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

FORM 10-Q

(Mark One)

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

For the quarterly period ended September 30, 2020

Or

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

For the transition period from to

Commission File Number 0-25346

ACI WORLDWIDE, INC.
(Exact name of registrant as specified in its charter)

Delaware	**47-0772104**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**
3520 Kraft Rd, Suite 300 Naples, Florida	**34105**
(Address of principal executive offices)	**(Zip code)**

(239) 403-4660
(Registrant's telephone number, including area code)

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

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of the Regulation S-T 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	☒	Accelerated filer	☐
Non-accelerated filer	☐	Smaller reporting company	☐
		Emerging growth company	☐

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

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

As of November 2, 2020, there were 116,761,531 shares of the registrant's common stock outstanding.

Securities registered or to be registered pursuant to Section 12(b) of the Act.

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, $0.005 par value	**ACIW**	**Nasdaq Global Select Market**

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PART I - FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

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

	September 30, 2020	December 31, 2019
ASSETS		
Current assets		
Cash and cash equivalents	$ 133,845	$ 121,398
Receivables, net of allowances of $3,517 and $5,149, respectively	309,496	359,197
Settlement assets	376,382	391,039
Prepaid expenses	25,913	24,542
Other current assets	24,695	24,200
Total current assets	870,331	920,376
Noncurrent assets		
Accrued receivables, net	205,885	213,041
Property and equipment, net	67,028	70,380
Operating lease right-of-use assets	47,017	57,382
Software, net	204,239	234,517
Goodwill	1,280,226	1,280,525
Intangible assets, net	328,257	356,969
Deferred income taxes, net	60,397	51,611
Other noncurrent assets	69,054	72,733
TOTAL ASSETS	$ 3,132,434	$ 3,257,534
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities		
Accounts payable	$ 38,932	$ 37,010
Settlement liabilities	349,510	368,719
Employee compensation	42,638	29,318
Current portion of long-term debt	34,236	34,148
Deferred revenue	59,414	65,784
Other current liabilities	65,452	76,971
Total current liabilities	590,182	611,950
Noncurrent liabilities		
Deferred revenue	71,870	53,155
Long-term debt	1,234,319	1,339,007
Deferred income taxes, net	27,270	32,053
Operating lease liabilities	39,952	46,766
Other noncurrent liabilities	45,997	44,635
Total liabilities	2,009,590	2,127,566
Commitments and contingencies		
Stockholders' equity		
Preferred stock; $0.01 par value; 5,000,000 shares authorized; no shares issued at September 30, 2020, and December 31, 2019	—	—
Common stock; $0.005 par value; 280,000,000 shares authorized; 140,525,055 shares issued at September 30, 2020, and December 31, 2019	702	702
Additional paid-in capital	675,941	667,658
Retained earnings	936,344	930,830
Treasury stock, at cost, 23,794,109 and 24,538,703 shares at September 30, 2020, and December 31, 2019, respectively	(393,651)	(377,639)
Accumulated other comprehensive loss	(96,492)	(91,583)
Total stockholders' equity	1,122,844	1,129,968
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	$ 3,132,434	$ 3,257,534

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)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Revenues				
Software as a service and platform as a service	$ 190,369	$ 192,952	$ 563,892	$ 474,008
License	56,773	92,058	135,038	165,677
Maintenance	53,049	52,638	159,078	159,671
Services	15,692	17,253	49,270	59,018
Total revenues	315,883	354,901	907,278	858,374
Operating expenses				
Cost of revenue (1)	158,579	174,168	471,762	444,349
Research and development	33,573	36,543	108,175	111,972
Selling and marketing	22,154	30,417	76,692	92,809
General and administrative	37,000	27,286	102,684	108,122
Depreciation and amortization	33,395	31,169	98,928	79,779
Total operating expenses	284,701	299,583	858,241	837,031
Operating income	31,182	55,318	49,037	21,343
Other income (expense)				
Interest expense	(12,925)	(18,987)	(44,238)	(45,924)
Interest income	2,927	2,988	8,781	9,018
Other, net	1,356	(2,369)	(6,361)	(2,879)
Total other income (expense)	(8,642)	(18,368)	(41,818)	(39,785)
Income (loss) before income taxes	22,540	36,950	7,219	(18,442)
Income tax expense (benefit)	6,674	5,136	1,705	(30,018)
Net income	$ 15,866	$ 31,814	$ 5,514	$ 11,576
Income per common share				
Basic	$ 0.14	$ 0.27	$ 0.05	$ 0.10
Diluted	$ 0.13	$ 0.27	$ 0.05	$ 0.10
Weighted average common shares outstanding				
Basic	116,558	116,169	116,217	116,337
Diluted	117,804	118,307	117,644	118,460

(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)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Net income	$ 15,866	$ 31,814	$ 5,514	$ 11,576
Other comprehensive income (loss):				
Foreign currency translation adjustments	1,842	(1,610)	(4,909)	(2,019)
Total other comprehensive income (loss)	1,842	(1,610)	(4,909)	(2,019)
Comprehensive income	$ 17,708	$ 30,204	$ 605	$ 9,557

