1.2 million of which outstanding letters of credit are secured by cash) and we had unused commitments under our senior credit facility of approximately \$621.9 million, of which approximately \$214.8 million would have been available for borrowing as a result of financial covenants. The committed amount under our senior credit facility is currently \$900 million and may be increased by up to an additional \$500 million in the aggregate if the existing or additional lenders are willing to make such increased commitments.

Subject to the limits contained in our debt instruments, we may be able to incur substantial additional debt from time to time to finance working capital, capital expenditures, investments or acquisitions, or for other purposes. If we do so, the risks related to our high level of debt could intensify. Specifically, our high level of debt could have significant consequences, including:

- making it more difficult for us to satisfy our debt obligations and other ongoing business obligations, which may result in defaults;
- events of default if we fail to comply with the financial and other covenants contained in the agreements governing our debt instruments, which could result in all of our debt becoming immediately due and payable or require us to negotiate an amendment to financial or other covenants that could cause us to incur additional fees and expenses;
- limiting our ability to obtain additional financing to fund future working capital, capital expenditures, acquisitions or other general corporate requirements;
- reducing the availability of our cash flow to fund working capital, capital expenditures, acquisitions and other general corporate purposes and limiting our ability to obtain additional financing for these purposes;
- increasing our vulnerability to the impact of adverse economic and industry conditions;
- exposing us to the risk of increased interest rates as certain of our borrowings, including borrowings under the senior credit facility, are at variable rates of interest;
- limiting our flexibility in planning for, or reacting to, and increasing our vulnerability to, changes in our business, the industries in which we operate, and the overall economy;
- placing us at a competitive disadvantage compared to other, less leveraged competitors; and
- increasing our cost of borrowing.

Any of the above-listed factors could have an adverse effect on our business, financial condition and results of operations and our ability to meet our payment obligations under our debt.

**We may not be able to generate sufficient cash to service all of our indebtedness, and may be forced to take other actions to satisfy our obligations under our indebtedness, which may not be successful.**

Our ability to make scheduled payments on or refinance our debt obligations depends on our financial condition and operating performance, which are subject to prevailing economic and competitive conditions and to certain financial, business, legislative, regulatory and other factors beyond our control. We may be unable to maintain a level of cash flows from operating activities sufficient to permit us to pay the principal, premium, if any, and interest on our indebtedness.

If our cash flows and capital resources are insufficient to fund our debt service obligations, we could face substantial liquidity problems and could be forced to reduce or delay investments and capital expenditures or to dispose of material assets or operations, seek additional debt or equity capital or restructure or refinance our indebtedness. We may not be able to effect any such alternative measures, if necessary, on commercially reasonable terms or at all and, even if successful, those alternative actions may not allow us to meet our scheduled debt service obligations. Our debt instruments restrict our ability to dispose of assets and use the proceeds from those dispositions and may also restrict our ability to raise debt or equity capital to be used to repay other indebtedness when it becomes due. We may not be able to consummate those dispositions or to obtain proceeds in an amount sufficient to meet any debt service obligations then due.

Our inability to generate sufficient cash flows to satisfy our debt obligations, or to refinance our indebtedness on commercially reasonable terms or at all, would materially and adversely affect our financial position and results of operations and our ability to satisfy our obligations under the notes.

If we cannot make scheduled payments on our debt, we will be in default and holders of the notes could declare all outstanding principal and interest to be due and payable, the lenders under the senior credit facility could terminate their commitments to loan money, the lenders could foreclose against the assets securing their borrowings and we could be forced into bankruptcy or liquidation. All of these events could result in your losing your investment in the notes.

**Despite our current level of indebtedness, we and our subsidiaries may still be able to incur substantially more debt and other obligations. This could further exacerbate the risks to our financial condition described above.**

We and our subsidiaries may be able to incur significant additional indebtedness and other obligations in the future. Although our debt instruments contain restrictions on the incurrence of additional indebtedness, these restrictions are subject to a number of qualifications and exceptions. The additional indebtedness incurred in compliance with these restrictions could be substantial. These restrictions also will not prevent us from incurring obligations that do not constitute indebtedness. If new debt is added to our current debt levels, or we incur other obligations, the related risks that we now face could intensify.

