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

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**FORM 10-Q**

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(Mark One)

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

For the quarterly period ended September 30, 2018

or

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

For the transition period from

Commission File Number 0-25346

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**ACI WORLDWIDE, INC.**

(Exact name of registrant as specified in its charter)

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**Delaware**  
(State or other jurisdiction of  
incorporation or organization)

**3520 Kraft Rd, Suite 300**  
**Naples, FL 34105**  
(Address of principal executive offices,  
including zip code)

**47-0772104**  
(I.R.S. Employer  
Identification No.)

**(239) 403-4600**  
(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 every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes  No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company, or an emerging growth company. See definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer

Non-accelerated filer

Accelerated filer

Smaller reporting company

Emerging growth company

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

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

As of November 5, 2018, there were 115,979,645 shares of the registrant's common stock outstanding.



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**ACI WORLDWIDE, INC. AND SUBSIDIARIES**  
**CONDENSED CONSOLIDATED BALANCE SHEETS**  
(unaudited and in thousands, except share and per share amounts)

	September 30, 2018	December 31, 2017
<b>ASSETS</b>		
<b>Current assets</b>		
Cash and cash equivalents	\$ 76,342	\$ 69,710
Receivables, net of allowances of \$3,598 and \$4,799, respectively	279,641	262,845
Recoverable income taxes	8,233	7,921
Prepaid expenses	25,875	23,219
Other current assets	23,244	58,126
<b>Total current assets</b>	<u>413,335</u>	<u>421,821</u>
<b>Noncurrent assets</b>		
Accrued receivables, net	181,832	—
Property and equipment, net	75,437	80,228
Software, net	147,316	155,386
Goodwill	909,691	909,691
Intangible assets, net	174,057	191,281
Deferred income taxes, net	28,179	66,749
Other noncurrent assets	54,477	36,483
<b>TOTAL ASSETS</b>	<u>\$ 1,984,324</u>	<u>\$ 1,861,639</u>
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>		
<b>Current liabilities</b>		
Accounts payable	\$ 27,381	\$ 34,718
Employee compensation	48,142	48,933
Current portion of long-term debt	18,765	17,786
Deferred revenue	93,668	107,543
Income taxes payable	1,600	9,898
Other current liabilities	60,075	102,904
<b>Total current liabilities</b>	<u>249,631</u>	<u>321,782</u>
<b>Noncurrent liabilities</b>		
Deferred revenue	48,789	51,967
Long-term debt	656,159	667,943
Deferred income taxes, net	26,372	16,910
Other noncurrent liabilities	40,435	38,440
<b>Total liabilities</b>	<u>1,021,386</u>	<u>1,097,042</u>
Commitments and contingencies		
<b>Stockholders' equity</b>		
Preferred stock; \$0.01 par value; 5,000,000 shares authorized; no shares issued at September 30, 2018 and December 31, 2017	—	—
Common stock; \$0.005 par value; 280,000,000 shares authorized; 140,525,055 shares issued at September 30, 2018 and December 31, 2017	702	702
Additional paid-in capital	632,547	610,345
Retained earnings	776,078	550,866
Treasury stock, at cost, 24,543,359 and 23,428,324 shares at September 30, 2018 and December 31, 2017, respectively	(357,923)	(319,960)
Accumulated other comprehensive loss	(88,466)	(77,356)
<b>Total stockholders' equity</b>	<u>962,938</u>	<u>764,597</u>
<b>TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY</b>	<u>\$ 1,984,324</u>	<u>\$ 1,861,639</u>

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

**ACI WORLDWIDE, INC. AND SUBSIDIARIES**  
**CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS**  
(unaudited and in thousands, except per share amounts)

	For the Three Months Ended September 30,		For the Nine Months Ended September 30,	
	2018	2017	2018	2017
<b>Revenues</b>				
Software as a service and platform as a service	\$ 104,519	\$ 99,761	\$ 322,399	\$ 312,677
License	68,964	50,017	142,565	163,578
Maintenance	54,373	56,349	166,080	166,829
Services	17,669	19,608	58,786	54,712
<b>Total revenues</b>	<u>245,525</u>	<u>225,735</u>	<u>689,830</u>	<u>697,796</u>
<b>Operating expenses</b>				
Cost of revenue (1)	102,473	107,393	326,070	336,293
Research and development	36,008	33,935	110,661	106,189
Selling and marketing	28,252	25,236	93,305	81,190
General and administrative	29,537	25,302	87,023	130,332
Depreciation and amortization	20,896	22,446	63,274	67,189
<b>Total operating expenses</b>	<u>217,166</u>	<u>214,312</u>	<u>680,333</u>	<u>721,193</u>
<b>Operating income (loss)</b>	<u>28,359</u>	<u>11,423</u>	<u>9,497</u>	<u>(23,397)</u>
<b>Other income (expense)</b>				
Interest expense	(12,573)	(9,374)	(31,655)	(30,198)
Interest income	2,763	165	8,249	421
Other, net	(1,304)	(1,059)	(3,036)	(2,176)
<b>Total other income (expense)</b>	<u>(11,114)</u>	<u>(10,268)</u>	<u>(26,442)</u>	<u>(31,953)</u>
<b>Income (loss) before income taxes</b>	17,245	1,155	(16,945)	(55,350)
Income tax expense (benefit)	2,012	(2,233)	1,824	(27,321)
<b>Net income (loss)</b>	<u>\$ 15,233</u>	<u>\$ 3,388</u>	<u>\$ (18,769)</u>	<u>\$ (28,029)</u>
<b>Earnings (loss) per common share</b>				
Basic	\$ 0.13	\$ 0.03	\$ (0.16)	\$ (0.24)
Diluted	\$ 0.13	\$ 0.03	\$ (0.16)	\$ (0.24)
Weighted average common shares outstanding				
Basic	115,889	118,254	115,615	117,096
Diluted	117,492	119,743	115,615	117,096

(1) The cost of revenue excludes charges for depreciation but includes amortization of purchased and developed software for resale.

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

**ACI WORLDWIDE, INC. AND SUBSIDIARIES**  
**CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)**  
(unaudited and in thousands)

	<u>Three Months Ended</u>		<u>Nine Months Ended</u>	
	<u>September 30,</u>		<u>September 30,</u>	
	<u>2018</u>	<u>2017</u>	<u>2018</u>	<u>2017</u>
<b>Net income (loss)</b>	\$ 15,233	\$ 3,388	\$(18,769)	\$(28,029)
<b>Other comprehensive income (loss):</b>				
Foreign currency translation adjustments	(3,862)	(594)	(11,110)	14,526
<b>Total other comprehensive income (loss)</b>	<u>(3,862)</u>	<u>(594)</u>	<u>(11,110)</u>	<u>14,526</u>
<b>Comprehensive income (loss)</b>	<u>\$ 11,371</u>	<u>\$ 2,794</u>	<u>\$(29,879)</u>	<u>\$(13,503)</u>

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

**ACI WORLDWIDE, INC. AND SUBSIDIARIES**  
**CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS**  
(unaudited and in thousands)

	For the Nine Months Ended September 30,	
	2018	2017
<b>Cash flows from operating activities:</b>		
Net loss	\$ (18,769)	\$ (28,029)
<b>Adjustments to reconcile net loss to net cash flows from operating activities:</b>		
Depreciation	17,896	18,658
Amortization	54,993	58,114
Amortization of deferred debt issuance costs	3,881	3,537
Deferred income taxes	(7,139)	(37,707)
Stock-based compensation expense	20,642	22,724
Other	1,432	1,094
<b>Changes in operating assets and liabilities</b>		
Receivables	58,443	80,398
Accounts payable	(4,217)	(11,610)
Accrued employee compensation	92	(1,056)
Current income taxes	(10,429)	(10,161)
Deferred revenue	(47)	(1,248)
Other current and noncurrent assets and liabilities	(16,316)	(9,642)
<b>Net cash flows from operating activities</b>	<b>100,462</b>	<b>85,072</b>
<b>Cash flows from investing activities:</b>		
Purchases of property and equipment	(16,434)	(18,566)
Purchases of software and distribution rights	(21,876)	(21,328)
Other	(1,467)	—
<b>Net cash flows from investing activities</b>	<b>(39,777)</b>	<b>(39,894)</b>
<b>Cash flows from financing activities:</b>		
Proceeds from issuance of common stock	2,326	2,185
Proceeds from exercises of stock options	18,405	10,284
Repurchase of restricted stock for tax withholdings	(2,588)	(5,311)
Repurchases of common stock	(54,527)	—
Proceeds from senior notes	400,000	—
Redemption of senior notes	(300,000)	—
Proceeds from revolving credit facility	109,000	42,000
Repayment of revolving credit facility	(111,000)	(126,000)
Proceeds from term portion of credit agreement	—	415,000
Repayment of term portion of credit agreement	(105,332)	(380,852)
Payment of debt issuance costs	(7,253)	(5,340)
Payments on other debt and capital leases	(2,332)	(9,286)
<b>Net cash flows from financing activities</b>	<b>(53,301)</b>	<b>(57,320)</b>
Effect of exchange rate fluctuations on cash	(752)	4,319
Net increase (decrease) in cash and cash equivalents	6,632	(7,823)
Cash and cash equivalents, beginning of period	69,710	75,753
Cash and cash equivalents, end of period	<u>\$ 76,342</u>	<u>\$ 67,930</u>
<b>Supplemental cash flow information</b>		
Income taxes paid	\$ 22,439	\$ 24,693
Interest paid	\$ 31,914	\$ 31,762

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

**ACI WORLDWIDE, INC. AND SUBSIDIARIES**  
**NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS**  
**(unaudited)**

**1. Condensed Consolidated Financial Statements**

The unaudited condensed consolidated financial statements include the accounts of ACI Worldwide, Inc. and its wholly-owned subsidiaries (collectively, the “Company”). All intercompany balances and transactions have been eliminated. The condensed consolidated financial statements as of September 30, 2018, and for the three and nine months ended September 30, 2018 and 2017, are unaudited and reflect all adjustments of a normal recurring nature, which are, in the opinion of management, necessary for a fair presentation, in all material respects, of the financial position and operating results for the interim periods. The condensed consolidated balance sheet as of December 31, 2017 is derived from the audited financial statements.

The condensed consolidated financial statements contained herein should be read in conjunction with the consolidated financial statements and notes thereto contained in the Company’s annual report on Form 10-K for the fiscal year ended December 31, 2017, filed on February 27, 2018. Results for the three and nine months ended September 30, 2018 are not necessarily indicative of results that may be attained in the future.

The preparation of condensed consolidated financial statements in conformity with accounting principles generally accepted in the United States (“U.S. GAAP”) requires management to make judgments, estimates, and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the condensed consolidated financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

**Other Current Assets and Other Current Liabilities**

<b>(in thousands)</b>	<b>September 30, 2018</b>	<b>December 31, 2017</b>
Settlement deposits	\$ 5,477	\$ 22,282
Settlement receivables	11,462	30,063
Other	6,305	5,781
Total other current assets	<u>\$ 23,244</u>	<u>\$ 58,126</u>
<b>(in thousands)</b>	<b>September 30, 2018</b>	<b>December 31, 2017</b>
Settlement payables	\$ 16,221	\$ 48,953
Accrued interest	2,726	7,291
Vendor financed licenses	5,973	1,862
Royalties payable	7,148	9,264
Other	28,007	35,534
Total other current liabilities	<u>\$ 60,075</u>	<u>\$ 102,904</u>

Individuals and businesses settle their obligations to the Company’s various clients, primarily utility and other public sector clients, using credit or debit cards or via ACH payments. The Company creates a receivable for the amount due from the credit or debit card company and an offsetting payable to the client. Upon confirmation that the funds have been received, the Company settles the obligation to the client. Due to timing, in some instances, the Company may receive the funds into bank accounts controlled by and in the Company’s name that are not disbursed to its clients by the end of the day resulting in a settlement deposit on the Company’s books.

**Off Balance Sheet Accounts**

The Company also enters into agreements with certain clients to process payment funds on their behalf. When an ACH or automated teller machine network payment transaction is processed, a transaction is initiated to withdraw funds from the designated source account and deposit them into a settlement account, which is a trust account maintained for the benefit of the Company’s clients. A simultaneous transaction is initiated to transfer funds from the settlement account to the intended destination account. These “back to back” transactions are designed to settle at the same time, usually overnight, such that the Company receives the funds from the source at the same time as it sends the funds to their destination. However, due to the transactions being with various financial institutions there may be timing differences that result in float balances. These funds are maintained in accounts for the benefit of the client which is separate from the Company’s corporate assets. As the Company does not take ownership of the funds, the settlement accounts are not included in the



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Company's balance sheet. The Company is entitled to interest earned on the fund balances. The collection of interest on these settlement accounts is considered in the Company's determination of its fee structure for clients and represents a portion of the payment for services performed by the Company. The amount of settlement funds as of September 30, 2018 and December 31, 2017 were \$185.4 million and \$238.9 million, respectively.

### **Fair Value**

The fair value of the Company's Credit Agreement approximates the carrying value due to the floating interest rate (Level 2 of the fair value hierarchy). The Company measures the fair value of its Senior Notes based on Level 2 inputs, which include quoted market prices and interest rate spreads of similar securities. The fair value of the Company's 2026 Senior Notes was \$407.1 million at September 30, 2018. The fair value of the Company's 2020 Senior Notes was \$305.7 million at December 31, 2017.

The fair values of cash and cash equivalents approximate the carrying values due to the short period of time to maturity (Level 2 of the fair value hierarchy).

### **Goodwill**

In accordance with ASC 350, *Intangibles – Goodwill and Other*, the Company assesses goodwill for impairment annually during the fourth quarter of its fiscal year using October 1 balances or when there is evidence that events or changes in circumstances indicate that the carrying amount of the asset may not be recovered. The Company evaluates goodwill at the reporting unit level and has identified its operating segments, ACI On Demand and ACI On Premise, as its reporting units. The Company allocated goodwill to the reporting units using a relative fair value approach with total goodwill of \$909.7 million of which it allocated \$725.9 million and \$183.8 million to ACI On Premise and ACI On Demand, respectively.

Recoverability of goodwill is measured using a discounted cash flow model incorporating discount rates commensurate with the risks involved. Use of a discounted cash flow model is common practice in impairment testing in the absence of available transactional market evidence to determine the fair value. The calculated fair value was substantially in excess of the current carrying value for all reporting units based upon the October 1, 2017 annual impairment test and there have been no indications of impairment in the subsequent periods.

### **New Accounting Standards Recently Adopted**

In May 2014, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") 2014-09, *Revenue from Contracts with Customers* (codified as "ASC 606") as well as other clarifications and technical guidance related to this new revenue standard, including ASC 340-40, *Other Assets and Deferred Costs – Contracts with Customers* ("ASC 340-40"). ASC 606 superseded the revenue recognition requirements in ASC 605, *Revenue Recognition*, and most industry-specific guidance. The Company adopted ASC 606 and ASC 340-40 on January 1, 2018 (the effective date) using the modified retrospective transition method which required an adjustment to retained earnings for the cumulative effect of applying ASC 606 to active contracts as of the adoption date. For active contracts that were modified before the effective date, the Company reflected the aggregate effect of all modifications when identifying performance obligations and allocating the transaction price in accordance with the practical expedient permitted under ASC 606. The cumulative effect of applying ASC 606 to active contracts as of the adoption date was an increase to retained earnings of \$244.0 million.

In August 2016, the FASB issued ASU 2016-15, *Statement of Cash Flows – Classification of Certain Cash Receipts and Cash Payments*, an update that addresses how certain cash receipts and cash payments are presented and classified in the statement of cash flows. Among the cash flow matters addressed in the update are payments for costs related to debt prepayments or extinguishments, payments related to settlement of certain types of debt instruments, payments of contingent consideration made after a business combination, proceeds from insurance claims and corporate-owned life insurance policies, and distributions received from equity method investees, among others. The amendments are applied using a retrospective transition method to each period presented, unless impracticable for specific cash flow matters, in which case the amendments would be applied prospectively as of the earliest date practicable. The Company adopted ASU 2016-15 as of January 1, 2018. The adoption of ASU 2016-15 was not material to the condensed consolidated statement of cash flows.

In October 2016, the FASB issued ASU 2016-16, *Intra-Entity Transfers of Assets Other than Inventory*, to simplify the accounting for the income tax consequences of intra-entity transfers of assets other than inventory. Previously, U.S. GAAP prohibited the recognition of current and deferred income taxes for an intra-entity asset transfer until the asset has been sold to an outside party. This prohibition on recognition was an exception to the principle of comprehensive recognition of current and deferred income taxes in U.S. GAAP. The limited amount of authoritative guidance about the exception led to diversity in practice and is a source of complexity in financial reporting, particularly for an intra-entity transfer of intellectual property. Under the amendments of ASU 2016-16, an entity should recognize the income tax consequences of an intra-entity transfer of an asset other than inventory when the transfer occurs. Consequently, this amendment eliminates the exception for an intra-entity transfer of an asset other than inventory. The amendments to this ASU should be applied on a modified retrospective basis through a cumulative-effect adjustment directly to retained earnings as of the beginning of the period of adoption. The Company adopted ASU 2016-16 as of January 1, 2018. The adoption of ASU 2016-16 had no impact on the condensed consolidated balance sheet, results of operations, or statement of cash flows.