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

ACI WORLDWIDE, INC. AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(unaudited and in thousands, except share amounts)

	Three Months Ended September 30, 2020					
	Common Stock	Additional Paid-in Capital	Retained Earnings	Treasury Stock	Accumulated Other Comprehensive Loss	Total
Balance as of June 30, 2020	$ 702	$ 667,554	$ 920,478	$ (399,663)	$ (98,334)	$ 1,090,737
Net income	—	—	15,866	—	—	15,866
Other comprehensive income	—	—	—	—	1,842	1,842
Stock-based compensation	—	8,061	—	—	—	8,061
Shares issued and forfeited, net, under stock plans	—	326	—	6,038	—	6,364
Repurchase of stock-based compensation awards for tax withholdings	—	—	—	(26)	—	(26)
Balance as of September 30, 2020	$ 702	$ 675,941	$ 936,344	$ (393,651)	$ (96,492)	$ 1,122,844

	Three Months Ended September 30, 2019					
	Common Stock	Additional Paid-in Capital	Retained Earnings	Treasury Stock	Accumulated Other Comprehensive Loss	Total
Balance as of June 30, 2019	$ 702	$ 650,797	$ 843,530	$ (349,426)	$ (93,026)	$ 1,052,577
Net income	—	—	31,814	—	—	31,814
Other comprehensive loss	—	—	—	—	(1,610)	(1,610)
Stock-based compensation	—	9,371	—	—	—	9,371
Shares issued and forfeited, net, under stock plans	—	485	—	1,299	—	1,784
Repurchase of 1,204,300 shares of common stock	—	—	—	(34,986)	—	(34,986)
Repurchase of stock-based compensation awards for tax withholdings	—	—	—	(13)	—	(13)
Balance as of September 30, 2019	$ 702	$ 660,653	$ 875,344	$ (383,126)	$ (94,636)	$ 1,058,937

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

ACI WORLDWIDE, INC. AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(unaudited and in thousands, except share amounts)

	Nine Months Ended September 30, 2020					
	Common Stock	Additional Paid-in Capital	Retained Earnings	Treasury Stock	Accumulated Other Comprehensive Loss	Total
Balance as of December 31, 2019	$ 702	$ 667,658	$ 930,830	$ (377,639)	$ (91,583)	$ 1,129,968
Net income	—	—	5,514	—	—	5,514
Other comprehensive loss	—	—	—	—	(4,909)	(4,909)
Stock-based compensation	—	22,943	—	—	—	22,943
Shares issued and forfeited, net, under stock plans	—	(14,660)	—	24,019	—	9,359
Repurchase of 1,000,000 shares of common stock	—	—	—	(28,881)	—	(28,881)
Repurchase of stock-based compensation awards for tax withholdings	—	—	—	(11,150)	—	(11,150)
Balance as of September 30, 2020	$ 702	$ 675,941	$ 936,344	$ (393,651)	$ (96,492)	$ 1,122,844

	Nine Months Ended September 30, 2019					
	Common Stock	Additional Paid-in Capital	Retained Earnings	Treasury Stock	Accumulated Other Comprehensive Loss	Total
Balance as of December 31, 2018	$ 702	$ 632,235	$ 863,768	$ (355,857)	$ (92,617)	$ 1,048,231
Net income	—	—	11,576	—	—	11,576
Other comprehensive loss	—	—	—	—	(2,019)	(2,019)
Stock-based compensation	—	30,328	—	—	—	30,328
Shares issued and forfeited, net, under stock plans	—	(1,910)	—	11,170	—	9,260
Repurchase of 1,228,102 shares of common stock	—	—	—	(35,617)	—	(35,617)
Repurchase of stock-based compensation awards for tax withholdings	—	—	—	(2,822)	—	(2,822)
Balance as of September 30, 2019	$ 702	$ 660,653	$ 875,344	$ (383,126)	$ (94,636)	$ 1,058,937

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)