**Our debt instruments have various covenants that limit our management's discretion in the operation of our business.**

Our debt instruments contain various provisions that limit our management's discretion by restricting our and our subsidiaries' ability to, among other things:

- incur additional indebtedness or guarantee indebtedness;
- pay dividends or make other distributions or repurchase or redeem our capital stock;
- prepay, redeem or repurchase certain debt;
- make loans and investments;
- sell assets;
- incur liens; and
- consolidate, merge or sell all or substantially all of our assets.

Our senior credit facility also requires us to meet certain financial ratios. Any failure to comply with our debt instruments may result in an event of default. An event of default may allow the creditors, if the agreements so provide, to accelerate the related debt as well as any other debt to which a cross-acceleration or cross-default provision applies. In addition, the lenders may be able to terminate any commitments they had made to supply us with further funds.

**Our variable rate indebtedness subjects us to interest rate risk, which could cause our debt service obligations to increase significantly.**

Borrowings under our senior credit facility are at variable rates of interest and expose us to interest rate risk. If interest rates were to increase, our debt service obligations on the variable rate indebtedness would increase even though the amount borrowed remained the same, and our net income and cash flows, including cash available for servicing our indebtedness, will correspondingly decrease. Assuming all loans are fully drawn, each 25 basis point change in interest rates would result in a \$2.3 million change in annual interest expense on our indebtedness under our senior credit facility. In the future, we may enter into interest rate swaps that involve the exchange of floating for fixed rate interest payments in

order to reduce interest rate volatility. However, we may not maintain interest rate swaps with respect to all of our variable rate indebtedness, and any swaps we enter into may not fully mitigate our interest rate risk.

## ITEM 6. EXHIBITS

- 1.1 Underwriting Agreement, dated May 4, 2016, by and between PTC Inc. and J.P. Morgan Securities LLC, as the representative of the several underwriters named therein (filed as Exhibit 1.1 to our Current Report on Form 8-K filed on May 5, 2016 (File No. 0-18059) and incorporated herein by reference).
- 3.1 Restated Articles of Organization of PTC Inc. adopted August 4, 2015 (filed as Exhibit 3.1 to our Annual Report on Form 10-K for the fiscal year ended September 30, 2015 (File No. 0-18059) and incorporated herein by reference).
- 3.2 By-Laws, as amended and restated, of PTC Inc. (filed as Exhibit 3.2 to our Quarterly Report in Form 10-Q for the fiscal quarter ended March 29, 2014 (File No. 0-18059) and incorporated herein by reference).
- 4.1 Indenture, dated as of May 12, 2016, by and between the Company and The Bank of New York Mellon, as Trustee (filed as Exhibit 4.1 to our Current Report on Form 8-K filed on May 18, 2016 (File No. 0-18059) and incorporated herein by reference).
- 4.2 First Supplemental Indenture, dated as of May 12, 2016, by and between the Company and The Bank of New York Mellon, as Trustee (filed as Exhibit 4.2 to our Current Report on Form 8-K filed on May 18, 2016 (File No. 0-18059) and incorporated herein by reference).
- 4.3 6.000% Senior Notes due 2024 (filed as Exhibit 4.3 to our Current Report on Form 8-K filed on May 18, 2016 (File No. 0-18059) and incorporated herein by reference).
- 10.1 Amendment No. 1 dated April 18, 2016 to Credit Agreement dated as of November 4, 2015 by and among PTC Inc., JP Morgan Chase Bank, N.A., as Administrative Agent, and the lenders party thereto (filed as Exhibit 99.3 to our Current Report on Form 8-K filed on April 20, 2016 (File No. 0-18059) and incorporated herein by reference).
- 10.2 Amendment No. 2 dated June 1, 2016 to Credit Agreement dated as of November 4, 2015 by and among PTC Inc., JP Morgan Chase Bank, N.A., as Administrative Agent, and the lenders party thereto.
- 31.1 Certification of the Chief Executive Officer Pursuant to Exchange Act Rules 13a-14(a) and 15d-14(a).
- 31.2 Certification of the Chief Financial Officer Pursuant to Exchange Act Rules 13a-14(a) and 15d-14(a).
- 32\* Certification of Periodic Financial Report Pursuant to 18 U.S.C. Section 1350.
- 101 The following materials from PTC Inc.'s Quarterly Report on Form 10-Q for the quarter ended April 2, 2016 formatted in XBRL (eXtensible Business Reporting Language): (i) Condensed Consolidated Balance Sheets as of April 2, 2016 and September 30, 2015; (ii) Condensed Consolidated Statements of Operations for the three and six months ended April 2, 2016 and April 4, 2015; (iii) Condensed Consolidated Statements of Comprehensive Income for the three and six months ended April 2, 2016 and April 4, 2015; (iv) Condensed Consolidated Statements of Cash Flows for the three and six months ended April 2, 2016 and April 4, 2015; and (v) Notes to Condensed Consolidated Financial Statements.