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In August 2018, the FASB issued ASU 2018-05, *Intangibles—Goodwill and Other—Internal-Use Software: Customer’s Accounting for Fees Paid in a Cloud Computing Arrangement* (“ASU 2018-05”). The purpose of the update was to reduce potential diversity in practice and provide specific guidance on how to account for implementation costs incurred in a cloud computing arrangement. ASU 2018-05 applies the same guidance in ASC 350-40, *Intangibles – Goodwill and Other — Internal-Use Software* (“ASC 350-40”), to determine implementation costs to capitalize versus costs that are to be expensed as incurred. This ASU will be effective for fiscal years beginning after December 15, 2019, with early adoption permitted. The Company has elected to early adopt ASU 2018-05 during the period ended September 30, 2018. The adoption had no impact on the condensed consolidated balance sheet, results of operations, or statement of cash flows.

### **Recently Issued Accounting Standards Not Yet Effective**

In February 2016, the FASB issued ASU 2016-02, *Leases* (codified as “ASC 842”). ASC 842 requires a lessee to record on the balance sheet the assets and liabilities for the rights and obligations created by leases with lease terms of more than 12 months. In addition, this standard requires both lessees and lessors to disclose certain key information about lease transactions. This standard will be effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years; early adoption is permitted and modified retrospective application is currently required with optional practical expedients. The Company will adopt ASC 842 as of the effective date and is evaluating the use of the optional practical expedients.

The Company has established a cross-functional project team to assess implementing changes to its systems, processes, and controls, in conjunction with a comprehensive review of existing lease agreements. The Company expects the adoption of ASC 842 will have a material impact on its condensed consolidated balance sheet as its rights and obligations from its existing operating leases will be recognized on the balance sheet as assets and liabilities. As of September 30, 2018, the Company’s undiscounted minimum commitments under noncancelable operating leases was approximately \$79.4 million. The Company does not expect the adoption of ASC 842 to have a material impact on its results of operations or statement of cash flows.

In February 2018, the FASB issued ASU 2018-02, *Income Statement-Reporting Comprehensive Income: Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income*. This ASU provides an option to reclassify stranded tax effects within accumulated other comprehensive income (“AOCI”) to retained earnings in each period in which the effect of the change in the U.S. federal corporate income tax rate in the 2017 U.S. Tax Cuts and Jobs Act (or portion thereof) is recorded. This ASU requires disclosure of a description of the accounting policy for releasing income tax effects from AOCI; whether election is made to reclassify the stranded income tax effects from the 2017 U.S. Tax Cuts and Jobs Act; and information about the income tax effects that are reclassified. This ASU is effective for annual and interim periods beginning after December 15, 2018. The Company is currently assessing the impact the adoption of ASU 2018-02 will have on its condensed consolidated balance sheet, results of operations, and statement of cash flows.

## **2. Revenue**

### **Revenue Recognition**

In accordance with ASC 606 revenue is recognized upon transfer of control of promised products and/or services to customers in an amount that reflects the consideration the Company expects to receive in exchange for those products and services. Revenue is recognized net of any taxes collected from customers and subsequently remitted to governmental authorities.

*Contract Combination.* The Company may execute more than one contract or agreement with a single customer. The separate contracts or agreements may be viewed as one combined arrangement or separate agreements for revenue recognition purposes. In order to reach appropriate conclusions regarding whether such agreements should be combined, the Company evaluates whether the agreements were negotiated as a package with a single commercial objective, whether the amount of consideration to be paid in one agreement depends on the price and/or performance of another agreement, or whether the product(s) or services promised in the agreements represent a single performance obligation. The conclusions reached can impact the allocation of the transaction price to each performance obligation and the timing of revenue recognition related to those arrangements.

*Software as a Service (“SaaS”) and Platform as a Service (“PaaS”) Arrangements.* The Company’s SaaS-based and PaaS-based arrangements, including implementation, support and other services, represent a single promise to provide continuous access (i.e. a stand-ready performance obligation) to its software solutions and their processing capabilities in the form of a service through one of the Company’s data centers. As each day of providing access to the software solution(s) is substantially the same and the customer simultaneously receives and consumes the benefits as access is provided, the Company’s single promise under its SaaS-based and PaaS-based arrangements is comprised of a series of distinct service periods. The Company’s SaaS-based and PaaS-based arrangements may include fixed consideration, variable consideration, or a combination of the two. Fixed consideration is recognized over the term of the arrangement or longer if the fixed consideration relates to a material right. A material right would be a separate performance obligation. The Company estimates the standalone selling price for a material right by reference to the services expected to be provided and the corresponding expected consideration. Variable consideration in these arrangements is typically a function of transaction volume or

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another usage-based measure. Depending upon the structure of a particular arrangement, the Company: (1) allocates the variable amount to each distinct service period within the series and recognizes revenue as each distinct service period is performed (i.e. direct allocation), (2) estimates total variable consideration at contract inception (giving consideration to any constraints that may apply and updating the estimates as new information becomes available) and recognizes the total transaction price over the period to which it relates, or (3) applies the 'right to invoice' practical expedient and recognizes revenue based on the amount invoiced to the customer during the period.

*License Arrangements.* The Company's software license arrangements provide the customer with the right to use functional intellectual property (as it exists at the point in time at which the license is granted) for the duration of the contract term. Implementation, support, and other services are typically considered distinct performance obligations when sold with a software license unless these services are determined to significantly modify the software.

Payment terms for the Company's software license arrangements generally include fixed license and capacity fees that are payable up front or over time. These arrangements may also include incremental usage-based fees that are payable when the customer exceeds its contracted license capacity limits. The Company accounts for capacity overages as a usage-based royalty that is recognized when the usage occurs.

When a software license arrangement contains payment terms that are extended beyond one year, a significant financing component may exist. The significant financing component is calculated as the difference between the stated value and present value of the software license fees and is recognized as interest income over the extended payment period. The total fixed software license fee net of the significant financing component is recognized as revenue at the point in time when the software is transferred to the customer.

For those software license arrangements that include customer-specific acceptance provisions, such provisions are generally presumed to be substantive and the Company does not recognize revenue until the earlier of the receipt of a written customer acceptance, objective demonstration that the delivered product meets the customer-specific acceptance criteria, or the expiration of the acceptance period. The Company recognizes revenues on such arrangements upon the earlier of receipt of written acceptance or the first production use of the software by the customer.

For software license arrangements in which the Company acts as a distributor of another company's product, and in certain circumstances, modifies or enhances the product, revenues are recorded on a gross basis. These include arrangements in which the Company takes control of the products and is responsible for providing the product or service. For software license arrangements in which the Company acts as a sales agent for another company's product, revenues are recorded on a net basis. These include arrangements in which the Company does not take control of products and is not responsible for providing the product or service.

For software license arrangements in which the Company utilizes a third-party distributor or sales agent, the Company recognizes revenue upon transfer of control of the software license(s) to the third-party distributor or sales agent.

The Company's software license arrangements typically provide the customer with a standard 90-day assurance-type warranty. These warranties do not represent an additional performance obligation as services beyond assuring that the software license complies with agreed-upon specifications are not provided.

Software license arrangements typically include an initial post contract customer support (maintenance or "PCS") term of one year with subsequent renewals for additional years within the initial license period. The Company's promise to those customers who elect to purchase PCS represents a stand-ready performance obligation that is distinct from the license performance obligation and recognized over the PCS term.

The Company also provides various professional services to customers with software licenses. These include project management, software implementation, and software modification services. Revenues from arrangements to provide professional services are generally distinct from the other promises in the contract(s) and are recognized as the related services are performed. Consideration payable under these arrangements is either fixed fee or on a time-and-materials basis, which represents variable consideration that must be estimated using the most likely amount based on the range of hours expected to be incurred in providing the services.

The Company estimates the standalone selling price ("SSP") for maintenance and professional services based on observable standalone sales. The Company applies the residual approach to estimate the SSP for software licenses.

Refer to Note 10, *Segment Information*, for further details, including disaggregation of revenue based on primary solution category and geographic location.

### *Significant Judgments*

The Company applies judgment in determining the customer's ability and intention to pay, which is based on a variety of factors including the customer's historical payment experience or, in the case of a new customer, published credit and financial information.

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The Company also applies judgment in determining the term of an arrangement when early termination rights are provided to the customer.

The Company's software license arrangements with its customers often include multiple promises to transfer licensed software products and services. Determining whether the products and/or services are distinct performance obligations that should be accounted for separately may require significant judgment.

The Company's SaaS and PaaS arrangements may include variable consideration in the form of usage-based fees. If the arrangement that includes variable consideration in the form of usage-based fees does not meet the allocation exception for variable consideration, the Company estimates the amount of variable consideration at the outset of the arrangement using either the expected value or most likely amount method, depending on the specifics of each arrangement. These estimates are constrained to the extent that it is probable that a significant reversal of incremental revenue will not occur and are updated each reporting period as additional information becomes available.

Judgment is used in determining: (1) whether the financing component in a software license agreement is significant and, if so, (2) the discount rate used in calculating the significant financing component. The Company assesses the significance of the financing component based on the ratio of license fees paid over time to total license fees. If determined to be significant, the financing component is calculated using a rate that discounts the license fees to the cash selling price.

Judgment is also used in assessing whether the extension of payment terms in a software license arrangement results in variable consideration and, if so, the amount to be included in the transaction price. The Company applies the portfolio approach to estimating the amount of variable consideration in these arrangements using the most likely amount method that is based on the Company's historical collection experience under similar arrangements.

Significant judgment is required to determine the SSP for each performance obligation, the amount allocated to each performance obligation and whether it depicts the amount that the Company expects to receive in exchange for the related product and/or service. As the selling prices of the Company's software licenses are highly variable, the Company estimates SSP of its software licenses using the residual approach when the software license is sold with other services and observable SSPs exist for the other services. The Company uses a range of amounts to estimate SSP for maintenance and services. These ranges are based on standalone sales and vary based on the type of service and geographic region. If the SSP of a performance obligation is not directly observable, the Company will maximize observable inputs to determine its SSP.

### *Contract Balances*

Timing of revenue recognition may differ from the timing of invoicing to customers. The Company records an accrued receivable when revenue is recognized prior to invoicing and the Company's right to consideration only requires the passage of time, or deferred revenue when revenue is recognized subsequent to invoicing.

Total receivables represent amounts billed and amounts earned that are to be billed in the future (i.e., accrued receivables). Included in accrued receivables are services and SaaS and PaaS revenues earned in the current period but billed in the following period and amounts due under multi-year software license arrangements with extended payment terms for which the Company has an unconditional right to invoice and receive payment in the future.

<b>(in thousands)</b>	<b>September 30, 2018</b>	<b>December 31, 2017</b>
Billed Receivables	\$ 172,395	\$ 240,137
Allowance for doubtful accounts	(3,598)	(4,799)
Billed Receivables, net	\$ 168,797	\$ 235,338
Accrued receivables	324,019	27,507
Significant financing component	(31,343)	—
Total accrued receivables, net	292,676	27,507
Less current accrued receivables	120,532	27,507
Less current significant financing component	(9,688)	—
Total long-term accrued receivables, net	\$ 181,832	\$ —
Total receivables, net	\$ 461,473	\$ 262,845

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No customer accounted for more than 10% of the Company's consolidated receivables balance as of September 30, 2018 or December 31, 2017.

Deferred revenue includes amounts due or received from customers for software licenses, maintenance, services, and/or SaaS and PaaS services in advance of recording the related revenue.

Changes in deferred revenue were as follows:

<u>(in thousands)</u>	<u>Deferred Revenue</u>
Balance, January 1, 2018	\$ 145,344
Deferral of revenue	145,573
Recognition of deferred revenue	(144,935)
Foreign currency translation	(3,525)
Balance, September 30, 2018	<u>\$ 142,457</u>

Revenue allocated to remaining performance obligations represents contracted revenue that will be recognized in future periods, which is comprised of deferred revenue and amounts that will be invoiced and recognized as revenue in future periods. This does not include:

- (1) Revenue that will be recognized in future periods from capacity overages that are accounted for as a usage-based royalty.
- (2) SaaS and PaaS revenue from variable consideration that will be recognized in accordance with the 'right to invoice' practical expedient.
- (3) SaaS and PaaS revenue from variable consideration that will be recognized in accordance with the direct allocation method.

Revenue allocated to remaining performance obligations was \$599.9 million as of September 30, 2018, of which the Company expects to recognize approximately 48% over the next 12 months and the remainder thereafter.

During the three and nine-month periods ended September 30, 2018, the revenue recognized by the Company from performance obligations satisfied in previous periods was not material.

### *Costs to Obtain and Fulfill a Contract*

The Company accounts for costs to obtain and fulfill its contracts in accordance with ASC 340, *Other Assets and Deferred Costs*.

The Company capitalizes certain of its sales commissions that meet the definition of incremental costs of obtaining a contract and for which the amortization period is greater than one year. The costs associated with those sales commissions is capitalized during the period in which the Company becomes obligated to pay the commissions and is amortized over the period in which the related products or services are transferred to the customer. As of September 30, 2018, \$0.6 million and \$15.4 million of these costs are included in other current and other non-current assets, respectively, on the condensed consolidated balance sheets. During the three and nine months ended September 30, 2018, the Company recognized \$2.1 million and \$6.4 million, respectively, of sales commission expense related to the amortization of these costs, which is included in selling and marketing expense.

The Company capitalizes costs incurred to fulfill its contracts that: (1) relate directly to the arrangement, (2) are expected to generate resources that will be used to satisfy the Company's performance obligation under the arrangement, and (3) are expected to be recovered through revenue generated under the arrangement. Contract fulfillment costs are expensed as the Company transfers the related services to the customer. As of September 30, 2018, \$0.1 million and \$12.6 million of these costs are included in other current and other non-current assets, respectively, on the condensed consolidated balance sheets. The amounts capitalized primarily relate to direct costs that enhance resources under the Company's SaaS and PaaS arrangements. During the three and nine months ended September 30, 2018, the Company recognized \$1.1 million and \$3.5 million, respectively, of expense related to the amortization of these costs, which is included in cost of revenue.

### *Financial Statement Effect of Applying ASC 606*

As the modified retrospective transition method does not result in recast of the prior year financial statements, ASC 606 requires the Company to provide additional disclosures for the amount by which each financial statement line item is affected by adoption of the standard and explanation of the reasons for significant changes.

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The financial statement line items affected by adoption of ASC 606 are as follows:

(in thousands)	As Reported	September 30, 2018	
		Without application of ASC 606	Effect of Change Higher / (Lower)
<b>Assets</b>			
Receivables, net of allowances	\$ 279,641	\$ 202,829	\$ 76,812
Recoverable income taxes	8,233	6,711	1,522
Prepaid expenses	25,875	26,616	(741)
Other current assets	23,244	22,844	400
Accrued receivables, net	181,832	—	181,832
Deferred income taxes, net	28,179	67,261	(39,082)
Other noncurrent assets	54,477	40,275	14,202
<b>Liabilities</b>			
Deferred revenue	93,668	108,162	(14,494)
Income taxes payable	1,600	153	1,447
Other current liabilities	60,075	60,310	(235)
Deferred income taxes, net	26,372	6,161	20,211
<b>Stockholders' equity</b>			
Total stockholders' equity	962,938	734,925	228,013

(in thousands)	As Reported	For the Three Months Ended September 30, 2018	
		Without application of ASC 606	Effect of Change Higher / (Lower)
<b>Revenues</b>			
Software as a service and platform as a service	\$ 104,519	\$ 103,764	\$ 755
License	68,964	69,052	(88)
Maintenance	54,373	54,659	(286)
Services	17,669	18,184	(515)
<b>Operating expenses</b>			
Selling and marketing	28,252	26,397	1,855
<b>Other income (expense)</b>			
Interest income	2,763	230	2,533
Other, net	(1,304)	(1,155)	(149)
<b>Income tax provision</b>			
Income tax expense (benefit)	2,012	2,804	(792)

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	For the Nine Months Ended September 30, 2018		
(in thousands)	As Reported	Without application of ASC 606	Effect of Change Higher / (Lower)
<b>Revenues</b>			
Software as a service and platform as a service	\$ 322,399	\$ 321,897	\$ 502
License	142,565	163,788	(21,223)
Maintenance	166,080	166,673	(593)
Services	58,786	58,938	(152)
<b>Operating expenses</b>			
Selling and marketing	93,305	88,667	4,638
<b>Other income (expense)</b>			
Interest income	8,249	601	7,648
Other, net	(3,036)	(2,495)	(541)
<b>Income tax provision</b>			
Income tax expense (benefit)	1,824	5,371	(3,547)

The following summarizes the significant changes resulting from the adoption of ASC 606 compared to if the Company had continued to recognize revenues under ASC 985-605, *Revenue Recognition: Software* (ASC 605).

#### *Receivables, Deferred Revenue, License Revenue, and Interest Income*

The change in receivables, deferred revenue, license revenue, and interest income is due to a change in the timing and the amount of recognition for software license revenues under ASC 606.

Under ASC 605, the Company recognized revenue upon delivery provided (i) there is persuasive evidence of an arrangement, (ii) collection of the fee is considered probable, and (iii) the fee is fixed or determinable. For software license arrangements in which a significant portion of the fee is due more than 12 months after delivery or when payment terms are significantly beyond the Company's standard business practice, the license fee is deemed not fixed or determinable. For software license arrangements in which the fee is not considered fixed or determinable, the license is recognized as revenue as payments become due and payable, provided all other conditions for revenue recognition have been met.