	Nine Months Ended September 30,	
	2020	2019
Cash flows from operating activities:		
Net income	$ 5,514	$ 11,576
Adjustments to reconcile net income to net cash flows from operating activities:		
Depreciation	18,012	17,916
Amortization	86,992	70,627
Amortization of operating lease right-of-use assets	14,145	10,877
Amortization of deferred debt issuance costs	3,613	2,909
Deferred income taxes	(10,540)	(39,323)
Stock-based compensation expense	22,943	30,328
Other	4,339	2,431
Changes in operating assets and liabilities, net of impact of acquisitions:		
Receivables	41,261	34,690
Accounts payable	1,680	(8,414)
Accrued employee compensation	13,585	1,740
Current income taxes	(2,595)	(8,536)
Deferred revenue	14,361	(17,735)
Other current and noncurrent assets and liabilities	(21,252)	(20,148)
Net cash flows from operating activities	192,058	88,938
Cash flows from investing activities:		
Purchases of property and equipment	(14,091)	(18,739)
Purchases of software and distribution rights	(21,556)	(18,565)
Acquisition of businesses, net of cash acquired	—	(757,268)
Other	—	(18,474)
Net cash flows from investing activities	(35,647)	(813,046)
Cash flows from financing activities:		
Proceeds from issuance of common stock	2,853	2,662
Proceeds from exercises of stock options	6,518	6,677
Repurchase of stock-based compensation awards for tax withholdings	(11,150)	(2,822)
Repurchases of common stock	(28,881)	(35,617)
Proceeds from revolving credit facility	30,000	280,000
Repayment of revolving credit facility	(109,000)	(15,000)
Proceeds from term portion of credit agreement	—	500,000
Repayment of term portion of credit agreement	(29,212)	(19,162)
Payments for debt issuance costs	—	(12,830)
Payments on or proceeds from other debt, net	(10,044)	(8,209)
Net cash flows from financing activities	(148,916)	695,699
Effect of exchange rate fluctuations on cash	4,952	1,488
Net increase (decrease) in cash and cash equivalents	12,447	(26,921)
Cash and cash equivalents, beginning of period	121,398	148,502
Cash and cash equivalents, end of period	$ 133,845	$ 121,581
Supplemental cash flow information		
Income taxes paid	$ 19,733	$ 21,205
Interest paid	$ 46,489	$ 47,741

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, 2020, and for the three and nine months ended September 30, 2020 and 2019, 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, 2019, 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, 2019, filed on February 27, 2020. Results for the three and nine months ended September 30, 2020, 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.

Risks and Uncertainties

The Company is subject to risks and uncertainties as a result of the COVID-19 pandemic. The extent of the impact of the COVID-19 pandemic on the Company's business is highly uncertain and difficult to predict, as the response to the pandemic and available information continues to be evolving. The Company has experienced changes in volumes for certain Merchant and Biller customers and has received limited requests for extended payment terms under existing contracts. Furthermore, capital markets and economies worldwide have also been negatively impacted by the COVID-19 pandemic, and it is possible that it could cause a local and/or global economic recession. Such economic disruption could have a material adverse effect on our business as our customers curtail and reduce capital and overall spending. Policymakers around the globe have responded with fiscal policy actions to support the economy as a whole. The magnitude and overall effectiveness of these actions remains uncertain.

The severity of the impact of the COVID-19 pandemic on the Company's business will depend on a number of factors, including, but not limited to, the duration and severity of the pandemic and the extent and severity of the impact on the Company's customers, all of which are uncertain and cannot be predicted. The Company's future results of operations and liquidity could be adversely impacted by delays in payments of outstanding receivable amounts beyond normal payment terms, uncertain demand, and the impact of any initiatives or programs that the Company may undertake to address financial and operations challenges faced by its customers. As of the date of issuance of these condensed consolidated financial statements, the extent to which the COVID-19 pandemic may materially impact the Company's financial condition, liquidity, or results of operations is uncertain.

Other Current Liabilities

The components of other current liabilities are included in the following table (in thousands):

	September 30, 2020	December 31, 2019
Operating lease liabilities	$ 13,569	$ 15,049
Vendor financed licenses	13,270	9,667
Royalties payable	4,775	6,107
Accrued interest	3,065	9,212
Other	30,773	36,936
Total other current liabilities	$ 65,452	$ 76,971

Settlement Assets and Liabilities

Individuals and businesses settle their obligations to the Company's various Biller clients using credit or debit cards or via automated clearing house ("ACH") payments. The Company creates a receivable for the amount due from the credit or debit card processor 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 (1) 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 and (2) disburse funds to its clients in advance of receiving funds from the credit or debit card processor, resulting in a net settlement receivable position.

Off Balance Sheet Settlement Accounts

The Company also enters into agreements with certain Biller 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, these settlement accounts are not included in the 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, 2020, and December 31, 2019, was $164.5 million and $274.0 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 5.750% Senior Notes due 2026 ("2026 Notes") was $423.0 million and $432.0 million as of September 30, 2020, and December 31, 2019, respectively.

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 the Accounting Standards Codification ("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 reportable segments, ACI On Demand and ACI On Premise, as the reporting units.

Changes in the carrying amount of goodwill attributable to each reporting unit during the nine months ended September 30, 2020, were as follows (in thousands):

	ACI On Demand	ACI On Premise	Total
Gross Balance, prior to December 31, 2019	$ 554,617	$ 773,340	$ 1,327,957
Total impairment prior to December 31, 2019	—	(47,432)	(47,432)
Balance, December 31, 2019	554,617	725,908	1,280,525
Goodwill from acquisitions (1)	(299)	—	(299)
Balance, September 30, 2020	$ 554,318	$ 725,908	$ 1,280,226

(1) Goodwill from acquisitions relates to adjustments in the goodwill recorded for the acquisition of E Commerce Group Products, Inc. ("ECG"), along with ECG's subsidiary, Speedpay, Inc. (collectively referred to as "Speedpay") and Walletron, Inc. ("Walletron"), as discussed in Note 3, *Acquisition*.