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\* Indicates that the exhibit is being furnished, not filed, with this report.

**SIGNATURE**

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 hereunto duly authorized.

PTC Inc.

By:

\_\_\_\_\_  
/S/ ANDREW MILLER

**Andrew Miller**  
**Executive Vice President and Chief Financial**  
**Officer (Principal Financial Officer)**

Date: August 11, 2016

## AMENDMENT NO. 2

Dated as of June 1, 2016

to

## AMENDED AND RESTATED CREDIT AGREEMENT

Dated as of November 4, 2015

THIS AMENDMENT NO. 2 (this “Amendment”) is made as of June 1, 2016 by and among PTC Inc., a Massachusetts corporation (the “Parent”), PTC (IFSC) Limited, an entity organized under the laws of the Republic of Ireland (the “Irish Borrower” and, together with the Parent, the “Borrowers”), the Lenders listed on the signature pages hereof and JPMorgan Chase Bank, N.A., as administrative agent for the Lenders (in such capacity, the “Administrative Agent”), under that certain Amended and Restated Credit Agreement, dated as of November 4, 2015, by and among the Parent, the Foreign Subsidiary Borrowers from time to time party thereto, the Lenders from time to time party thereto and the Administrative Agent (as further amended, restated, supplemented or otherwise modified from time to time, the “Credit Agreement”). Capitalized terms used herein and not otherwise defined herein shall have the respective meanings given to them in the Credit Agreement.

WHEREAS, the Parent has requested that the Lenders and the Administrative Agent agree to make certain amendments to the Credit Agreement; and

WHEREAS, the Borrowers, the requisite Lenders and the Administrative Agent have so agreed on the terms and conditions set forth herein;

NOW, THEREFORE, in consideration of the premises set forth above, the terms and conditions contained herein, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Borrowers, the Lenders party hereto and the Administrative Agent hereby agree to enter into this Amendment.

1. Amendments to the Credit Agreement. Subject to the satisfaction of the conditions precedent set forth in Section 2 below, the Credit Agreement is hereby amended as follows, with effect from (and including) the date hereof (unless otherwise specified below):

(a) Section 1.01 of the Credit Agreement is hereby amended to add the following new term and related definition in the appropriate alphabetical order:

“Amendment No. 2 Effective Date” means June 1, 2016.

(b) The definition of “Aggregate Commitment” set forth in Section 1.01 of the Credit Agreement is hereby amended to restate the last sentence thereof to read as follows: “As of the Amendment No. 2 Effective Date, the Aggregate Commitment is \$900,000,000”.

(c) The definition of “Commitment” set forth in Section 1.01 of the Credit Agreement is hereby amended to (i) replace the reference to “initial amount of each Lender’s Commitment” set forth in the penultimate sentence thereof with “amount of each Lender’s Commitment as of the Amendment No. 2 Effective Date” and (ii) amend and restate the last sentence thereof to read as follows: “The aggregate amount of the Lenders’ Commitments as of the Amendment No. 2 Effective Date is \$900,000,000.”

(d) Clause (c) of Section 5.15 of the Credit Agreement is hereby amended and restated to read as follows:

“(c) any of the following conditions are satisfied: (i) the aggregate amount of all such Capital Distributions during any fiscal year of the Parent does not exceed the Specified Basket Amount; (ii) such Capital Distributions are made during the period commencing on (and including) the Amendment No. 2 Effective Date and ending on (and including) June 30, 2018 and the aggregate amount of all such Capital Distributions during such period does not exceed \$100,000,000; or (iii) the Total Leverage Ratio is less than 3.25 to 1.00 at the time of and after giving effect (including giving effect thereto on a Pro Forma Basis) to such Capital Distribution.”