License revenue under ASC 605 includes revenue from software license arrangements with extended payment terms for which the due and payable pattern of recognition was applied and revenue from renewals of software license arrangements in the period during which the renewal is signed. Under ASC 606, license revenue from these software license arrangements with extended payment terms is accelerated (i.e. upfront recognition) and adjusted for the effects of the financing component, if significant. The significant financing component in these software license arrangements is recognized as interest income over the extended payment period. As many of these software license arrangements were active as of the date the Company adopted ASC 606, the license fees are included in the Company's cumulative adjustment to retained earnings. Revenue for license renewals is recognized when the customer can begin to use and benefit from the license, which is generally at the commencement of the license renewal period.

#### *Other Current Assets, Other Noncurrent Assets, and Selling and Marketing*

Under ASC 606, certain of the Company's sales commissions meet the definition of incremental costs of obtaining a contract. Accordingly, these costs are capitalized and the expense is recognized as the related goods or services are transferred to the customer. Prior to the adoption of ASC 606, the Company recognized sales commission expenses as they were incurred.

#### *Deferred Income Taxes, Net*

The change in deferred income taxes is primarily due to the deferred tax effects resulting from the adjustment to retained earnings for the cumulative effect of applying ASC 606 to active contracts as of the adoption date.

The adoption of ASC 606 had no impact in total on the Company's cash flows from operations.

### 3. Debt

As of September 30, 2018, the Company had \$288.9 million and \$400.0 million outstanding under its Term Credit Facility and Senior Notes, respectively, with up to \$500.0 million of unused borrowings under the Revolving Credit Facility portion of the Credit Agreement, as amended.

#### *Credit Agreement*

On February 24, 2017, the Company entered into an amended and restated credit agreement (the “Credit Agreement”), replacing the existing agreement, with a syndicate of financial institutions, as lenders, and Bank of America, N.A. (“BoFA”), as Administrative Agent, providing for revolving loans, swingline loans, letters of credit, and a term loan. The Credit Agreement consists of a five-year \$500.0 million senior secured revolving credit facility (the “Revolving Credit Facility”), which includes a sublimit for the issuance of standby letters of credit and a sublimit for swingline loans, and \$415.0 million under the five-year senior secured term loan facility (the “Term Credit Facility” and, together with the Revolving Credit Facility, the “Credit Facility”). The Credit Agreement also allows the Company to request optional incremental term loans and increases in the revolving commitment.

The loans under the Credit Facility may be made to, and the letters of credit under the Revolving Credit Facility may be issued on behalf of the Company.

Borrowings under the Credit Facility bear interest at a rate per annum equal to, at the Company’s option, either (a) a base rate determined by reference to the highest of (1) the rate of interest per annum publicly announced by the Administrative Agent as its Prime Rate, (2) the federal funds effective rate plus 1/2 of 1%, and (3) a LIBOR rate determined by reference to the costs of funds for U.S. dollar deposits for a one-month interest period adjusted for certain additional costs plus 1% or (b) a LIBOR rate determined by reference to the costs of funds for U.S. dollar deposits for the interest period relevant to such borrowing adjusted for certain additional costs, in each case plus an applicable margin. The applicable margin for borrowings under the Credit Facility is, based on the calculation of the applicable consolidated total leverage ratio, between 0.25% to 1.25% with respect to base rate borrowings and between 1.25% and 2.25% with respect to LIBOR rate borrowings. Interest is due and payable monthly. The interest rate in effect at September 30, 2018, for the Credit Facility was 3.99%.

In addition to paying interest on the outstanding principal under the Credit Facility, the Company is required to pay a commitment fee in respect of the unutilized commitments under the Revolving Credit Facility, payable quarterly in arrears. The Company is also required to pay letter of credit fees on the maximum amount available to be drawn under all outstanding letters of credit in an amount equal to the applicable margin on LIBOR rate borrowings under the Revolving Credit Facility on a per annum basis, payable quarterly in arrears, as well as customary fronting fees for the issuance of letters of credit fees and agency fees.

The Company’s obligations under the Credit Facility and cash management arrangements entered into with lenders under the Credit Facility (or affiliates thereof) and the obligations of the subsidiary guarantors are secured by first-priority security interests in substantially all assets of the Company and any guarantor, including 100% of the capital stock of ACI Worldwide Corp. and each domestic subsidiary of the Company, each domestic subsidiary of any guarantor, and 65% of the voting capital stock of each foreign subsidiary of the Company that is directly owned by the Company or a guarantor, in each case subject to certain exclusions set forth in the credit documentation governing the Credit Facility.

The Credit Agreement contains a number of covenants that, among other things and subject to certain exceptions, restrict the Company’s ability and, as applicable, the ability of its subsidiaries to: create, incur, assume or suffer to exist any additional indebtedness; create, incur, assume or suffer to exist any liens; enter into agreements and other arrangements that include negative pledge clauses; pay dividends on capital stock or redeem, repurchase or retire capital stock or subordinated indebtedness; create restrictions on the payment of dividends or other distributions by subsidiaries; make investments, loans, advances and acquisitions; merge, consolidate or enter into any similar combination or sell assets, including equity interests of the subsidiaries; enter into sale and leaseback transactions; directly or indirectly engage in transactions with affiliates; alter in any material respect the character or conduct of the business; enter into amendments of or waivers under subordinated indebtedness, organizational documents and certain other material agreements; and hold certain assets and incur certain liabilities.

The Credit Agreement also contains certain customary affirmative covenants and events of default. If an event of default, as specified in the Credit Agreement, shall occur and be continuing, the Company may be required to repay all amounts outstanding under the Credit Facility.

#### *Senior Notes*

On August 21, 2018, the Company completed a \$400.0 million offering of 5.750% Senior Notes due 2026 (the “2026 Notes”) at an issue price of 100% of the principal amount, in a private placement for resale to qualified institutional buyers. The 2026 Notes bear interest at a rate of 5.750% per year, payable semi-annually in arrears on February 15 and August 15 of each year, commencing on February 15, 2019.



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Interest will accrue from August 21, 2018. The 2026 Notes will mature on August 15, 2026. In connection with the issuance of the 2026 Notes, the Company incurred and paid debt issuance costs of \$7.3 million as of September 30, 2018.

The Company used the net proceeds of the offering described above to redeem in full the Company's outstanding 6.375% Senior Notes due 2020 (the "2020 Notes"), including accrued interest, and repaid a portion of the outstanding amount under the Term Credit Facility.

Maturities on long-term debt outstanding at September 30, 2018 are as follows:

<b>Fiscal year ending December 31,</b>	
<b>(in thousands)</b>	
2018	\$ 3,958
2019	23,747
2020	23,747
2021	31,662
2022	205,803
Thereafter	400,000
<b>Total</b>	<b><u>\$688,917</u></b>

The Credit Agreement and 2026 Notes also contain certain customary mandatory prepayment provisions. If certain events, as specified in the Credit Agreement or 2026 Notes agreement, shall occur, the Company may be required to repay all or a portion of the amounts outstanding under the Credit Facility or 2026 Notes.

The Credit Facility will mature on February 24, 2022 and the 2026 Notes will mature on August 15, 2026. The Revolving Credit Facility and 2026 Notes do not amortize and the Term Credit Facility does amortize, with principal payable in consecutive quarterly installments.

The Credit Agreement and 2026 Notes contain certain customary affirmative covenants and negative covenants that limit or restrict, subject to certain exceptions, the incurrence of liens, indebtedness of subsidiaries, mergers, advances, investments, acquisitions, transactions with affiliates, change in nature of business and the sale of the assets. The Company is also required to maintain a consolidated leverage ratio at or below a specified amount and an interest coverage ratio at or above a specified amount. If an event of default, as specified in the Credit Agreement and 2026 Notes agreement, shall occur and be continuing, the Company may be required to repay all amounts outstanding under the Credit Facility and 2026 Notes. As of September 30, 2018, and at all times during the period, the Company was in compliance with its financial debt covenants.

<b>(in thousands)</b>	<b>As of September 30, 2018</b>	<b>As of December 31, 2017</b>
Term credit facility	\$ 288,917	\$ 394,250
Revolving credit facility	—	2,000
5.750% Senior Notes, due August 2026	400,000	—
6.375% Senior Notes, due August 2020	—	300,000
Debt issuance costs	(13,993)	(10,521)
Total debt	674,924	685,729
Less current portion of term credit facility	21,768	20,750
Less current portion of debt issuance costs	(3,003)	(2,964)
Total long-term debt	<u>\$ 656,159</u>	<u>\$ 667,943</u>

### Other

During the nine months ended September 30, 2018, the Company financed certain multi-year license agreements for internally-used software for \$11.9 million with annual payments through June 2023. As of September 30, 2018, \$11.6 million is outstanding, of which \$4.7 million and \$6.9 million is included in other current liabilities and other noncurrent liabilities, respectively, in the accompanying condensed consolidated balance sheet. The \$11.6 million has been treated as a non-cash investing and financing activity for purposes of the condensed consolidated statement of cash flows.

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### 4. Stock-Based Compensation Plans

#### Employee Stock Purchase Plan

On April 6, 2017, the Board of Directors approved the 2017 Employee Stock Purchase Plan (“2017 ESPP”), which was approved by shareholders at the 2017 Annual Shareholder meeting. The 2017 ESPP provides employees with an opportunity to purchase shares of common stock in the Company. The 1999 Employee Stock Purchase Plan terminated upon the August 1, 2017 effective date of the 2017 ESPP. Under the Company’s 2017 ESPP a total of 3,000,000 shares of the Company’s common stock have been reserved for issuance to eligible employees. Participating employees are permitted to designate up to the lesser of \$25,000 or 10% of their annual base compensation, for the purchase of common stock under the ESPP. Purchases under the ESPP are made one calendar month after the end of each fiscal quarter. The price for shares of common stock purchased under the ESPP is 85% of the stock’s fair market value on the last business day of the three-month participation period. Shares issued under the ESPP during the nine months ended September 30, 2018 and 2017, totaled 112,549 and 121,765, respectively.

#### Stock-Based Payments

A summary of stock options issued pursuant to the Company’s stock incentive plans is as follows:

	Number of Shares	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Term (Years)	Aggregate Intrinsic Value of In-the-Money Options
Outstanding as of December 31, 2017	6,162,717	\$ 16.83		
Granted	170,455	23.36		
Exercised	(1,262,994)	14.57		
Forfeited	(81,881)	18.62		
Outstanding as of September 30, 2018	<u>4,988,297</u>	<u>\$ 17.60</u>	<u>6.30</u>	<u>\$ 52,585,398</u>
Exercisable as of September 30, 2018	<u>3,533,425</u>	<u>\$ 16.84</u>	<u>5.64</u>	<u>\$ 39,930,860</u>

The weighted-average grant date fair value of stock options granted during the nine months ended September 30, 2018 and 2017 was \$7.03 and \$6.24, respectively. The Company issued treasury shares for the exercise of stock options during the nine months ended September 30, 2018 and 2017. The total intrinsic value of stock options exercised during the nine months ended September 30, 2018 and 2017 was \$13.6 million and \$6.6 million, respectively.

The fair value of options that do not vest based on the achievement of certain market conditions granted during the nine months ended September 30, 2018 and 2017 were estimated on the date of grant using the Black-Scholes option-pricing model, a pricing model acceptable under U.S. GAAP, with the following weighted-average assumptions:

	Nine Months Ended September 30, 2018	Nine Months Ended September 30, 2017
Expected life (years)	5.6	5.6
Interest rate	2.7%	1.9%
Volatility	26.4%	29.4%
Dividend yield	—	—

Expected volatilities are based on the Company’s historical common stock volatility derived from historical stock price data for historical periods commensurate with the options’ expected life. The expected life is the average number of years that the Company estimated that the options will be outstanding, based primarily on historical employee option exercise behavior. The risk-free interest rate is based on the implied yield currently available on United States Treasury zero coupon issues with a term equal to the expected term at the date of grant of the options. The expected dividend yield is zero as the Company has historically not paid dividends and does not anticipate dividends to be paid in the future.

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### Long-term Incentive Program Performance Share Awards

A summary of nonvested long-term incentive program performance share awards (“LTIP performance shares”) outstanding as of September 30, 2018, and changes during the period are as follows:

<b>Nonvested LTIP Performance Shares</b>	<b>Number of Shares at Expected Attainment</b>	<b>Weighted-Average Grant Date Fair Value</b>
Nonvested as of December 31, 2017	1,125,035	\$ 18.94
Forfeited	(89,582)	19.24
Nonvested as of September 30, 2018	<u>1,035,453</u>	<u>\$ 18.92</u>

### Restricted Share Awards

A summary of nonvested restricted share awards (“RSAs”) as of September 30, 2018, and changes during the period are as follows:

<b>Nonvested Restricted Share Awards</b>	<b>Number of Restricted Share Awards</b>	<b>Weighted-Average Grant Date Fair Value</b>
Nonvested as of December 31, 2017	503,237	\$ 20.63
Vested	(231,473)	21.20
Forfeited	(47,411)	19.88
Nonvested as of September 30, 2018	<u>224,353</u>	<u>\$ 20.18</u>

During the nine months ended September 30, 2018, a total of 231,473 RSA shares vested. The Company withheld 41,973 of those shares to pay the employees’ portion of the minimum payroll withholding taxes.

### Performance-Based Restricted Share Awards

A summary of nonvested Performance-Based Restricted Share Awards (“PBRSA”) as of September 30, 2018, and changes during the period are as follows:

<b>Nonvested Performance-Based Restricted Share Awards</b>	<b>Number of Performance-Based Restricted Share Awards</b>	<b>Weighted-Average Grant Date Fair Value</b>
Nonvested as of December 31, 2017	173,636	\$ 24.41
Vested	(173,636)	24.41
Nonvested as of September 30, 2018	<u>—</u>	<u>\$ —</u>

During the nine months ended September 30, 2018, a total of 173,636 PBRSA shares vested. The Company withheld 64,699 of those shares to pay the employees’ portion of the minimum payroll withholding taxes.

### Total Shareholder Return Awards

During the nine months ended September 30, 2018 and 2017, the Company granted total shareholder return (“TSR”) awards, pursuant to the 2016 Equity and Performance Incentive Plan. TSRs are performance shares that are earned, if at all, based upon the Company’s total shareholder return as compared to a group of peer companies over a three-year performance period. The award payout can range from 0% to 200%. In order to determine the grant date fair value of the TSRs, a Monte Carlo simulation model is used. The Company recognizes compensation expense for TSRs over a three-year performance period based on the grant date fair value.

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The grant date fair value of the TSRs was estimated using the following weighted-average assumptions:

	Nine Months Ended September 30, 2018	Nine Months Ended September 30, 2017
Expected life (years)	2.9	2.9
Interest rate	2.4%	1.5%
Volatility	28.0%	26.5%
Dividend Yield	—	—

A summary of nonvested TSRs outstanding as of September 30, 2018, and changes during the period are as follows:

	Number of Shares at Expected Attainment	Weighted- Average Grant Date Fair Value
<b>Nonvested Total Shareholder Return Awards</b>		
Nonvested as of December 31, 2017	143,649	\$ 24.37
Granted	541,214	31.31
Forfeited	(33,970)	29.90
Nonvested as of September 30, 2018	<u>650,893</u>	<u>\$ 29.85</u>

### Restricted Share Units

During the nine months ended September 30, 2018, the Company granted restricted share units (“RSUs”) awards, pursuant to the 2016 Equity and Performance Incentive Plan. The awards generally have requisite service periods of three years and vest in increments of 33% on the anniversary of the grant dates. Under each arrangement, stock is issued without direct cost to the employee on the vesting date. The Company estimates the fair value of the RSUs based upon the market price of the Company’s stock at the date of grant. The Company recognizes compensation expense for RSUs on a straight-line basis over the requisite service period.

A summary of nonvested RSUs as of September 30, 2018, and changes during the period are as follows:

	Number of Restricted Share Units	Weighted- Average Grant Date Fair Value
<b>Nonvested Restricted Share Units</b>		
Nonvested as of December 31, 2017	—	\$ —
Granted	714,123	23.81
Vested	(10,000)	25.72
Forfeited	(38,739)	23.36
Nonvested as of September 30, 2018	<u>665,384</u>	<u>\$ 23.81</u>

During the nine months ended September 30, 2018, a total of 10,000 RSU shares vested.

As of September 30, 2018, there were unrecognized compensation costs of \$14.3 million related to the TSRs, \$12.6 million related to RSUs, \$5.8 million related to the LTIP performance shares, \$3.7 million related to nonvested stock options, and \$3.2 million related to the nonvested RSAs, which the Company expects to recognize over weighted-average periods of 2.3 years, 2.3 years, 1.3 years, 0.9 years, and 1.4 years, respectively.

The Company recorded stock-based compensation expenses recognized under ASC 718, *Compensation – Stock Compensation*, for the three months ended September 30, 2018 and 2017, related to stock options, LTIP performance shares, RSAs, PBRsAs, TSR shares, RSUs, and the ESPP of \$6.5 million and \$8.1 million, respectively, with corresponding tax benefits of \$1.5 million and \$2.7 million, respectively. The Company recorded stock-based compensation, for the nine months ended September 30, 2018 and 2017, of \$20.6 million and \$22.7 million, respectively, with corresponding tax benefits of \$3.6 million and \$7.7 million, respectively.