Recoverability of goodwill is measured using a discounted cash flow valuation 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, 2019, annual impairment test. Given the adverse economic and market conditions caused by the COVID-19 pandemic, the Company considered a variety of qualitative factors to determine if an additional quantitative impairment test was required subsequent to our annual impairment test. Based on a variety of factors, including the excess of the fair value over the carrying amount in the most recent impairment test, we determined that an additional quantitative impairment test was not required.

Equity Method Investment

On July 23, 2019, the Company invested $18.3 million for a 30% non-controlling financial interest in a payment technology and services company in India. The Company accounted for this investment using the equity method in accordance with ASC 323, *Investments - Equity Method and Joint Ventures*. The Company records its share of earnings and losses in the investment on a one-quarter lag basis. Accordingly, the Company recorded an investment of $18.8 million and $18.5 million, which is included in other noncurrent assets in the condensed consolidated balance sheet as of September 30, 2020, and December 31, 2019, respectively.

Name Change

Effective January 1, 2020, Official Payments Corporation, a wholly owned subsidiary, changed its name to ACI Payments, Inc. An amended and restated certificate of incorporation was filed with the state of Delaware to reflect the change. The Official Payments Corporation name and corresponding trade name may continue to be used until all stationary and marketing materials are transitioned to ACI Payments, Inc. equivalents.

New Accounting Standards Recently Adopted

In June 2016, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") 2016-13, *Financial Instruments – Credit Losses: Measurement of Credit Losses on Financial Instruments,* codified as ASC 326. Subsequent amendments to the guidance were issued as follows: ASU 2018-19 in November 2018; ASU 2019-04 in April 2019; ASU 2019-05 in May 2019; ASU's 2019-10 and 2019-11 in November 2019; and ASU 2020-02 in February 2020. This ASU provides financial statement users with more decision-useful information about the expected credit losses on financial instruments and other commitments to extend credit held by a reporting entity at each reporting date. The amendments in ASU 2016-13 replace the incurred loss impairment methodology in current U.S. GAAP with a methodology that reflects expected credit losses and requires consideration of a broader range of reasonable and supportable information to inform credit loss estimates. The Company is required to use a forward-looking expected credit loss model for billed and accrued receivables. The Company adopted ASU 2016-13 as of January 1, 2020. The adoption of ASU 2016-13 did not have a material impact on the condensed consolidated financial statements.

In February 2020, the FASB issued ASU 2020-03, *Codification Improvements to Financial Instruments*, which clarifies or improves various financial instruments topics in the accounting standards codification to increase stakeholder awareness. ASU 2020-03 was effective upon issuance and did not have a material impact on the condensed consolidated financial statements.

In March 2020, the FASB issued ASU 2020-04, *Reference Rate Reform (Topic 848): Facilitation of the Effects of Reference Rate Reform on Financial Reporting.* The update provides optional guidance for a limited period of time to ease potential accounting impacts associated with transitioning away from reference rates that are expected to be discontinued, such as the London Interbank Offered Rate ("LIBOR"). This guidance includes optional expedients and exceptions for applying U.S. GAAP to transactions affected by reference rate reform if certain criteria are met. ASU 2020-04 is effective for all entities as of March 12, 2020, through December 31, 2022, when the reference rate replacement activity is expected to be completed. The adoption of ASU 2020-04 did not have an impact on the Company's condensed consolidated financial statements.

Recently Issued Accounting Standards Not Yet Effective

In December 2019, the FASB issued ASU 2019-12, *Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes*, as part of its initiative to reduce complexity in accounting standards. The amendments in this update simplify the accounting for income taxes by removing certain exceptions within ASC 740, as well as clarify and simplify other aspects of the accounting for income taxes to promote consistency among reporting entities. ASU 2019-12 is effective for annual and interim periods beginning after December 15, 2020. The Company is currently assessing the impact the adoption of ASU 2019-12 will have on its condensed consolidated financial statements.

2. Revenue

In accordance with ASC 606, *Revenue From Contracts With Customers*, 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. See Note 10, *Segment Information,* for additional information, including disaggregation of revenue based on primary solution category and geographic location.

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, software as a service ("SaaS"), and platform as a service ("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 subsequent to invoicing.

Total receivables, net is comprised of the following (in thousands):

	September 30, 2020	December 31, 2019
Billed receivables	$ 168,973	$ 213,654
Allowance for doubtful accounts	(3,517)	(5,149)
Billed receivables, net	165,456	208,505
Accrued receivables	380,300	399,302
Significant financing component	(30,375)	(35,569)
Total accrued receivables, net	349,925	363,733
Less: current accrued receivables	154,665	161,714
Less: current significant financing component	(10,625)	(11,022)
Total long-term accrued receivables, net	205,885	213,041
Total receivables, net	$ 515,381	$ 572,238

No customer accounted for more than 10% of the Company's consolidated receivables balance as of September 30, 2020, or December 31, 2019.