(e) Schedule 2.01 of the Credit Agreement is hereby amended and restated to read as set forth on Schedule 2.01 hereto.

2.

Condition of Effectiveness. The effectiveness of this Amendment is subject to the conditions precedent that (i) the Administrative Agent shall have received counterparts of this Amendment duly executed by the Borrowers, the Required Lenders and the Administrative Agent and (ii) the Administrative Agent shall have received from the Parent, for the account of each Lender signatory hereto that delivers its executed signature page to this Amendment by no later than the date and time specified by the Administrative Agent, an amendment fee in an amount equal to \$5,000.

3.

Representations and Warranties of the Borrowers. Each of the Borrowers hereby represents and warrants as follows:

(a)

This Amendment and the Credit Agreement as modified hereby constitute valid and binding obligations of such Borrower, enforceable against such Borrower in accordance with their respective terms.

(b)

As of the date hereof and immediately after giving effect to the terms of this Amendment, (i) no Default or Event of Default has occurred and is continuing and (ii) the representations and warranties of the Borrowers set forth in the Credit Agreement are true and correct in all material respects (or, in the case of any representation or warranty qualified by materiality or Material Adverse Effect, in all respects) on and as of the date hereof (or, if a representation or warranty is expressly stated to have been made as of a specific date, such representation or warranty shall be true and correct in all material respects (or, in the case of any representation or warranty qualified by materiality or Material Adverse Effect, in all respects) as of such specific date).

4.

Reference to and Effect on the Credit Agreement.

(a)

Upon the effectiveness hereof, each reference to the Credit Agreement in the Credit Agreement or any other Loan Document shall mean and be a reference to the Credit Agreement as amended hereby.

(b)

The Credit Agreement and all other Loan Documents shall remain in full force and effect and are hereby ratified and confirmed.

(c)

Except with respect to the subject matter hereof, the execution, delivery and effectiveness of this Amendment shall not operate as a waiver of any right, power or remedy of the Administrative Agent or the Lenders, nor constitute a waiver of any provision of the Credit Agreement or any other Loan Documents.

(d)

This Amendment is a Loan Document.

5.

Governing Law. This Amendment shall be construed in accordance with and governed by the law of the State of New York.

6.

Headings. Section headings in this Amendment are included herein for convenience of reference only and shall not constitute a part of this Amendment for any other purpose.

7.

Counterparts. This Amendment may be executed by one or more of the parties hereto on any number of separate counterparts, and all of said counterparts taken together shall be deemed to constitute one and the same instrument. Signatures delivered by facsimile or other electronic imaging shall have the same force and effect as manual signatures delivered in person.

[Signature Pages Follow]

IN WITNESS WHEREOF, this Amendment has been duly executed as of the day and year first above written.

PTC INC.,  
as the Parent

By: /s/Stephen Bouchard

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Name: Stephen Bouchard

Title: Treasurer

PTC (IFSC) LIMITED,  
as the Irish Borrower

By: /s/Eamonn Clarke

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Name: Eamonn Clarke

Title: Director

JPMORGAN CHASE BANK, N.A.,  
individually as a Lender, as the Swingline  
Lender, as an Issuing Bank and as  
Administrative Agent

By: /s/Daglas P. Panchal

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Name: Daglas P. Panchal

Title: Vice President

KEYBANK NATIONAL ASSOCIATION

By: /s/David A. Wild

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Name: David A. Wild

Title: Senior Vice President

Name of Lender:

FIFTH THIRD BANK

By: /s/Colin Murphy

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Name: Colin Murphy

Title: Director

Name of Lender:



HSBC Bank USA, National Association

By: /s/Elise M. Russo

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Name: Elise M. Russo

Title: Senior Vice President

For any Lender requiring a second signature  
line:

By:

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Name:

Title:

Name of Lender:

CITIZENS BANK, N.A.

By: /s/William M. Clossey

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Name: William M. Clossey

Title: Sr. Vice President

For any Lender requiring a second signature  
line:

By:

---

Name:

Title:

Name of Lender:

ROYAL BANK OF CANADA

By: /s/Nicholas Heslip

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Name: Nicholas Heslip

Title: Authorized Signatory

Name of Lender:

SANTANDER BANK, N.A.