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**5. Software and Other Intangible Assets**

At September 30, 2018, software net book value totaling \$147.3 million, net of \$250.0 million of accumulated amortization, includes the net book value of software marketed for external sale of \$30.9 million. The remaining software net book value of \$116.4 million is comprised of various software that has been acquired or developed for internal use.

At December 31, 2017, software net book value totaled \$155.4 million, net of \$230.7 million of accumulated amortization. Included in this amount is software marketed for external sale of \$40.9 million. The remaining software net book value of \$114.5 million is comprised of various software that has been acquired or developed for internal use.

Quarterly amortization of software marketed for external sale is computed using the greater of the ratio of current revenues to total estimated revenues expected to be derived from the software or the straight-line method over an estimated useful life of three to ten years. Software for resale amortization expense recorded in the three months ended September 30, 2018 and 2017, totaled \$2.6 million and \$3.1 million, respectively. Software for resale amortization expense recorded in the nine months ended September 30, 2018 and 2017, totaled \$9.6 million. These software amortization expense amounts are reflected in cost of revenue in the condensed consolidated statements of operations.

Quarterly amortization of software for internal use is computed using the straight-line method over an estimated useful life of three to ten years. Software for internal use includes software acquired through acquisitions that is used to provide certain of our SaaS and PaaS offerings. Amortization of software for internal use in the three months ended September 30, 2018 and 2017, totaled \$10.2 million and \$11.5 million, respectively. Amortization of software for internal use in the nine months ended September 30, 2018 and 2017, totaled \$31.0 million and \$34.1 million, respectively. These software amortization expense amounts are included in depreciation and amortization in the condensed consolidated statements of operations.

The carrying amount and accumulated amortization of the Company's other intangible assets that were subject to amortization at each balance sheet date are as follows:

<u>(in thousands)</u>	<u>September 30, 2018</u>			<u>December 31, 2017</u>		
	<u>Gross Carrying Amount</u>	<u>Accumulated Amortization</u>	<u>Net Balance</u>	<u>Gross Carrying Amount</u>	<u>Accumulated Amortization</u>	<u>Net Balance</u>
Customer relationships	\$300,782	\$ (128,367)	\$ 172,415	\$305,218	\$ (116,677)	\$ 188,541
Trademarks and tradenames	16,450	(14,808)	1,642	16,646	(13,906)	2,740
	<u>\$317,232</u>	<u>\$ (143,175)</u>	<u>\$ 174,057</u>	<u>\$321,864</u>	<u>\$ (130,583)</u>	<u>\$ 191,281</u>

Other intangible assets amortization expense for the three months ended September 30, 2018 and 2017, totaled \$4.7 million and \$4.9 million, respectively. Other intangible assets amortization expense for the nine months ended September 30, 2018 and 2017, totaled \$14.4 million and \$14.5 million, respectively.

Based on capitalized software and other intangible assets at September 30, 2018, estimated amortization expense for future fiscal years is as follows:

<u>Fiscal Year Ending December 31,</u> <u>(in thousands)</u>	<u>Software Amortization</u>	<u>Other Intangible Assets Amortization</u>
Remainder of 2018	\$ 13,724	\$ 4,670
2019	47,416	18,325
2020	37,964	17,438
2021	24,930	16,939
2022	11,957	16,789
2023	6,306	16,478
Thereafter	5,019	83,418
Total	<u>\$ 147,316</u>	<u>\$ 174,057</u>

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### 6. Corporate Restructuring and Other Organizational Changes

The components of corporate restructuring and other reorganization activities are included in the following table:

<u>(in thousands)</u>	<u>Facility Closures</u>
Balance, December 31, 2017	\$ 5,945
Amounts paid during the period	(1,342)
Foreign currency translation	(48)
Balance, September 30, 2018	<u>\$ 4,555</u>

Of the \$4.6 million facility closure liability, \$1.6 million and \$3.0 million is recorded in other current liabilities and noncurrent liabilities, respectively, in the accompanying condensed consolidated balance sheet at September 30, 2018.

### 7. Common Stock and Treasury Stock

In 2005, the Company's Board of Directors ("the Board") approved a stock repurchase program authorizing the Company, as market and business conditions warrant, to acquire its common stock and periodically authorizes additional funds for the program. In February 2018, the Board approved \$200.0 million for the stock repurchase program.

The Company repurchased 2,346,427 shares for \$54.5 million under the program during the nine months ended September 30, 2018. Under the program to date, the Company has repurchased 44,129,393 shares for approximately \$547.8 million. The maximum remaining authorized for purchase under the stock repurchase program was \$176.6 million as of September 30, 2018.

### 8. Earnings (loss) Per Share

Basic earnings (loss) per share is computed on the basis of weighted average outstanding common shares. Diluted earnings (loss) per share is computed on the basis of basic weighted average outstanding common shares adjusted for the dilutive effect of stock options and other outstanding dilutive securities.

The following table reconciles the average share amounts used to compute both basic and diluted earnings (loss) per share (in thousands):

	<u>Three Months Ended September 30,</u>		<u>Nine Months Ended September 30,</u>	
	<u>2018</u>	<u>2017</u>	<u>2018</u>	<u>2017</u>
Weighted average shares outstanding:				
Basic weighted average shares outstanding	115,889	118,254	115,615	117,096
Add: Dilutive effect of stock options	1,603	1,489	—	—
Diluted weighted average shares outstanding	<u>117,492</u>	<u>119,743</u>	<u>115,615</u>	<u>117,096</u>

The diluted earnings per share computation excludes 1.2 million and 3.3 million options to purchase shares, contingently issuable shares, and restricted share awards during the three months ended September 30, 2018 and 2017, respectively, as their effect would be anti-dilutive. The diluted loss per share computation excludes 8.0 million and 10.1 million options to purchase shares, contingently issuable shares, and restricted share awards during the nine months ended September 30, 2018 and 2017, respectively, as their effect would be anti-dilutive.

Common stock outstanding as of September 30, 2018 and December 31, 2017, was 115,981,696 and 117,096,731, respectively.

### 9. Other, net

Other is comprised of foreign currency transaction losses of \$1.3 million and \$1.1 million for the three months ended September 30, 2018 and 2017, respectively. Other is comprised of foreign currency transaction losses of \$3.0 million and \$2.2 million for the nine months ended September 30, 2018 and 2017, respectively.

### 10. Segment Information

The Company reports financial performance based on its segments, ACI On Premise and ACI On Demand, and analyzes Segment Adjusted EBITDA as a measure of segment profitability.

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The Company's chief operating decision maker ("CODM"), which is also our Chief Executive Officer, together with other senior management personnel, focus their review of consolidated financial information and the allocation of resources based upon the operating results, including revenues and Segment Adjusted EBITDA, for the segments ACI On Premise and ACI On Demand, separate from the Corporate operations.

*ACI On Premise* serves customers who manage their software on site. These on premise customers use the Company's software to develop sophisticated solutions, which are often part of a larger system located and managed at the customer specified site. These customers require a level of control and flexibility that ACI On Premise solutions can offer, and they have the resources and expertise to take a lead role in managing these solutions.

*ACI On Demand* serves the needs of retail and financial institutions who use payments to facilitate their core business. These on demand solutions are maintained and delivered through the cloud via our global data centers and are available in either a single-tenant environment, SaaS offerings, or in a multi-tenant environment, PaaS offerings.

Revenue is attributed to the reportable segments based upon the product sold and mechanism for delivery to the customer. Expenses are attributed to the reportable segments in one of three methods, (1) direct costs of the segment, (2) labor costs that can be attributed based upon time tracking for individual products, or (3) costs that are allocated. Allocated costs are generally marketing and sales related activities as well as information technology and facilities related expense for which multiple segments benefit. The Company also allocates certain depreciation costs to the segments.

Segment Adjusted EBITDA is the measure reported to the CODM for purposes of making decisions on allocating resources and assessing the performance of the Company's segments and, therefore, Segment Adjusted EBITDA is presented in conformity with ASC 280, *Segment Reporting*. Segment Adjusted EBITDA is defined as earnings (loss) from operations before interest, income tax expense (benefit), depreciation and amortization ("EBITDA") adjusted to exclude stock-based compensation, and net other income (expense). During the first quarter of 2018, the Company changed the presentation of its segment measure of profit and loss. As a result the 2017 segment disclosure has been recast to conform with the 2018 presentation.

Corporate and other unallocated expenses consists of the corporate overhead costs that are not allocated to reportable segments. These overhead costs relate to human resources, finance, legal, accounting, merger and acquisition activity, and other costs that are not considered when management evaluates segment performance.

The following is selected financial data for the Company's reportable segments (in thousands):

	Three Months Ended		Nine Months Ended	
	September 30, 2018	September 30, 2017	September 30, 2018	September 30, 2017
Revenue				
ACI On Premise	\$ 141,006	\$ 126,006	\$ 367,431	\$ 385,108
ACI On Demand	104,519	99,729	322,399	312,688
Total revenue	<u>\$ 245,525</u>	<u>\$ 225,735</u>	<u>\$ 689,830</u>	<u>\$ 697,796</u>
Segment Adjusted EBITDA				
ACI On Premise	\$ 77,819	\$ 65,138	\$ 171,477	\$ 196,060
ACI On Demand	3,270	(1,241)	(4,327)	(8,794)
Depreciation and amortization	(23,545)	(25,553)	(72,889)	(76,772)
Stock-based compensation	(6,575)	(8,084)	(20,642)	(22,724)
Corporate and unallocated expenses	(22,610)	(18,837)	(64,122)	(111,167)
Interest, net	(9,810)	(9,209)	(23,406)	(29,777)
Other, net	(1,304)	(1,059)	(3,036)	(2,176)
Income (loss) before income taxes	<u>\$ 17,245</u>	<u>\$ 1,155</u>	<u>\$ (16,945)</u>	<u>\$ (55,350)</u>
Depreciation and amortization				
ACI On Premise	\$ 2,772	\$ 3,321	\$ 8,596	\$ 9,915
ACI On Demand	7,906	8,576	23,468	25,973
Corporate	12,867	13,656	40,825	40,884
Total depreciation and amortization	<u>\$ 23,545</u>	<u>\$ 25,553</u>	<u>\$ 72,889</u>	<u>\$ 76,772</u>

Assets are not allocated to segments and the Company's CODM does not evaluate operating segments using discrete asset information.

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The following is selected financial data for the Company's geographical areas and revenues by geographic location and primary solution category for the periods indicated (in thousands):

(in thousands)	Three Months Ended September 30, 2018			Three Months Ended September 30, 2017		
	ACI	ACI	Total	ACI	ACI	Total
	On Premise	On Demand		On Premise	On Demand	
<b>Primary Geographic Markets</b>						
Americas - United States	\$ 26,022	\$ 88,401	\$ 114,423	\$ 36,189	\$ 84,669	\$ 120,858
Americas - Other	16,709	2,409	19,118	16,874	2,314	19,188
EMEA	80,738	12,385	93,123	47,919	12,104	60,023
Asia Pacific	17,537	1,324	18,861	25,024	642	25,666
Total	<u>\$ 141,006</u>	<u>\$ 104,519</u>	<u>\$ 245,525</u>	<u>\$ 126,006</u>	<u>\$ 99,729</u>	<u>\$ 225,735</u>
<b>Primary Solution Categories</b>						
Bill Payments	\$ —	\$ 64,134	\$ 64,134	\$ —	\$ 62,328	\$ 62,328
Digital Channels/Online	7,499	9,327	16,826	13,403	11,555	24,958
Merchant Payments	6,216	18,052	24,268	6,423	12,458	18,881
Payments Risk Management	7,259	11,068	18,327	10,887	11,192	22,079
Real Time Payments	23,704	540	24,244	11,745	520	12,265
Retail Payments	96,328	1,398	97,726	83,548	1,676	85,224
Total	<u>\$ 141,006</u>	<u>\$ 104,519</u>	<u>\$ 245,525</u>	<u>\$ 126,006</u>	<u>\$ 99,729</u>	<u>\$ 225,735</u>

(in thousands)	Nine Months Ended September 30, 2018			Nine Months Ended September 30, 2017		
	ACI	ACI	Total	ACI	ACI	Total
	On Premise	On Demand		On Premise	On Demand	
<b>Primary Geographic Markets</b>						
Americas - United States	\$ 82,280	\$ 275,171	\$ 357,451	\$ 118,311	\$ 268,125	\$ 386,436
Americas - Other	45,269	7,077	52,346	44,591	7,168	51,759
EMEA	181,913	36,819	218,732	166,379	35,554	201,933
Asia Pacific	57,969	3,332	61,301	55,827	1,841	57,668
Total	<u>\$ 367,431</u>	<u>\$ 322,399</u>	<u>\$ 689,830</u>	<u>\$ 385,108</u>	<u>\$ 312,688</u>	<u>\$ 697,796</u>
<b>Primary Solution Categories</b>						
Bill Payments	\$ —	\$ 204,673	\$ 204,673	\$ —	\$ 201,259	\$ 201,259
Digital Channels/Online	27,779	30,281	58,060	36,118	33,771	69,889
Merchant Payments	16,476	44,423	60,899	20,175	35,816	55,991
Payments Risk Management	25,711	34,524	60,235	22,855	33,604	56,459
Real Time Payments	53,086	1,474	54,560	35,195	2,418	37,613
Retail Payments	244,379	7,024	251,403	270,765	5,820	276,585
Total	<u>\$ 367,431</u>	<u>\$ 322,399</u>	<u>\$ 689,830</u>	<u>\$ 385,108</u>	<u>\$ 312,688</u>	<u>\$ 697,796</u>

The following is selected financial data for the Company's long-lived assets by geographic location for the periods indicated:

(in thousands)	September 30, 2018	December 31, 2017
Long lived assets		
United States	\$ 834,386	\$ 759,513
Other	708,424	613,556
	<u>\$ 1,542,810</u>	<u>\$ 1,373,069</u>

No single customer accounted for more than 10% of the Company's consolidated revenues during the three and nine months ended September 30, 2018 and 2017. Aggregate revenues attributable to our customers in Canada accounted for 11.8% of the Company's consolidated revenues during the three months ended September 30, 2018. No other country outside the United States and Canada accounted for more than 10% of the Company's consolidated revenues during the three months ended September 30, 2018. During the three months ended September 30, 2017, no other country outside the United States accounted for more than 10% of the Company's consolidated revenues. No other country outside the United States accounted for more than 10% of the Company's consolidated revenues during the nine months ended September 30, 2018 and 2017.



## 11. Income Taxes

On December 22, 2017, the Tax Cuts and Jobs Act (“Tax Act”) was signed into U.S. Law. In December 2017, the Securities and Exchange Commission staff issued Staff Accounting Bulletin No. 118, *Income Tax Accounting Implications of the Tax Cuts and Jobs Act* (“SAB 118”), which allows the Company to record provisional amounts during a measurement period not to extend beyond one year of the enactment date. As of September 30, 2018, the Company has not completed its accounting for the tax effects of the enactment of the Tax Act; however, in certain cases, specifically as follows, the Company made a reasonable estimate of (i) the effects on its existing deferred tax balances and (ii) the effects of the one-time mandatory repatriation tax. The Company recognized a provisional tax expense of \$35.9 million in the year ended December 31, 2017 associated with the items it could reasonably estimate. For the nine months ended September 30, 2018, the Company made an adjustment to its estimate related to executive compensation which resulted in \$2.8 million of tax benefit. Due the timing of the release of the Tax Act, the complexity of the Tax Act and regulatory guidance that has recently been released and additional guidance expected to be released, the Company is still analyzing the Tax Act and refining its calculations, which could potentially impact the measurement of its income tax balances. The Company expects to complete its analysis within the measurement period in accordance with SAB 118.

At September 30, 2018, the Company has not yet determined its policy election with respect to whether to record deferred taxes for basis differences expected to reverse as a result of the Global Intangible Low-Taxed Income (“GILTI”) provisions in future periods or use the period cost method. The Company has recorded \$5.0 million of tax expense in the nine months ended September 30, 2018 for the current impact of the GILTI provisions.

The effective tax rate for the three months ended September 30, 2018 was 12%. The Company reported a tax charge for the nine months ended September 30, 2018 while reporting a pretax loss for the same period. The resulting effective tax rate is a negative 11%. The earnings of the Company’s foreign entities for the three and nine months ended September 30, 2018 were \$27.3 million and \$32.7 million, respectively. The effective tax rate for the three and nine months ended September 30, 2018 were impacted by profits in certain foreign jurisdictions taxed at lower rates and equity compensation tax benefits, partially offset by lower domestic tax benefits resulting from the current GILTI tax and Base Erosion and Anti-Abuse Tax (“BEAT”) charges.

The Company reported a tax benefit for the three months ended September 30, 2017 while reporting a pretax profit for the same period. The resulting effective tax rate is a negative 193%. The effective tax rate for the nine months ended September 30, 2017 was 49%. The earnings of the Company’s foreign entities for the three and nine months ended September 30, 2017 were \$15.2 million and \$40.6 million, respectively. The effective tax rates for the three and nine months ended September 30, 2017 were impacted by profits and losses in certain foreign jurisdictions taxed at lower rates and domestic losses taxed at higher rates.