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 (in thousands):

Balance, December 31, 2019	$ 118,939
Deferral of revenue	108,976
Recognition of deferred revenue	(96,379)
Foreign currency translation	(252)
Balance, September 30, 2020	$ 131,284

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:

- Revenue that will be recognized in future periods from capacity overages that are accounted for as a usage-based royalty.
- SaaS and PaaS revenue from variable consideration that will be recognized in accordance with the 'right to invoice' practical expedient.
- 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 $731.7 million as of September 30, 2020, of which the Company expects to recognize approximately 39% over the next 12 months and the remainder thereafter.

During the three and nine months ended September 30, 2020 and 2019, revenue recognized by the Company from performance obligations satisfied in previous periods was not significant.

3. Acquisition

Speedpay

On May 9, 2019, the Company acquired Speedpay, a subsidiary of The Western Union Company ("Western Union"), for $754.1 million in cash, including working capital adjustments, pursuant to a Stock Purchase Agreement, among the Company, Western Union, and ACI Worldwide Corp., a wholly owned subsidiary of the Company. The Company has included the financial results of Speedpay in the condensed consolidated financial statements from the date of acquisition. The combination of the Company and Speedpay bill pay solutions serves more than 4,000 customers across the U.S., bringing expanded reach in existing and complementary market segments such as consumer finance, insurance, healthcare, higher education, utilities, government, and mortgage. The acquisition of Speedpay increased the scale of the Company's On Demand platform business and allows the acceleration of platform innovation through increased research and development and investment in ACI's On Demand platform infrastructure.

To fund the acquisition, the Company amended its existing Credit Agreement, dated February 24, 2017, for an additional $500.0 million senior secured term loan ("Delayed Draw Term Loan"), in addition to drawing $250.0 million on the available Revolving Credit Facility. See Note 4, *Debt*, for terms of the Credit Agreement. The remaining acquisition consideration was funded with cash on hand.

The Company expensed approximately $0.9 million and $22.2 million of costs related to the acquisition of Speedpay for the three and nine months ended September 30, 2019, respectively. These costs, which consist primarily of investment bank, consulting, and legal fees, are included in general and administrative expenses in the accompanying condensed consolidated statements of operations.

Speedpay contributed approximately $80.3 million and $249.2 million in total revenue for the three and nine months ended September 30, 2020, respectively. Due to integration activities, the Company is no longer able to separately identify the contribution to operating income generated from the acquisition of Speedpay for the three and nine months ended September 30, 2020.

Speedpay contributed approximately $87.7 million and $137.1 million in total revenue for the three and nine months ended September 30, 2019, respectively. Speedpay contributed approximately $7.5 million and $15.2 million in total operating income for the three and nine months ended September 30, 2019, respectively.

In connection with the acquisition, the Company recorded the following amounts based upon its purchase price allocation as of September 30, 2020 (in thousands, except weighted average useful lives):

	Amount	Weighted Average Useful Lives
Current assets:		
Cash and cash equivalents	$ 135	
Receivables, net of allowances	17,658	
Settlement assets	239,604	
Prepaid expenses	317	
Other current assets	19,585	
Total current assets acquired	277,299	
Noncurrent assets:		
Goodwill	366,508	
Software	113,600	7 years
Customer relationships	208,500	15 years
Trademarks	10,900	5 years
Other noncurrent assets	3,745	
Total assets acquired	980,552	
Current liabilities:		
Accounts payable	6,623	
Settlement liabilities	212,892	
Employee compensation	1,959	
Other current liabilities	3,802	
Total current liabilities acquired	225,276	
Noncurrent liabilities:		
Other noncurrent liabilities	1,219	
Total liabilities acquired	226,495	
Net assets acquired	$ 754,057	

During the nine months ended September 30, 2020, the Company made adjustments to the preliminary purchase price allocation as additional information became available for accounts payable. These adjustments and any resulting adjustments to the statements of operations were not material to the Company’s previously reported operating results or financial position. The Company's review of the purchase price allocation has been completed.

Factors contributing to the purchase price that resulted in the goodwill (which is tax deductible) include the acquisition of management, sales, and technology personnel with the skills to market new and existing products of the Company, enhanced product capabilities, complementary products, and customers.

Unaudited Pro Forma Financial Information

The pro forma financial information in the table below presents the combined results of operations for ACI and Speedpay as if the acquisition had occurred January 1, 2018. The pro forma information is shown for illustrative purposes only and is not necessarily indicative of future results of operations of the Company or results of operations of the Company that would have actually occurred had the transaction been in effect for the periods presented. This pro forma information is not intended to represent or be indicative of actual results had the acquisition occurred as of the beginning of each period, and does not reflect potential synergies, integration costs, or other such costs or savings.