By: /s/William Maag

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Name: William Maag

Title: Managing Director

Name of Lender:

TD BANK, N.A.

By: /s/Christopher Matheson

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Name: Christopher Matheson

Title: Director

For any Lender requiring a second signature  
line:

By:

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Name:

Title:

Name of Lender:

Barclays Bank PLC

By: /s/Sean Duggan

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Name: Sean Duggan

Title: Assistant Vice President

Name of Lender:

SunTrust Bank

By: /s/Jason Crowley

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Name: Jason Crowley  
Title: Vice President

For any Lender requiring a second signature  
line:

By: \_\_\_\_\_  
Name:  
Title:

Name of Lender:

U.S. BANK NATIONAL ASSOCIATION

By: /s/Brian Seipke  
\_\_\_\_\_  
Name: Brian Seipke  
Title: Vice President

Name of Lender:

WELLS FARGO BANK, NATIONAL  
ASSOCIATION

By: /s/David Mallett  
\_\_\_\_\_  
Name: David Mallett  
Title: Managing Director

For any Lender requiring a second signature  
line:

By: \_\_\_\_\_  
Name:  
Title:

Name of Lender:

SILICON VALLEY BANK

By: /s/Kristy Vlahos

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Name: Kristy Vlahos

Title: Director

For any Lender requiring a second signature  
line:

By:

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Name:

Title:

Name of Lender:

The Huntington National Bank

By: /s/Jared Shaner

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Name: Jared Shaner

Title: Vice President

Name of Lender: BANK OF AMERICA, N.A.

By: /s/My-Linh Yoshiike

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Name: My-Linh Yoshiike

Title: Vice President

Name of Lender: PEOPLE'S UNITED BANK,  
NATIONAL ASSOCIATION

By: /s/Kathryn M. Williams

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Name: Kathryn M. Williams

Title: Vice President

## COMMITMENTS

<u>LENDER</u>	<u>COMMITMENT</u>
JPMORGAN CHASE BANK, N.A.	\$78,000,000.00
KEYBANK NATIONAL ASSOCIATION	\$78,000,000.00
FIFTH THIRD BANK	\$66,000,000.00
HSBC BANK USA, NATIONAL ASSOCIATION	\$66,000,000.00
CITIZENS BANK, N.A.	\$66,000,000.00
ROYAL BANK OF CANADA	\$66,000,000.00
SANTANDER BANK, N.A.	\$66,000,000.00
TD BANK, N.A.	\$66,000,000.00
BARCLAYS BANK PLC	\$54,000,000.00
SUNTRUST BANK	\$54,000,000.00
U.S. BANK NATIONAL ASSOCIATION	\$54,000,000.00
WELLS FARGO BANK, NATIONAL ASSOCIATION	\$45,000,000.00
SILICON VALLEY BANK	\$45,000,000.00
THE HUNTINGTON NATIONAL BANK	\$36,000,000.00
BANK OF AMERICA, N.A.	\$36,000,000.00
PEOPLE'S UNITED BANK	\$24,000,000.00
<b>AGGREGATE COMMITMENTS</b>	<b>\$900,000,000.00</b>

## CERTIFICATION

I, James Heppelmann, certify that:

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

Date: August 11, 2016

/S/ JAMES HEPPELMANN

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**James Heppelmann**  
*President and Chief Executive Officer*

## CERTIFICATION

I, Andrew Miller, certify that:

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

Date: August 11, 2016

/S/ ANDREW MILLER

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Andrew Miller

*Executive Vice President and Chief Financial Officer*

**Certification of Periodic Financial Report****Pursuant to 18 U.S.C. Section 1350**

Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, each of the undersigned officers of PTC Inc. (the "Company") certifies that, to his knowledge, the Quarterly Report on Form 10-Q of the Company for the quarter ended July 2, 2016 fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and information contained in that Form 10-Q fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: August 11, 2016

/S/ JAMES HEPELMANN

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**James Heppelmann**

*President and Chief Executive Officer*

Date: August 11, 2016

/S/ ANDREW MILLER

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**Andrew Miller**

*Executive Vice President and Chief Financial Officer*