The Company’s effective tax rate could fluctuate significantly on a quarterly basis and could be negatively affected to the extent earnings are lower in the countries in which it operates that have a lower statutory rate or higher in the countries in which it operates that have a higher statutory rate or to the extent it has losses sustained in countries where the future utilization of losses are uncertain. The Company’s effective tax rate could also fluctuate due to changes in the valuation of its deferred tax assets or liabilities, or by changes in tax laws, regulations, accounting principles, or interpretations thereof. In addition, the Company is occasionally subject to examination of its income tax returns by tax authorities in the jurisdictions it operates. The Company regularly assesses the likelihood of adverse outcomes resulting from these examinations to determine the adequacy of its provision for income taxes.

The amount of unrecognized tax benefits for uncertain tax positions was \$27.8 million as of September 30, 2018 and \$27.2 million as of December 31, 2017, excluding related liabilities for interest and penalties of \$1.1 million and \$1.2 million as of September 30, 2018 and December 31, 2017, respectively.

The Company believes it is reasonably possible that the total amount of unrecognized tax benefits will decrease within the next 12 months by approximately \$3.7 million, due to the settlement of various audits and the expiration of statutes of limitation.

During the three months ended September 30, 2018, the Company made a final determination in accordance with SAB 118 that the unremitted earnings and profits of its entities in Australia, Ireland, New Zealand, Romania, Russia and South Africa are no longer permanently reinvested. The Company continues to evaluate its position regarding any outside basis differences for its entities in those countries. The Company recorded a \$0.5 million foreign tax charge related to the remittance of earnings from those countries. There are unremitted foreign earnings in other countries which continue to be reinvested indefinitely. For entities in countries not listed above, the Company continues to evaluate the potential foreign and U.S. state tax liabilities that would result from future repatriations from those non-U.S. subsidiaries, if any, and how the Tax Act will affect its existing accounting position regarding the indefinite reinvestment of undistributed foreign earnings.

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**12. Accumulated Other Comprehensive Loss**

Activity within accumulated other comprehensive loss for the nine months ended September 30, 2018 and 2017, which consists of foreign currency translation adjustments, were as follows:

<u>(in thousands)</u>	<b>Accumulated other comprehensive loss</b>
Balance at December 31, 2017	\$ (77,356)
Other comprehensive loss	(11,110)
Balance at September 30, 2018	<u>\$ (88,466)</u>
	<b>Accumulated other comprehensive loss</b>
Balance at December 31, 2016	\$ (94,100)
Other comprehensive income	14,526
Balance at September 30, 2017	<u>\$ (79,574)</u>

## **Item 2. MANAGEMENT’S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS**

### **Forward-Looking Statements**

This report contains forward-looking statements based on current expectations that involve a number of risks and uncertainties. Generally, forward-looking statements do not relate strictly to historical or current facts and may include words or phrases such as “believes,” “will,” “expects,” “anticipates,” “intends,” and words and phrases of similar impact. The forward-looking statements are made pursuant to safe harbor provisions of the Private Securities Litigation Reform Act of 1995, as amended.

Forward-looking statements in this report include, but are not limited to, statements regarding future operations, business strategy, business environment, key trends, and, in each case, statements related to expected financial and other benefits. Many of these factors will be important in determining our actual future results. Any or all of the forward-looking statements in this report may turn out to be incorrect. They may be based on inaccurate assumptions or may not account for known or unknown risks and uncertainties. Consequently, no forward-looking statement can be guaranteed. Actual future results may vary materially from those expressed or implied in any forward-looking statements, and our business, financial condition and results of operations could be materially and adversely affected. In addition, we disclaim any obligation to update any forward-looking statements after the date of this report, except as required by law.

All of the forward-looking statements in this report are expressly qualified by the risk factors discussed in our filings with the Securities and Exchange Commission (“SEC”). Such factors include, but are not limited to, risks related to:

- increased competition;
- the performance of our strategic products, Universal Payments solutions;
- demand for our products;
- consolidations and failures in the financial services industry;
- customer reluctance to switch to a new vendor;
- the migration or failure to migrate customers to software as a service (“SaaS”) and platform as a service (“PaaS”) solutions;
- failure to obtain renewals of customer contracts or to obtain such renewals on favorable terms;
- delay or cancellation of customer projects or inaccurate project completion estimates;
- the complexity of our products and services and the risk that they may contain hidden defects;
- compliance of our products with applicable legislation, governmental regulations, and industry standards;
- failing to comply with money transmitter rules and regulations;
- our compliance with privacy regulations;
- being subject to security breaches or viruses;
- our ability to adequately protect our intellectual property;
- increasing intellectual property rights litigation;
- certain payment funding methods expose us to the credit and/or operating risk of our clients;
- business interruptions or failure of our information technology and communication systems;
- our offshore software development activities;
- operating internationally;
- global economic conditions impact on demand for our products and services;
- volatility and disruption of the capital and credit markets and adverse changes in the global economy;
- attracting and retaining employees;
- potential future litigation;
- our sale of Community Financial Services (“CFS”) assets and liabilities to Fiserv, Inc. (“Fiserv”), including potential claims arising under the transaction agreement, the transition services agreement or with respect to retained liabilities;
- future acquisitions, strategic partnerships, and investments;
- impairment of our goodwill or intangible assets;

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- restrictions and other financial covenants in our credit facility;
- difficulty meeting our debt service requirements;
- the accuracy of our backlog estimates;
- exposure to unknown tax liabilities;
- the cyclical nature of our revenue and earnings and the accuracy of forecasts due to the concentration of revenue generating activity during the final weeks of each quarter; and
- volatility in our stock price.

The cautionary statements in this report expressly qualify all of our forward-looking statements.

The following discussion should be read together with our financial statements and related notes contained in this report and with the financial statements and related notes and Management's Discussion & Analysis in our Annual Report on Form 10-K for the fiscal year ended December 31, 2017, filed February 27, 2018. Results for the nine months ended September 30, 2018, are not necessarily indicative of results that may be attained in the future.

### Overview

ACI Worldwide, the Universal Payments ("UP") company, powers electronic payments for more than 5,100 organizations around the world. More than 1,000 of the largest banks and financial intermediaries, as well as thousands of global merchants, rely on ACI to execute \$14 trillion each day in payments and securities. In addition, thousands of organizations utilize our EBPP services. Through our comprehensive suite of solutions, we deliver real-time, immediate payments capabilities, and enable a complete omni-channel payments experience.

Our products are sold and supported through distribution networks covering three geographic regions – the Americas, EMEA, and Asia/Pacific. Each distribution network has its own globally coordinated sales force and supplements its sales force with independent reseller and/or distributor networks. Our products and solutions are used globally by banks, financial intermediaries, merchants and corporates, such as third-party electronic payment processors, payment associations, switch interchanges and a wide range of transaction-generating endpoints, including ATMs, merchant point-of-sale ("POS") terminals, bank branches, mobile phones, tablets, corporations, and Internet commerce sites. Accordingly, our business and operating results are influenced by trends such as information technology spending levels, the growth rate of electronic payments, mandated regulatory changes, and changes in the number and type of customers in the financial services industry. Our products are marketed under the ACI Worldwide, ACI Universal Payment, and ACI UP brands.

We derive a majority of our revenues from domestic operations and believe we have large opportunities for growth in international markets as well as continued expansion domestically in the United States. Refining our global infrastructure is a critical component of driving our growth. We have launched a globalization strategy which includes elements intended to streamline our supply chain and maximize expertise in several geographic locations to support a growing international customer base and competitive needs. We utilize our Irish subsidiaries to manage certain of our intellectual property rights and to oversee and manage certain international product development and commercialization efforts. We increased our SaaS and PaaS capabilities with a data center in Ireland allowing our SaaS and PaaS solutions to be more-broadly offered in the European market. We also continue to grow centers of expertise in Timisoara, Romania and Pune and Bangalore in India, as well as key operational centers such as Cape Town, South Africa and in multiple locations in the United States.

Key trends that currently impact our strategies and operations include:

**Increasing electronic payment transaction volumes.** Electronic payment volumes continue to increase around the world, taking market share from traditional cash and check transactions. The Boston Consulting Group predicts that electronic payment transactions will grow in volume at an annual rate of 6.7%, from 481 billion in 2016 to 624.6 billion in 2020, with varying growth rates based on the type of payment and part of the world. We leverage the growth in transaction volumes through the licensing of new systems to customers whose older systems cannot handle increased volume and through the sale of capacity upgrades to existing customers.

**Adoption of real-time payments.** Customer expectations, from both consumers and corporate, are driving the payments world to more real-time delivery. In the U.K., payments sent through the traditional ACH multi-day batch service can now be sent through the Faster Payments service giving almost immediate access to the funds, and this is being considered and implemented in several countries including Australia and the United States. In the U.S. market, National Automated Clearinghouse Association ("NACHA") implemented phase 2 of Same Day ACH in September 2017. Corporate customers expect real-time information on the status of their payments instead of waiting for an end of-day report. Regulators expect banks to be monitoring key measures like liquidity in real time. ACI's focus has always been on the real-time execution of transactions and delivery of information through real-time tools, such as dashboards, so our experience will be valuable in addressing this trend.

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**Increasing competition.** The electronic payments market is highly competitive and subject to rapid change. Our competition comes from in-house information technology departments, third-party electronic payment processors, and third-party software companies located both within and outside of the United States. Many of these companies are significantly larger than us and have significantly greater financial, technical, and marketing resources. As electronic payment transaction volumes increase, third-party processors tend to provide competition to our solutions, particularly among customers that do not seek to differentiate their electronic payment offerings or are eliminating banks from the payments service, reducing the need for our solutions. As consolidation in the financial services industry continues, we anticipate that competition for those customers will intensify.

**Adoption of cloud technology.** In an effort to leverage lower-cost computing technologies, some banks, financial intermediaries, merchants, and corporates are seeking to transition their systems to make use of cloud technology. Our investments provide us the grounding to deliver cloud capabilities in the future. Market sizing data from Ovum indicates that spend on SaaS and PaaS payment systems is growing faster than spend on installed applications.

**Electronic payments fraud and compliance.** As electronic payment transaction volumes increase, organized criminal organizations continue to find ways to commit a growing volume of fraudulent transactions using a wide range of techniques. Banks, financial intermediaries, merchants and corporates continue to seek ways to leverage new technologies to identify and prevent fraudulent transactions and other attacks such as denial of service attacks. Due to concerns with international terrorism and money laundering, banks and financial intermediaries in particular are being faced with increasing scrutiny and regulatory pressures. We continue to see opportunity to offer our fraud detection solutions to help customers manage the growing levels of electronic payments fraud and compliance activity.

**Adoption of smartcard technology.** In many markets, card issuers are being required to issue new cards with embedded chip technology, with the liability shift having gone into effect in 2015 in the United States. Chip-based cards are more secure, harder to copy, and offer the opportunity for multiple functions on one card (e.g., debit, credit, electronic purse, identification, health records, etc.). This results in greater card-not-present fraud (e.g., fraud at eCommerce sites).

**Single Euro Payments Area (SEPA).** The SEPA, primarily focused on the European economic community and the U.K., is designed to facilitate lower costs for cross-border payments and reduce timeframes for settling electronic payment transactions. The transition to SEPA payment mechanisms will drive more volume to these systems with the potential to cause banks to review the capabilities of the systems supporting these payments. Our Retail Payments and Real-Time Payments solutions facilitate key functions that help banks and financial intermediaries address these mandated regulations.

**European Payment Service Directive (PSD2).** PSD2, which was ratified by the European Parliament in 2015, required member states to implement new payments regulations in 2018. The XS2A provision effectively creates a new market opportunity where banks in European Union member countries must provide open API standards to customer data, thus allowing authorized third-party providers to enter the market.

**Financial institution consolidation.** Consolidation continues on a national and international basis, as financial institutions seek to add market share and increase overall efficiency. Such consolidations have increased, and may continue to increase, in their number, size, and market impact as a result of recent economic conditions affecting the banking and financial industries. There are several potential negative effects of increased consolidation activity. Continuing consolidation of financial institutions may result in a smaller number of existing and potential customers for our products and services. Consolidation of two of our customers could result in reduced revenues if the combined entity were to negotiate greater volume discounts or discontinue use of certain of our products. Additionally, if a non-customer and a customer combine and the combined entity decides to forego future use of our products, our revenue would decline. Conversely, we could benefit from the combination of a non-customer and a customer when the combined entity continues use of our products and, as a larger combined entity, increases its demand for our products and services. We tend to focus on larger financial institutions as customers, often resulting in our solutions being the solutions that survive in the consolidated entity.

**Global vendor sourcing.** Global and regional banks, financial intermediaries, merchants, and corporates are aiming to reduce the costs in supplier management by picking suppliers who can service them across all their geographies instead of allowing each country operation to choose suppliers independently. Our global footprint from both a customer and a delivery perspective enable us to be successful in this global sourced market. However, projects in these environments tend to be more complex and therefore of higher risk.

**Electronic payments convergence.** As electronic payment volumes grow and pressures to lower overall cost per transaction increase, banks and financial intermediaries are seeking methods to consolidate their payments processing across the enterprise. We believe that the strategy of using service-oriented architectures to allow for re-use of common electronic payment functions, such as authentication, authorization, routing and settlement, will become more common. Using these techniques, banks and financial intermediaries will be able to reduce costs, increase overall service levels, enable one-to-one marketing in multiple bank channels, leverage volumes for improved pricing and liquidity, and manage enterprise risk. Our product strategy is, in part, focused on this trend, by creating integrated payment functions that can be re-used by multiple bank channels, across both the consumer and wholesale bank. While this trend presents an opportunity for us, it may also expand the competition from third-party electronic payment technology and service providers specializing in other forms of electronic payments. Many of these providers are larger than us and have significantly greater financial, technical and marketing resources.

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**Mobile banking and payments.** There is a growing demand for the ability to carry out banking services or make payments using a mobile phone. Recent statistics from Javelin Strategy & Research, a subsidiary of Greenwich Associates, show that 50% of adults in the United States use their phone for mobile banking. The use of phones for mobile banking is expected to grow to 81% in 2020. Our customers have been making use of existing products to deploy mobile banking, mobile payments, and mobile commerce solutions for their customers in many countries. In addition, ACI has invested in mobile products of our own and via partnerships to support mobile functionality in the marketplace.

**Electronic bill payment and presentment.** EBPP encompasses all facets of bill payment, including biller direct, where customers initiate payments on biller websites, the consolidator model, where customers initiate payments on a financial institution's website, and walk-in bill payment, as one might find in a convenience store. The EBPP market continues to grow as consumers move away from traditional forms of paper-based payments. According to Aite Group, the percentage of online payments made on biller sites grew from 62% in 2010 to 73% in 2016. The biller-direct solutions are seeing strong growth as billers migrate these services to outsourcers, such as ACI, from legacy systems built in house. We believe that EBPP remains ripe for outsourcing, as a significant amount of biller-direct transactions are still processed in house. As billers seek to manage costs and improve efficiency, we believe that they will continue to look to third-party EBPP vendors that can offer a complete solution for their billing needs.

Several other factors related to our business may have a significant impact on our operating results from year to year. For example, the accounting rules governing the timing of revenue recognition are complex and it can be difficult to estimate when we will recognize revenue generated by a given transaction. Factors such as creditworthiness of the customer and timing of transfer of control or acceptance of our products may cause revenues related to sales generated in one period to be deferred and recognized in later periods. For arrangements in which services revenue is deferred, related direct and incremental costs may also be deferred. Additionally, while the majority of our contracts are denominated in the U.S. dollar, a substantial portion of our sales are made, and some of our expenses are incurred, in the local currency of countries other than the United States. Fluctuations in currency exchange rates in a given period may result in the recognition of gains or losses for that period.

We continue to seek ways to grow through organic sources, partnerships, alliances, and acquisitions. We continually look for potential acquisitions designed to improve our solutions' breadth or provide access to new markets. As part of our acquisition strategy, we seek acquisition candidates that are strategic, capable of being integrated into our operating environment and financially accretive to our financial performance.

### **Backlog**

Backlog is comprised of:

- Committed Backlog which includes (1) contracted revenue that will be recognized in future periods (contracted but not recognized) from software license fees, maintenance fees, services fees, and SaaS and PaaS fees specified in executed contracts (including estimates of variable consideration if required under ASC 606) and included in the transaction price for those contracts, which includes deferred revenue and amounts that will be invoiced and recognized as revenue in future periods and (2) estimated future revenues from software license fees, maintenance fees, services fees, and SaaS and PaaS fees specified in executed contracts.
- Renewal Backlog which includes estimated future revenues from assumed contract renewals to the extent that we believe recognition of the related revenue will occur within the corresponding backlog period.

The adoption of ASC 606 resulted in the following key changes to backlog:

- The introduction of a U.S. GAAP requirement to measure and disclose revenue allocated to remaining performance obligations.
- A shift in license revenue from Committed Backlog to Renewal Backlog due to the acceleration of license revenue recognition and a corresponding change in the renewal assumptions used to estimate Renewal Backlog.
- An adjustment to the amount of license revenue included in Renewal Backlog due to the introduction of the significant financing component concept.

We have historically included assumed renewals in backlog estimates based upon automatic renewal provisions in the executed contract and our historic experience with customer renewal rates.

Our 60-month backlog estimates are derived using the following key assumptions:

- License arrangements are assumed to renew at the end of their committed term or under the renewal option stated in the contract at a rate consistent with historical experience. If the license arrangement includes extended payment terms, the renewal estimate is adjusted for the effects of a significant financing component.