Certain pro forma adjustments have been made to net income for the three and nine months ended September 30, 2019, to give effect to estimated adjustments that remove the amortization expense on eliminated Speedpay historical identifiable intangible assets, add amortization expense for the value of acquired identified intangible assets (primarily acquired software, customer relationships, and trademarks), and add estimated interest expense on the Company's additional Delayed Draw Term Loan and Revolving Credit Facility borrowings. Additionally, certain transaction expenses that are a direct result of the acquisition have been excluded. The three and nine months ended September 30, 2020, are not presented, as Speedpay is included in the Company's consolidated results for the entire periods.

The following is the unaudited summarized pro forma financial information (in thousands, except per share data):

	Three Months Ended September 30, 2019	Nine Months Ended September 30, 2019
Pro forma revenue	$ 354,901	$ 983,037
Pro forma net income	$ 32,513	$ 26,517
Pro forma income per share:		
Basic	$ 0.28	$ 0.23
Diluted	$ 0.27	$ 0.22

Walletron

On May 9, 2019, the Company also completed the acquisition of Walletron, which delivers patented mobile wallet technology. The Company has included the financial results of Walletron in the condensed consolidated financial statements from the date of acquisition, which were not material.

4. Debt

As of September 30, 2020, the Company had $160.0 million, $726.8 million, and $400.0 million outstanding under its Revolving Credit Facility, Term Loan, and Senior Notes, respectively, with up to $338.5 million of unused borrowings under the Revolving Credit Facility portion of the Credit Agreement, as amended, and up to $1.5 million of unused borrowings under the Letter of Credit agreement. The amount of unused borrowings actually available varies in accordance with the terms of the agreement.

Credit Agreement

On April 5, 2019, the Company (and its wholly-owned subsidiaries, ACI Worldwide Corp. and ACI Payments, Inc. entered into the Second Amended and Restated Credit Agreement (the "Credit Agreement") with the lenders, and Bank of America, N.A., as administrative agent for the lenders, to amend and restate the Company's existing agreement, as amended, dated February 24, 2017.

The Credit Agreement consists of (a) a five-year $500.0 million senior secured revolving credit facility (the "Revolving Credit Facility"), which includes sublimits for (1) the issuance of standby letters of credit and (2) swingline loans, (b) a five-year $279.0 million senior secured term loan facility (the "Initial Term Loan") and (c) a five-year $500.0 million Delayed Draw Term Loan (together with the Initial Term Loan, the "Term Loans", and together with the Initial Term Loan and 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 Credit Facility will mature on April 5, 2024.

At the Company's option, borrowings under the Credit Facility bear interest at an annual rate equal to, either (a) a base rate determined by reference to the highest of (1) the annual interest rate publicly announced by the administrative agent as its Prime Rate, (2) the federal funds effective rate plus 1/2 of 1%, or (3) a London Interbank Offered Rate ("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 borrowings, adjusted for certain additional costs, plus an applicable margin. Based on the calculation of the applicable consolidated total leverage ratio, the applicable margin for borrowings under the Credit Facility is 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 for the Credit Facility as of September 30, 2020, was 2.40%.

The Company is also required to pay (a) a commitment fee related to the unutilized commitments under the Revolving Credit Facility, payable quarterly in arrears, (b) 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 an annual basis, payable quarterly in arrears, and (c) 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 collateral agreement of the Credit Agreement, as amended, released the lien on certain assets of ACI Payments, Inc., our electronic bill presentment and payment affiliate, to allow ACI Payments, Inc. to comply with certain eligible securities and unencumbered asset requirements related to money transmitter or transfer license rules and regulations.

The Credit Agreement contains a number of covenants that, among other things and subject to certain exceptions, restrict the Company's and its subsidiaries' ability 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.

Letter of Credit

On August 12, 2020, the Company entered into a standby letter of credit (the "Letter of Credit"), under the terms of the Credit Agreement, for $1.5 million. The Letter of Credit expires on July 31, 2021, with automatic renewals for twelve month periods thereafter. The Letter of Credit reduces the maximum available borrowings under the Revolving Credit Facility to $498.5 million. Upon expiration of the Letter of Credit, maximum borrowings will return to $500.0 million.

Expected Discontinuation of LIBOR

In July 2017, the United Kingdom's Financial Conduct Authority, which regulates LIBOR, announced it will no longer compel banks to submit rates for the calculation of LIBOR after 2021. The Alternative Reference Rates Committee has proposed the Secured Overnight Financing Rate ("SOFR") as its recommended alternative to LIBOR, and the first publication of SOFR rates was released in April 2018.

The Company is evaluating the potential impact of the transition from LIBOR as an interest rate benchmark to other potential alternative reference rates, including SOFR. The Company's Credit Agreement is currently indexed to LIBOR and the maturity date of the Credit Agreement extends beyond 2021. The Credit Agreement contemplates the discontinuation of LIBOR and provides options for the Company in such an event. The Company will continue to actively assess the related opportunities and risks involved in this transition.

Senior Notes

On August 21, 2018, the Company completed a $400.0 million offering of 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 an annual rate of 5.750%, payable semi-annually in arrears on February 15 and August 15 of each year. The 2026 Notes will mature on August 15, 2026.

Maturities on debt outstanding as of September 30, 2020, are as follows (in thousands):

Fiscal Year Ending December 31,		
Remainder of 2020	$	9,738
2021		38,950
2022		50,431
2023		69,906
2024		717,823
Thereafter		400,000
Total	$	1,286,848

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. In addition, the Credit Agreement and 2026 Notes contain certain customary mandatory prepayment provisions. 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. As specified in the Credit Agreement and 2026 Notes agreement, if certain events occur and continue, the Company may be required to repay all amounts outstanding under the Credit Facility and 2026 Notes. As of September 30, 2020, and at all times during the period, the Company was in compliance with its financial debt covenants.

Total debt is comprised of the following (in thousands):

		September 30, 2020		**December 31, 2019**
Term loans	$	726,848	$	756,060
Revolving credit facility		160,000		239,000
5.750% Senior notes, due August 2026		400,000		400,000
Debt issuance costs		(18,293)		(21,905)
Total debt		1,268,555		1,373,155
Less: current portion of term loans		38,950		38,950
Less: current portion of debt issuance costs		(4,714)		(4,802)
Total long-term debt	$	1,234,319	$	1,339,007

Overdraft Facility

In 2019, the Company and ACI Payments, Inc. entered in to a $140.0 million uncommitted overdraft facility with Bank of America, N.A. The overdraft facility bears interest at LIBOR plus 0.875% based on the Company’s average outstanding balance and the frequency in which overdrafts occur. The overdraft facility acts as a secured loan under the terms of the Credit Agreement to provide an additional funding mechanism for timing differences that can occur in the bill payment settlement process. Amounts outstanding on the overdraft facility are included in other current liabilities in the condensed consolidated balance sheet. As of September 30, 2020, there was no amount outstanding on the overdraft facility. As of December 31, 2019, there was $1.5 million outstanding on the overdraft facility.

Other

The Company finances certain multi-year license agreements for internal-use software. Upon execution, these arrangements have been treated as a non-cash investing and financing activity for purposes of the condensed consolidated statements of cash flows. As of September 30, 2020, $10.0 million was outstanding, of which $7.8 million and $2.2 million is included in other current liabilities and other noncurrent liabilities, respectively, in the condensed consolidated balance sheet. As of December 31, 2019, $13.8 million was outstanding, of which $6.0 million and $7.8 million was included in other current liabilities and other noncurrent liabilities, respectively, in the condensed consolidated balance sheet.

5. Stock-Based Compensation Plans

Employee Stock Purchase Plan

Shares issued under the 2017 Employee Stock Purchase Plan during the nine months ended September 30, 2020 and 2019, totaled 114,709 and 92,765, respectively.

2020 Equity and Incentive Compensation Plan

On June 9, 2020, upon recommendation of the Company's board of directors (the "board"), stockholders approved the ACI Worldwide, Inc. 2020 Equity and Incentive Compensation Plan (the "2020 Plan"). The 2020 Plan authorizes the board to provide for equity-based compensation in the form of stock options, stock appreciation rights, restricted stock, restricted stock units, performance shares, performance units, dividend equivalents, and certain other awards, including those denominated or payable in, or otherwise based on, the Company's common stock ("awards"). The purpose of the 2020 Plan is to provide incentives and rewards for service and/or performance by providing awards to non-employee directors, officers, other employees, and certain consultants and other service providers of the Company and its subsidiaries. Following the approval of the 2020 Plan, the 2016 Equity and Performance Incentive Plan (the "2016 Incentive Plan") was terminated. Termination of the 2016 Incentive Plan did not affect any equity awards outstanding under the 2016 Incentive Plan.

Subject to adjustment and share counting rules as described in the 2020 Plan, a total of 6,658,754 shares of common stock are available for awards granted under the 2020 Plan. Shares underlying certain awards under the 2020 Plan, the Company's 2005 Equity and Performance Incentive Plan (the "2005 Incentive Plan"), and the 2016 Incentive Plan (each including as amended or amended and restated) that are cancelled or forfeited, expire, are settled for cash, or are unearned after June 9, 2020, will again be available under the 2020 Plan.

The board generally will be able to amend the 2020 Plan, subject to stockholder approval in certain circumstances, as described in the 2020 Plan.

Stock Options

A summary of stock option activity 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, 2019	4,006,816	$ 18.18		
Exercised	(1,428,829)	19.00		
Forfeited	(57,744)	19.08		
Expired	(6,090)	18.44		
Outstanding as of September 30, 2020	2,514,153	$ 17.70	4.17	$ 21,206,451
Exercisable as of September 30, 2020	2,366,917	$ 17.55	4.34	$ 20,304,026

The total intrinsic value of stock options exercised during the nine months ended September 30, 2020 and 2019, was $14.3 million and $6.9 million, respectively. There were no stock options granted during the nine months ended September 30, 2020 or 2019.