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- Maintenance fees are assumed to exist for the duration of the license term for those contracts in which the committed maintenance term is less than the committed license term.
- SaaS and PaaS arrangements are assumed to renew at the end of their committed term at a rate consistent with our historical experiences.
- Foreign currency exchange rates are assumed to remain constant over the 60-month backlog period for those contracts stated in currencies other than the U.S. dollar.
- Our pricing policies and practices are assumed to remain constant over the 60-month backlog period.

In computing our 60-month backlog estimate, the following items are specifically not taken into account:

- Anticipated increases in transaction, account, or processing volumes in customer systems.
- Optional annual uplifts or inflationary increases in recurring fees.
- Services engagements, other than SaaS and PaaS arrangements, are not assumed to renew over the 60-month backlog period.
- The potential impact of merger activity within our markets and/or customers.

We review our customer renewal experience on an annual basis. The impact of this review and subsequent update may result in a revision to the renewal assumptions used in computing the 60-month and 12-month backlog estimates. In the event a revision to renewal assumptions is determined to be necessary, prior periods will be adjusted for comparability purposes.

The following table sets forth our 60-month backlog estimate, by reportable segment, as of September 30, 2018, June 30, 2018, March 31, 2018, and December 31, 2017 (in millions). Dollar amounts reflect foreign currency exchange rates as of each period end. We included our 60-month backlog estimate without the application of ASC 606. This is a non-GAAP financial measure that is being presented to provide comparability across accounting periods. We believe this measure provides useful information to investors and others in understanding and evaluating our financial performance.

	<u>As Reported</u>	<u>Without application of ASC 606</u>	<u>As Reported</u>	<u>Without application of ASC 606</u>	<u>As Reported</u>	<u>Without application of ASC 606</u>	<u>December 31, 2017</u>
	<u>September 30, 2018</u>		<u>June 30, 2018</u>		<u>March 31, 2018</u>		
ACI On Premise	\$ 1,775	\$ 1,645	\$ 1,830	\$ 1,681	\$ 1,874	\$ 1,709	\$ 1,700
ACI On Demand	2,401	2,400	2,472	2,472	2,513	2,512	2,404
Total	<u>\$ 4,176</u>	<u>\$ 4,045</u>	<u>\$ 4,302</u>	<u>\$ 4,153</u>	<u>\$ 4,387</u>	<u>\$ 4,221</u>	<u>\$ 4,104</u>

  

	<u>As Reported</u>	<u>Without application of ASC 606</u>	<u>As Reported</u>	<u>Without application of ASC 606</u>	<u>As Reported</u>	<u>Without application of ASC 606</u>	<u>December 31, 2017</u>
	<u>September 30, 2018</u>		<u>June 30, 2018</u>		<u>March 31, 2018</u>		
Committed	\$ 1,760	\$ 2,015	\$ 1,769	\$ 2,022	\$ 1,879	\$ 2,138	\$ 2,062
Renewal	2,416	2,030	2,533	2,131	2,508	2,083	2,042
Total	<u>\$ 4,176</u>	<u>\$ 4,045</u>	<u>\$ 4,302</u>	<u>\$ 4,153</u>	<u>\$ 4,387</u>	<u>\$ 4,221</u>	<u>\$ 4,104</u>

Estimates of future financial results require substantial judgment and are based on a number of assumptions as described above. These assumptions may turn out to be inaccurate or wrong, including for reasons outside of management's control. For example, our customers may attempt to renegotiate or terminate their contracts for a number of reasons, including mergers, changes in their financial condition, or general changes in economic conditions in the customer's industry or geographic location, or we may experience delays in the development or delivery of products or services specified in customer contracts which may cause the actual renewal rates and amounts to differ from historical experiences. Changes in foreign currency exchange rates may also impact the amount of revenue actually recognized in future periods. Accordingly, there can be no assurance that amounts included in backlog estimates will actually generate the specified revenues or that the actual revenues will be generated within the corresponding 60-month period. Additionally, because certain components of Committed Backlog and all of Renewal Backlog estimates are operating metrics, the estimates are not required to be subject to the same level of internal review or controls as contracted but not recognized Committed Backlog.

## RESULTS OF OPERATIONS

The following table presents the condensed consolidated statements of operations as well as the percentage relationship to total revenues of items included in our condensed consolidated statements of operations (amounts in thousands):

	Three Months Ended September 30,				2017	
	2018					
	Amount	% of Total Revenue	\$ Change vs 2017	% Change vs 2017	Amount	% of Total Revenue
<b>Revenues:</b>						
Software as a service and platform as a service	\$104,519	43%	\$ 4,758	5%	\$ 99,761	44%
License	68,964	28%	18,947	38%	50,017	22%
Maintenance	54,373	22%	(1,976)	-4%	56,349	25%
Services	17,669	7%	(1,939)	-10%	19,608	9%
Total revenues	<u>245,525</u>	<u>100%</u>	<u>19,790</u>	<u>9%</u>	<u>225,735</u>	<u>100%</u>
<b>Operating expenses:</b>						
Cost of revenue	102,473	42%	(4,920)	-5%	107,393	48%
Research and development	36,008	15%	2,073	6%	33,935	15%
Selling and marketing	28,252	12%	3,016	12%	25,236	11%
General and administrative	29,537	12%	4,235	17%	25,302	11%
Depreciation and amortization	20,896	9%	(1,550)	-7%	22,446	10%
Total operating expenses	<u>217,166</u>	<u>88%</u>	<u>2,854</u>	<u>1%</u>	<u>214,312</u>	<u>95%</u>
Operating income	28,359	12%	16,936	148%	11,423	5%
<b>Other income (expense):</b>						
Interest expense	(12,573)	-5%	(3,199)	34%	(9,374)	-4%
Interest income	2,763	1%	2,598	1575%	165	0%
Other, net	(1,304)	-1%	(245)	23%	(1,059)	0%
Total other income (expense)	<u>(11,114)</u>	<u>-5%</u>	<u>(846)</u>	<u>8%</u>	<u>(10,268)</u>	<u>-5%</u>
Income before income taxes	17,245	7%	16,090	1393%	1,155	1%
Income tax expense (benefit)	2,012	1%	4,245	-190%	(2,233)	-1%
Net income	<u>\$ 15,233</u>	<u>6%</u>	<u>\$ 11,845</u>	<u>350%</u>	<u>\$ 3,388</u>	<u>2%</u>

### Three-Month Period Ended September 30, 2018 Compared to the Three-Month Period Ended September 30, 2017

#### Revenues

Total revenue for the three months ended September 30, 2018, increased \$19.8 million, or 9%, as compared to the same period in 2017.

The application of ASC 606 resulted in a \$0.1 million decrease in total revenue for the three months ended September 30, 2018. Total revenue was \$1.4 million lower for the three months ended September 30, 2018, compared to the same period in 2017 due to the impact of foreign currencies weakening against the U.S. dollar. Excluding the impact of applying ASC 606 and foreign currency, total revenue for the three months ended September 30, 2018, increased \$21.4 million, or 9%, compared to the same period in 2017 primarily as the result of an increase in license and SaaS and PaaS revenue partially offset by a decrease in services and maintenance revenue.

#### *Software as a Service ("SaaS") and Platform as a Service ("PaaS") Revenue*

The Company's SaaS arrangements allow customers to use certain software solutions (without taking possession of the software) in a single-tenant cloud environment on a subscription basis. The Company's PaaS arrangements allow customers to use certain software solutions (without taking possession of the software) in a multi-tenant cloud environment on a subscription or consumption basis. Included in SaaS and PaaS revenue are fees paid by our customers for use of our Biller solutions. Biller-related fees may be paid by our clients or directly by their customers and may be a percentage of the underlying transaction amount, a fixed fee per executed transaction or a monthly fee for each customer enrolled. SaaS and PaaS costs include payment card interchange fees, the amounts payable to banks and payment card processing fees, which are included in cost of revenue in the accompanying condensed consolidated statements of operations. All revenue from SaaS and PaaS arrangements that does not qualify for treatment as a distinct performance obligation, which includes set-up fees, implementation or customization services, and product support services, are included in SaaS and PaaS revenue.



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SaaS and PaaS revenue increased \$4.8 million, or 5%, during the three months ended September 30, 2018, as compared to the same period in 2017. Total SaaS and PaaS revenue was \$0.2 million lower for the three months ended September 30, 2018, compared to the same period in 2017 due to the impact of foreign currencies weakening against the U.S. dollar. Excluding the impact of applying ASC 606 and foreign currency, total SaaS and PaaS revenue for the three months ended September 30, 2018, increased \$4.2 million, or 4%, compared to the same period in 2017.

### *License Revenue*

Customers purchase the right to license ACI software under multi-year, time-based software license arrangements that vary in length but are generally five years. Under these arrangements the software is installed at the customer's location (i.e. on-premise). Within these agreements are specified capacity limits typically based on customer transaction volume. ACI employs measurement tools that monitor the number of transactions processed by customers and if contractually specified limits are exceeded, additional fees are charged for the overage. Capacity overages may occur at varying times throughout the term of the agreement depending on the product, the size of the customer, and the significance of customer transaction volume growth. Depending on specific circumstances, multiple overages or no overages may occur during the term of the agreement.

Included in license revenue are license and capacity fees that are payable at the inception of the agreement or annually (initial license fees). License revenue also includes license and capacity fees payable quarterly or monthly due to negotiated customer payment terms (monthly license fees). Under ASC 606 the Company recognizes revenue in advance of billings for software license arrangements with extended payment terms. Under ASC 605 the Company recognized revenue for those same software license arrangements as the fees become due and payable.

Total license revenue increased \$18.9 million, or 38%, during the three months ended September 30, 2018, as compared to the same period in 2017. The application of ASC 606 resulted in a \$0.1 million decrease in total license revenue for the three months ended September 30, 2018. Total license revenue was \$0.3 million lower for the three months ended September 30, 2018, compared to the same period in 2017 due to the impact of foreign currencies weakening against the U.S. dollar. Excluding the impact of applying ASC 606 and foreign currency, total license revenue for the three months ended September 30, 2018, increased \$19.3 million, or 39%, compared to the same period in 2017.

The increase in total license revenue was primarily driven by the timing and relative size of license and capacity events during the three months ended September 30, 2018, as compared to the same period in 2017.

### *Maintenance Revenue*

Maintenance revenue includes standard and premium maintenance and any post contract support fees received from customers for the provision of product support services.

Maintenance revenue decreased \$2.0 million, or 4%, during the three months ended September 30, 2018, as compared to the same period in 2017. Total maintenance revenue was \$0.7 million lower for the three months ended September 30, 2018, as compared to the same period in 2017 due to the impact of foreign currencies weakening against the U.S. dollar. Excluding the impact of applying ASC 606 and foreign currency, total maintenance revenue for the three months ended September 30, 2018, decreased \$1.0 million, or 2%, compared to the same period in 2017.

### *Services Revenue*

Services revenue includes fees earned through implementation services and other professional services. Implementation services include product installations, product configurations, and custom software modifications ("CSMs"). Other professional services include business consultancy, technical consultancy, on-site support services, CSMs, product education, and testing services. These services include new customer implementations as well as existing customer migrations to new products or new releases of existing products.

Services revenue decreased \$1.9 million, or 10%, during the three months ended September 30, 2018, as compared to the same period in 2017. Total services revenue was \$0.3 million lower for the three months ended September 30, 2018, as compared to the same period in 2017 due to the impact of foreign currencies weakening against the U.S. dollar. Excluding the impact of applying ASC 606 and foreign currency, total services revenue for the three months ended September 30, 2018, decreased \$1.1 million, or 6%, compared to the same period in 2017.

### **Operating Expenses**

Total operating expenses for the three months ended September 30, 2018 increased \$2.9 million, or 1%, as compared to the same period in 2017.

The application of ASC 606 resulted in a \$1.9 million increase in total operating expenses for the three months ended September 30, 2018, which is primarily due to differences in the timing of expense recognition for sales commissions. Total operating expenses were \$2.0 million lower for the three months ended September 30, 2018, compared to the same period in 2017 due to the impact of foreign currencies

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weakening against the U.S. dollar. Excluding the impact of applying ASC 606 and foreign currency, total operating expenses for the three months ended September 30, 2018, increased \$3.0 million, or 1%, compared to the same period in 2017 primarily because of higher research and development, selling and marketing, and general and administrative expenses, partially offset by lower cost of revenue and depreciation and amortization expenses.

### *Cost of Revenue*

Cost of revenue includes costs to provide SaaS and PaaS services, third-party royalties, amortization of purchased and developed software for resale, the costs of maintaining our software products, as well as the costs required to deliver, install, and support software at customer sites. SaaS and PaaS service costs include payment card interchange fees, assessments payable to banks, and payment card processing fees. Maintenance costs include the efforts associated with providing the customer with upgrades, 24-hour help desk, post go-live (remote) support, and production-type support for software that was previously installed at a customer location. Service costs include human resource costs and other incidental costs such as travel and training required for both pre go-live and post go-live support. Such efforts include project management, delivery, product customization and implementation, installation support, consulting, configuration, and on-site support.

Cost of revenue decreased \$4.9 million, or 5%, during the three months ended September 30, 2018, compared to the same period in 2017. Cost of revenue was \$0.6 million lower for the three months ended September 30, 2018, as compared to the same period in 2017 due to the impact of foreign currencies weakening against the U.S. dollar. Excluding the impact of foreign currency, cost of revenue decreased \$4.3 million, or 4%, for the three months ended September 30, 2018, as compared to the same period in 2017 primarily due to lower personnel and related costs of \$7.9 million, partially offset by a \$3.6 million increase in interchange processing fees.

### *Research and Development*

Research and development (“R&D”) expenses are primarily human resource costs related to the creation of new products, improvements made to existing products as well as compatibility with new operating system releases and generations of hardware.

R&D expense increased \$2.1 million, or 6%, during the three months ended September 30, 2018, as compared to the same period in 2017. R&D expense was \$0.5 million lower for the three months ended September 30, 2018, as compared to the same period in 2017 due to the impact of foreign currencies weakening against the U.S. dollar. Excluding the impact of foreign currency, R&D expense increased \$2.6 million, or 8%, for the three months ended September 30, 2018, as compared to the same period in 2017 primarily due to an increase in personnel and related expenses.

### *Selling and Marketing*

Selling and marketing includes both the costs related to selling our products to current and prospective customers as well as the costs related to promoting the Company, its products and the research efforts required to measure customers’ future needs and satisfaction levels. Selling costs are primarily the human resource and travel costs related to the effort expended to license our products and services to current and potential clients within defined territories and/or industries as well as the management of the overall relationship with customer accounts. Selling costs also include the costs associated with assisting distributors in their efforts to sell our products and services in their respective local markets. Marketing costs include costs incurred to promote the Company and its products, perform or acquire market research to help the Company better understand impending changes in customer demand for and of our products, and the costs associated with measuring customers’ opinions toward the Company, our products and personnel.

Selling and marketing expense increased \$3.0 million, or 12%, during the three months ended September 30, 2018, as compared to the same period in 2017. The application of ASC 606 resulted in a \$1.9 million increase in selling and marketing expense for the three months ended September 30, 2018, as compared to the same period in 2017. Selling and marketing expense was \$0.3 million lower for the three months ended September 30, 2018, as compared to the same period in 2017 due to the impact of foreign currencies weakening against the U.S. dollar. Excluding the impact of applying ASC 606 and foreign currency, selling and marketing expense increased \$1.5 million, or 6%, for the three months ended September 30, 2018, as compared to the same period in 2017 due to an increase in personnel and related expenses primarily as the result of an increase in total bookings.

### *General and Administrative*

General and administrative expenses are primarily human resource costs including executive salaries and benefits, personnel administration costs, and the costs of corporate support functions such as legal, administrative, human resources, and finance and accounting.

General and administrative expense increased \$4.2 million, or 17%, during the three months ended September 30, 2018, as compared to the same period in 2017. General and administrative expenses were \$0.3 million lower for the three months ended September 30, 2018, as compared to the same period in 2017 due to the impact of foreign currencies weakening against the U.S. dollar. Excluding the impact of foreign currency, general and administrative expense increased \$4.5 million, or 18%, for the three months ended September 30, 2018, as compared to the same period in 2017, primarily due to an increase in personnel and related expenses.

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### *Depreciation and Amortization*

Depreciation and amortization decreased \$1.6 million, or 7%, during the three months ended September 30, 2018, as compared to the same period in 2017. Depreciation and amortization was \$0.1 million lower for the three months ended September 30, 2018, as compared to the same period in 2017 due to the impact of foreign currencies weakening against the U.S. dollar. Excluding the impact of foreign currency, depreciation and amortization decreased \$1.5 million, or 6%, for the three months ended September 30, 2018, as compared to the same period in 2017.

### **Other Income and Expense**

Interest expense for the three months ended September 30, 2018 increased \$3.2 million, or 34%, as compared to the same period in 2017 primarily due to write-off of \$1.7 million of deferred debt issuance costs from the 2020 Notes upon their redemption as well as comparatively higher interest rates on the Term Credit Facility during the three-months ended September 30, 2018.

Interest income includes the portion of software license fees paid by customers under extended payment terms that is attributed to the significant financing component. Interest income for the three-months ended September 30, 2018, increased \$2.6 million, as compared to the same period in 2017, which is primarily due to the impact of applying ASC 606. Excluding the impact of applying ASC 606, interest income was flat.

Other, net consists of foreign currency loss and other non-operating items. Foreign currency losses for the three months ended September 30, 2018 and 2017, were \$1.3 million and \$1.1 million, respectively.

### **Income Taxes**

Refer to Note 11, *Income Taxes*, to our unaudited condensed consolidated financial statements in Part I of this Form 10-Q for additional information.

**Nine-Month Period Ended September 30, 2018 Compared to the Nine-Month Period Ended September 30, 2017**

	Nine Months Ended September 30,				2017	
	2018					
	Amount	% of Total Revenue	\$ Change vs 2017	% Change vs 2017	Amount	% of Total Revenue
<b>Revenues:</b>						
Software as a service and platform as a service	\$322,399	47%	\$ 9,722	3%	\$312,677	45%
License	142,565	21%	(21,013)	-13%	163,578	23%
Maintenance	166,080	24%	(749)	0%	166,829	24%
Services	58,786	9%	4,074	7%	54,712	8%
Total revenues	689,830	100%	(7,966)	-1%	697,796	100%
<b>Operating expenses:</b>						
Cost of revenue	326,070	47%	(10,223)	-3%	336,293	48%
Research and development	110,661	16%	4,472	4%	106,189	15%
Selling and marketing	93,305	14%	12,115	15%	81,190	12%
General and administrative	87,023	13%	(43,309)	-33%	130,332	19%
Depreciation and amortization	63,274	9%	(3,915)	-6%	67,189	10%
Total operating expenses	680,333	99%	(40,860)	-6%	721,193	103%
Operating income (loss)	9,497	1%	32,894	-141%	(23,397)	-3%
<b>Other income (expense):</b>						
Interest expense	(31,655)	-5%	(1,457)	5%	(30,198)	-4%
Interest income	8,249	1%	7,828	1859%	421	0%
Other, net	(3,036)	0%	(860)	40%	(2,176)	0%
Total other income (expense)	(26,442)	-4%	5,511	-17%	(31,953)	-5%
Loss before income taxes	(16,945)	-2%	38,405	-69%	(55,350)	-8%
Income tax expense (benefit)	1,824	0%	29,145	-107%	(27,321)	-4%
Net loss	\$ (18,769)	-3%	\$ 9,260	-33%	\$ (28,029)	-4%

**Revenues**

Total revenue for the nine months ended September 30, 2018, decreased \$8.0 million, or 1%, as compared to the same period in 2017.

The application of ASC 606 resulted in a \$21.5 million decrease in total revenue for the nine months ended September 30, 2018, which is primarily due to the differences in the timing and amount of revenue recognition for software license fees. Total revenue was \$7.7 million higher for the nine months ended September 30, 2018, compared to the same period in 2017 due to the impact of foreign currencies strengthening against the U.S. dollar. Excluding the impact of applying ASC 606 and foreign currency, total revenue for the nine months ended September 30, 2018, increased \$5.8 million, or 1%, compared to the same period in 2017 primarily as the result of an increase in SaaS and PaaS and services revenue partially offset by decreases in license and maintenance revenue.

*Software as a Service ("SaaS") and Platform as a Service ("PaaS") Revenue*

SaaS and PaaS revenue increased \$9.7 million, or 3%, during the nine months ended September 30, 2018, as compared to the same period in 2017. Total SaaS and PaaS revenue was \$2.3 million higher for the nine months ended September 30, 2018, compared to the same period in 2017 due to the impact of foreign currencies strengthening against the U.S. dollar. Excluding the impact of applying ASC 606 and foreign currency, total SaaS and PaaS revenue for the nine months ended September 30, 2018, increased \$7.0 million, or 2%, compared to the same period in 2017, which is primarily attributed to new customers adopting our SaaS and PaaS-based offerings and existing customers adding new functionality or increasing processing.

*License Revenue*

Total license revenue decreased \$21.0 million, or 13%, during the nine months ended September 30, 2018, as compared to the same period in 2017. The application of ASC 606 resulted in a \$21.2 million decrease in total license revenue for the nine months ended September 30, 2018, as compared to the same period in 2017. Total license revenue was \$2.8 million higher for the nine months ended September 30, 2018, compared to the same period in 2017 due to the impact of foreign currencies strengthening against the U.S. dollar. Excluding the impact of applying ASC 606 and foreign currency, total license revenue for the nine months ended September 30, 2018, decreased \$2.6 million, or 2%, compared to the same period in 2017.

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The decrease in total license revenue was primarily driven by the timing and relative size of license and capacity events during the nine months ended September 30, 2018, as compared to the same period in 2017.

### *Maintenance Revenue*

Maintenance revenue decreased \$0.7 million during the nine months ended September 30, 2018, as compared to the same period in 2017. Total maintenance revenue was \$2.1 million higher for the nine months ended September 30, 2018, as compared to the same period in 2017 due to the impact of foreign currencies strengthening against the U.S. dollar. Excluding the impact of adopting ASC 606 and foreign currency, total maintenance revenue for the nine months ended September 30, 2018, decreased \$2.3 million, or 1%, compared to the same period in 2017.

### *Services Revenue*

Services revenue increased \$4.1 million, or 7%, during the nine months ended September 30, 2018, as compared to the same period in 2017. Total services revenue was \$0.5 million higher for the nine months ended September 30, 2018, as compared to the same period in 2017 due to the impact of foreign currencies strengthening against the U.S. dollar. Excluding the impact of applying ASC 606 and foreign currency, total services revenue for the nine months ended September 30, 2018, increased \$3.7 million, or 7%, compared to the same period in 2017.

### **Operating Expenses**

Total operating expenses for the nine months ended September 30, 2018 decreased \$40.9 million, or 6%, as compared to the same period in 2017.

For the nine months ended September 30, 2017, there was \$46.7 million of expense recorded in relation to the Baldwin Hackett & Meeks, Inc. (“BHMI”) judgment. The application of ASC 606 resulted in a \$4.7 million increase in total operating expenses for the nine months ended September 30, 2018, compared to the same period in 2017, which is primarily due to differences in the timing of expense recognition for sales commissions. Total operating expenses were \$6.1 million higher for the nine months ended September 30, 2018, compared to the same period in 2017 due to the impact of foreign currencies strengthening against the U.S. dollar. Excluding the impact of the BHMI judgment, the impact of applying ASC 606 and foreign currency, operating expenses decreased \$5.0 million, or 1%, for the nine months ended September 30, 2018, primarily because of lower cost of revenue, general and administrative expenses, and depreciation and amortization expenses, partially offset by higher sales and marketing expenses and research and development expenses.

### *Cost of Revenue*

Cost of revenue decreased \$10.2 million, or 3%, during the nine months ended September 30, 2018, compared to the same period in 2017. Cost of revenue was \$2.0 million higher due to the impact of foreign currencies strengthening against the U.S. dollar. Excluding the impact of foreign currency, cost of revenue decreased \$12.2 million, or 4%, for the nine months ended September 30, 2018, as compared to the same period in 2017 primarily due to lower personnel and related costs of \$17.7 million, partially offset by a \$5.5 million increase in interchange processing fees.

### *Research and Development*

R&D expense increased \$4.5 million, or 4%, during the nine months ended September 30, 2018, as compared to the same period in 2017. R&D expense was \$1.1 million higher due to the impact of foreign currencies strengthening against the U.S. dollar. Excluding the impact of foreign currency, R&D expense increased \$3.4 million, or 3%, for the nine months ended September 30, 2018, as compared to the same period in 2017 primarily due to an increase in personnel and related costs.

### *Selling and Marketing*

Selling and marketing expense increased \$12.1 million, or 15%, during the nine months ended September 30, 2018, as compared to the same period in 2017. The application of ASC 606 resulted in a \$4.7 million increase in selling and marketing expense for the nine months ended September 30, 2018, as compared to the same period in 2017. Selling and marketing expense was \$1.3 million higher for the nine months ended September 30, 2018, as compared to the same period in 2017 due to the impact of foreign currencies strengthening against the U.S. dollar. Excluding the impact of applying ASC 606 and foreign currency, selling and marketing expense increased \$6.2 million, or 7%, for the nine months ended September 30, 2018, as compared to the same period in 2017 due to an increase in personnel and related expenses primarily as the result of an increase in new bookings.

### *General and Administrative*

General and administrative expense decreased \$43.3 million, or 33%, during the nine months ended September 30, 2018, as compared to the same period in 2017. For the nine months ended September 30, 2017, there was \$46.7 million of expense recorded in relation to the BHMI judgment. General and administrative expense was \$0.9 million higher for the nine months ended September 30, 2018, as compared to the same period in 2017 due to the impact of foreign currencies strengthening against the U.S. dollar. Excluding the impact of the BHMI judgment and foreign currency, general and administrative expense increased \$2.5 million, or 3%, for the nine months ended September 30, 2018, as compared to the same period in 2017 primarily due to an increase in personnel and related expenses.

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### *Depreciation and Amortization*

Depreciation and amortization decreased \$3.9 million, or 6%, during the nine months ended September 30, 2018, as compared to the same period in 2017. Depreciation and amortization was \$0.8 million higher for the nine months ended September 30, 2018, as compared to the same period in 2017 due to the impact of foreign currencies strengthening against the U.S. dollar. Excluding the impact of foreign currency, depreciation and amortization decreased \$4.7 million, or 7%, for the nine months ended September 30, 2018, as compared to the same period in 2017.

### **Other Income and Expense**

Interest expense for the nine months ended September 30, 2018, increased \$1.5 million, or 5%, as compared to the same period in 2017 primarily due to the write-off of \$1.7 million of deferred debt issuance costs from the 2020 Notes upon their redemption.

Interest income for the nine months ended September 30, 2018 increased \$7.8 million, as compared to the same period in 2017, which is primarily due to the impact of applying ASC 606. Excluding the impact of applying ASC 606, interest income was flat.

Other, net consists of foreign currency loss and other non-operating items. Foreign currency losses for the nine months ended September 30, 2018 and 2017, were \$3.0 million and \$2.2 million, respectively.

### **Income Taxes**

Refer to Note 11, *Income Taxes*, to our unaudited condensed consolidated financial statements in Part I of this Form 10-Q for additional information.

### **Segment Results**

The Company reports financial performance based on its segments, ACI On Premise and ACI On Demand, and analyzes Segment Adjusted EBITDA as a measure of segment profitability.

The Company's chief operating decision maker ("CODM"), which is also our Chief Executive Officer, together with other senior management personnel, focus their review of consolidated financial information and the allocation of resources based upon the operating results, including revenues and Segment Adjusted EBITDA, for the segments ACI On Premise and ACI On Demand, separate from the Corporate operations.

*ACI On Premise* serves customers who manage their software on site. These on premise customers use the Company's software to develop sophisticated solutions, which are often part of a larger system located and managed at the customer site. These customers require a level of control and flexibility that ACI On Premise solutions can offer, and they have the resources and expertise to take a lead role in managing these solutions.

*ACI On Demand* serves the needs of retail and financial institutions who use payments to facilitate their core business. The Company sees an increasing demand for SaaS and PaaS offerings, which offer reduced complexity and cost as well as the ability to rapidly implement and scale.

Revenue is attributed to the reportable segments based upon the product sold and mechanism for delivery to the customer. Expenses are attributed to the reportable segments in one of three methods, (1) direct costs of the segment, (2) labor costs that can be attributed based upon time tracking for individual products, or (3) costs that are allocated. Allocated costs are generally marketing and sales related activities as well as information technology and facilities related expense for which multiple segments benefit. The Company also allocates certain depreciation costs to the segments.

Segment Adjusted EBITDA is the measure reported to the CODM for purposes of making decisions on allocating resources and assessing the performance of the Company's segments and, therefore, Segment Adjusted EBITDA is presented in conformity with ASC 280, *Segment Reporting*. Segment Adjusted EBITDA is defined as earnings (loss) from operations before interest, income tax expense (benefit), depreciation and amortization ("EBITDA") adjusted to exclude stock-based compensation, and net other income (expense).

Corporate and other unallocated expenses consists of the corporate overhead costs that are not allocated to reportable segments. These overhead costs relate to human resources, finance, legal, accounting, merger and acquisition activity, and other costs that are not considered when management evaluates segment performance.

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The following is selected financial data for the Company's reportable segments (in thousands):

	Three Months Ended		Nine Months Ended	
	September 30, 2018	September 30, 2017	September 30, 2018	September 30, 2017
<b>Revenue</b>				
ACI On Premise	\$ 141,006	\$ 126,006	\$ 367,431	\$ 385,108
ACI On Demand	104,519	99,729	322,399	312,688
<b>Total revenue</b>	<b>\$ 245,525</b>	<b>\$ 225,735</b>	<b>\$ 689,830</b>	<b>\$ 697,796</b>
<b>Segment Adjusted EBITDA</b>				
ACI On Premise	\$ 77,819	\$ 65,138	\$ 171,477	\$ 196,060
ACI On Demand	3,270	(1,241)	(4,327)	(8,794)
Depreciation and amortization	(23,545)	(25,553)	(72,889)	(76,772)
Stock-based compensation	(6,575)	(8,084)	(20,642)	(22,724)
Corporate and unallocated expenses	(22,610)	(18,837)	(64,122)	(111,167)
Interest, net	(9,810)	(9,209)	(23,406)	(29,777)
Other, net	(1,304)	(1,059)	(3,036)	(2,176)
<b>Loss before income taxes</b>	<b>\$ 17,245</b>	<b>\$ 1,155</b>	<b>\$ (16,945)</b>	<b>\$ (55,350)</b>
<b>Depreciation and amortization</b>				
ACI On Premise	\$ 2,772	\$ 3,321	\$ 8,596	\$ 9,915
ACI On Demand	7,906	8,576	23,468	25,973
Corporate	12,867	13,656	40,825	40,884
<b>Total depreciation and amortization</b>	<b>\$ 23,545</b>	<b>\$ 25,553</b>	<b>\$ 72,889</b>	<b>\$ 76,772</b>

ACI On Premise Segment Adjusted EBITDA increased \$12.7 million for the three months ended September 30, 2018, compared to the same period in 2017 primarily due to a \$15.0 million increase in revenue due to the timing of certain license and capacity events partially offset by an increase in expenses.

ACI On Premise Segment Adjusted EBITDA decreased \$24.6 million for the nine months ended September 30, 2018, compared to the same period in 2017 primarily due to the \$22.0 million impact of applying ASC 606 during the nine months ended September 30, 2018.

ACI On Demand Segment Adjusted EBITDA increased \$4.5 million for the three months ended September 30, 2018, compared to the same period in 2017 primarily due to a \$4.8 million increase in revenue.

ACI On Demand Segment Adjusted EBITDA increased \$4.5 for the nine months ended September 30, 2018, compared to the same period in 2017 primarily due to a \$9.7 million increase in revenues partially offset by a \$5.5 million increase in interchange processing fees and \$0.5 million impact of applying ASC 606.

## Liquidity and Capital Resources

### General

Our primary liquidity needs are: (i) to fund normal operating expenses; (ii) to meet the interest and principal requirements of our outstanding indebtedness; and (iii) to fund acquisitions, capital expenditures and lease payments. We believe these needs will be satisfied using cash flow generated by our operations, our cash and cash equivalents and available borrowings under our revolving credit facility.

### Available Liquidity

The following table sets forth our available liquidity for the periods indicated (amount in thousands):

	As of September 30, 2018	As of December 31, 2017
Cash and cash equivalents	\$ 76,342	\$ 69,710
Availability under Revolving Credit Facility	500,000	498,000
<b>Total liquidity</b>	<b>\$ 576,342</b>	<b>\$ 567,710</b>

The increase in total liquidity is primarily attributable to positive operating cash flows of \$100.5 million, offset by repurchases of common stock of \$54.5 million and \$38.3 million of payments to purchase property and equipment and software and distribution rights.

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Cash and cash equivalents consist of highly liquid investments with original maturities of three months or less. As of September 30, 2018, \$51.0 million of the \$76.3 million of cash and cash equivalents was held by our foreign subsidiaries. If these funds were needed for our operations in the U.S., we may potentially be required to accrue and pay foreign and U.S. state income taxes to repatriate these funds. During the three months ended September 30, 2018, we made a final determination in accordance with SAB 118 that the unremitted earnings and profits of our entities in Australia, Ireland, New Zealand, Romania, Russia and South Africa are no longer permanently reinvested. We are currently evaluating our existing position regarding the permanent reinvestment of our foreign funds in our entities in countries not listed above in light of the enactment of the Tax Act. We expect to complete our evaluation and determine the impact the Tax Act may have on our permanent reinvestment assertion within the measurement period provided by SAB 118.

(in thousands)	Nine Months Ended	
	September 30,	
	2018	2017
<b>Net cash provided by (used by):</b>		
Operating activities	\$100,462	\$ 85,072
Investing activities	(39,777)	(39,894)
Financing activities	(53,301)	(57,320)

### *Cash Flows from Operating Activities*

Net cash flows provided by operating activities for the nine months ended September 30, 2018, was \$100.5 million as compared to \$85.1 million during the same period in 2017. The comparative period increase was primarily due to a lower net loss for the nine months ended September 30, 2018 compared to the same period in 2017. Our current policy is to use our operating cash flow primarily for funding capital expenditures, lease payments, stock repurchases, and acquisitions.

### *Cash Flows from Investing Activities*

During the first nine months of 2018 we used cash of \$38.3 million to purchase software, property and equipment, as compared to \$39.9 million during the same period in 2017.

### *Cash Flows from Financing Activities*

Net cash flows used by financing activities for the nine months ended September 30, 2018, was \$53.3 million as compared to \$57.3 million during the same period in 2017. During the first nine months of 2018, we received proceeds of \$400.0 million from the issuance of 5.750% Senior Notes due 2026. We used \$300.0 million of the proceeds to redeem in full the Company's outstanding 6.375% Senior Notes due 2020 and repaid \$105.3 million on the Term Credit Facility. In addition, during the first nine months of 2018 we received proceeds of \$20.7 million from the exercises of stock options and the issuance of common stock under our 2017 Employee Stock Purchase Plan, as amended, and used \$2.6 million for the repurchase of restricted stock for tax withholdings. During the nine months ended September 30, 2018, we used \$54.5 million to repurchase common stock. During the first nine months of 2017 we received net proceeds of \$34.1 million on the Term Credit Facility and repaid a net \$84.0 million on the Revolving Credit Facility. In addition, during the nine months ended September 30, 2017, we received proceeds of \$12.5 million from the exercises of stock options and the issuance of common stock under our 2005 Employee Stock Purchase Plan, as amended, and used \$5.3 million for the repurchase of restricted stock for tax withholdings.

We may decide to use cash to acquire new products and services or enhance existing products and services through acquisitions of other companies, product lines, technologies and personnel, or through investments in other companies.

We believe that our existing sources of liquidity, including cash on hand and cash provided by operating activities, will satisfy our projected liquidity requirements, which primarily consists of working capital requirements, for the next twelve months and foreseeable future.

## **Debt**

### *Credit Agreement*

As of September 30, 2018, we had \$288.9 million outstanding under our Term Credit Facility, with up to \$500.0 million of unused borrowings under the Revolving Credit Facility portion of the Credit Agreement, as amended. The amount of unused borrowings actually available varies in accordance with the terms of the agreement. The Credit Agreement contains certain affirmative and negative covenants, including limitations on the incurrence of indebtedness, asset dispositions, acquisitions, investments, dividends and other restricted payments, liens and transactions with affiliates. The Credit Agreement also contains financial covenants relating to maximum permitted leverage ratio and the minimum interest coverage ratio. The facility does not contain any subjective acceleration features and does not have any required payment or principal reduction schedule and is included as a long-term liability in our condensed consolidated balance sheet. At September 30, 2018 (and at all times during this period) we were in compliance with our debt covenants. The interest rate in effect at September 30, 2018 was 3.99%.



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### *Senior Notes*

On August 21, 2018, the Company completed a \$400.0 million offering of 5.750% Senior Notes due 2026 (the “2026 Notes”) at an issue price of 100% of the principal amount in a private placement for resale to qualified institutional buyers. The 2026 Notes bear interest at a rate of 5.750% per year, payable semi-annually in arrears on February 15 and August 15 of each year, commencing on February 15, 2019. Interest will accrue from August 21, 2018. The 2026 Notes will mature on August 15, 2026.

The Company used the net proceeds of the offering described above to redeem in full the Company’s outstanding 6.375% Senior Notes due 2020 (the “2020 Notes”), including accrued interest, and repaid a portion of the outstanding amount under the Term Credit Facility.

### **Stock Repurchase Program**

In 2005, the Company’s Board of Directors (“the Board”) approved a stock repurchase program authorizing the Company, from time to time as market and business conditions warrant, to acquire its common stock and periodically authorizes additional funds for the program. In February 2018, the Board approved an additional \$200.0 million for the stock repurchase program.

The Company repurchased 2,346,427 shares for \$54.5 million under the program during the nine months ended September 30, 2018. Under the program to date, the Company has repurchased 44,129,393 shares for approximately \$547.8 million. The maximum remaining authorized for purchase under the stock repurchase program was \$176.6 million as of September 30, 2018.

There is no guarantee as to the exact number of shares that will be repurchased by us. Repurchased shares are returned to the status of authorized but unissued shares of common stock. In March 2005, our Board of Directors approved a plan under Rule 10b5-1 of the Securities Exchange Act of 1934 to facilitate the repurchase of shares of common stock under the existing stock repurchase program. Under our Rule 10b5-1 plan, we have delegated authority over the timing and amount of repurchases to an independent broker who does not have access to inside information about the Company. Rule 10b5-1 allows us, through the independent broker, to purchase shares at times when we ordinarily would not be in the market because of self-imposed trading blackout periods, such as the time immediately preceding the end of the fiscal quarter through a period three business days following our quarterly earnings release.

### **Contractual Obligations and Commercial Commitments**

For the nine months ended September 30, 2018, there have been no material changes to the contractual obligations and commercial commitments disclosed in Item 7 of our Form 10-K for the fiscal year ended December 31, 2017 except as disclosed below.

(in thousands)	Total	Payments due by Period			
		Less than 1 year	1-3 years	3-5 years	More than 5 years
<b>Contractual Obligations</b>					
2026 Senior Notes	\$400,000	\$ —	\$ —	\$ —	\$400,000
Senior Notes Interest (1)	172,500	23,000	46,000	46,000	57,500
Financed internally used software (2)	11,563	4,688	4,688	2,187	—
Total	<u>\$584,063</u>	<u>\$ 27,688</u>	<u>\$50,688</u>	<u>\$48,187</u>	<u>\$457,500</u>

(1) Based upon Senior Notes issued of \$400.0 million at per annum rate of 5.750%.

(2) During the nine months ended September 30, 2018, the Company financed certain multi-year license agreements for internally-used software for \$11.9 million with annual payments through June 2023. As of September 30, 2018, \$11.6 million is outstanding, of which \$4.7 million and \$6.9 million is included in other current and other noncurrent liabilities, respectively, in the accompanying condensed consolidated balance sheet.

We are unable to reasonably estimate the ultimate amount or timing of settlement of our reserves for income taxes under Financial Accounting Standards Board (“FASB”) Accounting Standards Codification (“ASC”) 740, *Income Tax*. The liability for unrecognized tax benefits at September 30, 2018 is \$27.8 million.

### **Critical Accounting Estimates**

The preparation of the condensed consolidated financial statements requires that we make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent assets and liabilities. We base our estimates on historical experience and other assumptions that we believe to be proper and reasonable under the circumstances. We continually evaluate the appropriateness of estimates and assumptions used in the preparation of our condensed consolidated financial statements. Actual results could differ from those estimates.

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The accounting policies that reflect our more significant estimates, judgments and assumptions and which we believe are the most critical to aid in fully understanding and evaluating our reported financial results include the following:

- Revenue Recognition
- Allowance for Doubtful Accounts
- Business Combinations
- Intangible Assets and Goodwill
- Stock-Based Compensation
- Accounting for Income Taxes

During the nine months ended September 30, 2018, there were no significant changes to our critical accounting policies and estimates other than as discussed in Note 2, *Revenue*, and Note 11, *Income Taxes*, in the Notes to the Condensed Consolidated Financial Statements. Please refer to Management's Discussion and Analysis of Financial Condition and Results of Operations contained in Part II, Item 7 of our Annual Report on Form 10-K for our fiscal year ended December 31, 2017, filed on February 27, 2018, for a more complete discussion of our critical accounting policies and estimates.

### **Item 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK**

Excluding the impact of changes in interest rates and the uncertainty in the global financial markets, there have been no material changes to our market risk for the nine months ended September 30, 2018. We conduct business in all parts of the world and are thereby exposed to market risks related to fluctuations in foreign currency exchange rates. The U.S. dollar is the single largest currency in which our revenue contracts are denominated. Thus, any decline in the value of local foreign currencies against the U.S. dollar results in our products and services being more expensive to a potential foreign customer, and in those instances where our goods and services have already been sold, may result in the receivables being more difficult to collect. Additionally, any decline in the value of the U.S. dollar in jurisdictions where the revenue contracts are denominated in U.S. dollars and operating expenses are incurred in local currency will have an unfavorable impact to operating margins. We at times enter into revenue contracts that are denominated in the country's local currency, principally in Australia, Canada, the United Kingdom and other European countries. This practice serves as a natural hedge to finance the local currency expenses incurred in those locations. We have not entered into any foreign currency hedging transactions. We do not purchase or hold any derivative financial instruments for the purpose of speculation or arbitrage.

The primary objective of our cash investment policy is to preserve principal without significantly increasing risk. Based on our cash investments and interest rates on these investments at September 30, 2018, and if we maintained this level of similar cash investments for a period of one year, a hypothetical ten percent increase or decrease in effective interest rates would increase or decrease interest income by less than \$0.1 million annually.

We had approximately \$688.9 million of debt outstanding at September 30, 2018, with \$400 million in Senior Notes and \$288.9 million outstanding under our Credit Facility. Our Senior Notes are fixed-rate long-term debt obligations with a 5.750% interest rate. Our Credit Facility has a floating rate which was 3.99% at September 30, 2018. The potential increase (decrease) in interest expense for the Credit Facility from a hypothetical ten percent increase (decrease) in effective interest rates would be approximately \$1.2 million.

### **Item 4. CONTROLS AND PROCEDURES**

#### *Disclosure Controls and Procedures*

Our management, under the supervision of and with the participation of the Chief Executive Officer and Chief Financial Officer, performed an evaluation of the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the "Exchange Act")) as of the end of the period covered by this report, September 30, 2018. Based on that evaluation, the Company's Chief Executive Officer and Chief Financial Officer have concluded that the Company's disclosure controls and procedures are effective as of September 30, 2018.

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

The Company adopted ASC 606, *Revenue from Contracts with Customers*, on January 1, 2018, which required management to make changes to our policies and processes and to implement new or modify existing internal controls over financial reporting during the quarter ended March 31, 2018. This included modifications to our existing internal controls over contract reviews and new controls related to the enhanced disclosure requirements.

There have been no changes during our quarter ended September 30, 2018, in our internal control over financial reporting (as defined in Rules 13a-15(f) under the Exchange Act) that have materially affected, or are reasonably likely to materially effect, our internal control over financial reporting.

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Our management, under the supervision of and with the participation of the Chief Executive Officer and Chief Financial Officer evaluated any change in the Company's internal control over financial reporting (as defined in Rules 13a-15(f) under the Exchange Act) during the Company's quarter ended September 30, 2018, and determined that there were no other changes in the Company's internal control over financial reporting that have materially affected, or are reasonably likely to materially affect the Company's internal control over financial reporting.

## **PART II – OTHER INFORMATION**

### **Item 1. LEGAL PROCEEDINGS**

From time to time, we are involved in various litigation matters arising in the ordinary course of our business. We are not currently a party to any legal proceedings, the adverse outcome of which, individually or in the aggregate, we believe would be likely to have a material effect on our financial condition or results of operations.

### **Item 1A. RISK FACTORS**

There have been no material changes to the risk factors disclosed in Item 1A of our Form 10-K for the fiscal year ended December 31, 2017. Additional risks and uncertainties, including risks and uncertainties not presently known to us, or that we currently deem immaterial, could also have an adverse effect on our business, financial condition and/or results of operations.

### **Item 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS**

#### **Issuer Purchases of Equity Securities**

The following table provides information regarding the Company's repurchases of its common stock during the nine months ended September 30, 2018:

<u>Period</u>	<u>Total Number of Shares Purchased</u>	<u>Average Price Paid per Share</u>	<u>Total Number of Shares Purchased as Part of Publicly Announced Program</u>	<u>Approximate Dollar Value of Shares that May Yet Be Purchased Under the Program</u>
July 1, 2018 through July 31, 2018	—	\$ —	—	\$ 176,587,000
August 1, 2018 through August 31, 2018	—	—	—	176,587,000
September 1, 2018 through September 30, 2018	—	—	—	176,587,000
Total	—	\$ —	—	—

In fiscal 2005, we announced that our Board of Directors (the "Board") approved a stock repurchase program authorizing us, from time to time as market and business conditions warrant, to acquire our common stock, and that we intended to use existing cash and cash equivalents to fund these repurchases. Periodically the Board authorizes additional funds for the program. In February 2018, the Board approved \$200.0 million for the stock repurchase program. The maximum remaining authorized for purchase under the stock repurchase program was \$176.6 million as of September 30, 2018. There is no guarantee as to the exact number of shares that will be repurchased by us. Repurchased shares are returned to the status of authorized but unissued shares of common stock. In March 2005, our Board of Directors approved a plan under Rule 10b5-1 of the Securities Exchange Act of 1934 to facilitate the repurchase of shares of common stock under the existing stock repurchase program. Under our Rule 10b5-1 plan, we have delegated authority over the timing and amount of repurchases to an independent broker who does not have access to inside information about the Company. Rule 10b5-1 allows us, through the independent broker, to purchase shares at times when we ordinarily would not be in the market because of self-imposed trading blackout periods, such as the time immediately preceding the end of the fiscal quarter through a period three business days following our quarterly earnings release.

### **Item 3. DEFAULTS UPON SENIOR SECURITIES**

Not applicable.

### **Item 4. MINE SAFETY DISCLOSURES**

Not applicable.

**Item 5. OTHER INFORMATION**

Not applicable.

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### **Item 6. EXHIBITS**

The following lists exhibits filed as part of this quarterly report on Form 10-Q:

<u>Exhibit No.</u>	<u>Description</u>
3.01 (1)	<a href="#">2013 Amended and Restated Certificate of Incorporation of the Company</a>
3.02 (2)	<a href="#">Amended and Restated Bylaws of the Company</a>
4.01 (3)	Form of Common Stock Certificate (P)
4.02 (4)	<a href="#">Indenture, dated as of August 21, 2018, among ACI Worldwide, Inc., the guarantors listed therein, and Wilmington Trust, National Association, as trustee</a>
4.03	<a href="#">Form of 5.750% Senior Notes due 2026 (included as Exhibit A to Exhibit 4.02)</a>
31.01	<a href="#">Certification of Principal Executive Officer pursuant to SEC Rule 13a-14, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002</a>
31.02	<a href="#">Certification of Principal Financial Officer pursuant to SEC Rule 13a-14, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002</a>
32.01 *	<a href="#">Certification of Principal Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002</a>
32.02 *	<a href="#">Certification of Principal Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002</a>
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema
101.CAL	XBRL Taxonomy Extension Calculation Linkbase
101.LAB	XBRL Taxonomy Extension Label Linkbase
101.PRE	XBRL Taxonomy Extension Presentation Linkbase
101.DEF	XBRL Taxonomy Extension Definition Linkbase

\* This certification is not deemed “filed” for purposes of Section 18 of the Securities Exchange Act of 1934, or otherwise subject to the liability of that section. Such certification will not be deemed to be incorporated by reference into any filing under the Securities Act of 1933 or the Securities Exchange Act of 1934, except to the extent that the Company specifically incorporates it by reference.

(P) Paper Exhibit

- (1) Incorporated herein by reference to Exhibit 3.1 to the registrant’s current report on Form 8-K filed August 17, 2017.
- (2) Incorporated herein by reference to Exhibit 3.1 to the registrant’s current report on Form 8-K filed February 27, 2017.
- (3) Incorporated herein by reference to Exhibit 4.01 to the registrant’s Registration Statement No. 33-88292 on Form S-1.
- (4) Incorporated herein by reference to Exhibit 4.1 to the registrant’s current report on Form 8-K filed August 21, 2018.

**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 thereunto duly authorized.

**ACI WORLDWIDE, INC.**  
(Registrant)

Date: November 8, 2018

By: \_\_\_\_\_ /s/ SCOTT W. BEHRENS  
Scott W. Behrens  
*Senior Executive Vice President, Chief Financial  
Officer and Chief Accounting Officer  
(Principal Financial Officer)*

## CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER

I, Philip G. Heasley, certify that:

1. I have reviewed this quarterly report on Form 10-Q of ACI Worldwide, 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: November 8, 2018

/s/ PHILIP G. HEASLEY

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Philip G. Heasley  
President, Chief Executive Officer  
and Director  
(Principal Executive Officer)

## CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER

I, Scott W. Behrens, certify that:

1. I have reviewed this quarterly report on Form 10-Q of ACI Worldwide, 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: November 8, 2018

/s/ SCOTT W. BEHRENS

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Scott W. Behrens  
Senior Executive Vice President, Chief Financial  
Officer and Chief Accounting Officer  
(Principal Financial Officer)



**CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER PURSUANT TO 18 U.S.C. SECTION 1350,  
AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the quarterly report of ACI Worldwide, Inc. (the "Company") on Form 10-Q for the quarter ended September 30, 2018 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Philip G. Heasley, Principal Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

- 1) The Report fully complies with the requirements of Sections 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- 2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: November 8, 2018

/s/ PHILIP G. HEASLEY

Philip G. Heasley  
*President, Chief Executive Officer  
and Director  
(Principal Executive Officer)*

**CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER PURSUANT TO 18 U.S.C. SECTION 1350,  
AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the quarterly report of ACI Worldwide, Inc. (the "Company") on Form 10-Q for the quarter ended September 30, 2018 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Scott W. Behrens, Principal Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

- 1) The Report fully complies with the requirements of Sections 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- 2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: November 8, 2018

/s/ SCOTT W. BEHRENS

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Scott W. Behrens

*Senior Executive Vice President, Chief Financial  
Officer and Chief Accounting Officer  
(Principal Financial Officer)*