Long-term Incentive Program Performance Share Awards

A summary of nonvested long-term incentive program performance share awards (“LTIP performance shares”) is as follows:

	Number of Shares at Expected Attainment	Weighted Average Grant Date Fair Value
Nonvested as of December 31, 2019	669,469	$ 20.12
Vested	(668,240)	20.12
Forfeited	(5,368)	20.12
Change in attainment	4,139	20.12
Nonvested as of September 30, 2020	—	$ —

During the nine months ended September 30, 2020, a total of 668,240 LTIPs vested. The Company withheld 165,237 of those shares to pay the employees’ portion of the minimum payroll withholding taxes.

Restricted Share Awards

A summary of nonvested restricted share awards (“RSAs”) is as follows:

	Number of Shares	Weighted Average Grant Date Fair Value
Nonvested as of December 31, 2019	92,842	$ 20.13
Vested	(88,913)	20.12
Forfeited	(3,929)	20.35
Nonvested as of September 30, 2020	—	$ —

During the nine months ended September 30, 2020, a total of 88,913 RSAs vested. The Company withheld 28,233 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, 2020 and 2019, pursuant to the 2016 Incentive Plan, the Company granted total shareholder return awards (“TSRs”). 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%. To determine the grant date fair value of the TSRs, a Monte Carlo simulation model is used. The Company recognizes compensation expense for the TSRs over a three-year performance period based on the grant date fair value.

A summary of nonvested TSRs is as follows:

	Number of Shares	Weighted Average Grant Date Fair Value
Nonvested as of December 31, 2019	1,062,291	$ 35.77
Granted	677,195	30.01
Vested	(199,413)	24.37
Forfeited	(84,012)	39.01
Change in payout rate	(14,259)	24.37
Nonvested as of September 30, 2020	1,441,802	$ 34.56

During the nine months ended September 30, 2020, a total of 199,413 TSRs awards granted in fiscal 2017 vested and achieved a payout rate of 93% based on the Company's total shareholder return as compared to a group of peer companies over a three-year performance period. The Company withheld 53,033 of those shares to pay the employees’ portion of the minimum payroll withholding taxes.

The fair value of TSRs granted during the nine months ended September 30, 2020 and 2019, were estimated on the date of grant using the Monte Carlo simulation model, acceptable under ASC 718, using the following weighted average assumptions:

	Nine Months Ended September 30,	
	2020	2019
Expected life (years)	2.8	2.8
Risk-free interest rate	0.5 %	2.5 %
Expected volatility	31.4 %	29.3 %
Expected dividend yield	—	—

Restricted Share Units

During the nine months ended September 30, 2020 and 2019, pursuant to the 2020 Plan and the 2016 Incentive Plan, respectively, the Company granted restricted share unit awards ("RSUs"). RSUs generally have requisite service periods of three years and vest in increments of 33% on the anniversary of the grant dates. RSUs granted to our board vest one year from grant or as of the next annual shareholders meeting, whichever is earlier. Under each arrangement, RSUs are 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 is as follows:

	Number of Shares	Weighted Average Grant Date Fair Value
Nonvested as of December 31, 2019	1,009,404	$ 29.96
Granted	807,807	25.64
Vested	(403,865)	29.15
Forfeited	(121,284)	29.50
Nonvested as of September 30, 2020	1,292,062	$ 27.55

During the nine months ended September 30, 2020, a total of 403,865 RSUs vested. The Company withheld 110,689 of those shares to pay the employees' portion of the minimum payroll withholding taxes.

As of September 30, 2020, there were unrecognized compensation costs of $26.1 million related to nonvested RSUs, $23.5 million related to nonvested TSRs, and less than $0.1 million related to nonvested stock options, which the Company expects to recognize over weighted average periods of 1.9 years, 1.7 years, and 0.4 years, respectively.

The Company recorded stock-based compensation expense recognized under ASC 718 for the three months ended September 30, 2020 and 2019, of $8.1 million and $9.3 million, respectively, with corresponding tax benefits of $1.4 million and $1.5 million, respectively. The Company recorded stock-based compensation expense recognized under ASC 718 for the nine months ended September 30, 2020 and 2019, of $22.9 million and $30.3 million, respectively, with the corresponding tax benefits of $4.2 million and $5.5 million, respectively.

6. Software and Other Intangible Assets

The carrying amount and accumulated amortization of the Company's software assets subject to amortization at each balance sheet date are as follows (in thousands):

	September 30, 2020			December 31, 2019		
	Gross Carrying Amount	Accumulated Amortization	Net Balance	Gross Carrying Amount	Accumulated Amortization	Net Balance
Software for resale	$ 138,017	$ (127,535)	$ 10,482	$ 138,823	$ (122,061)	$ 16,762
Software for internal use	424,054	(230,297)	193,757	400,065	(182,310)	217,755
Total software	$ 562,071	$ (357,832)	$ 204,239	$ 538,888	$ (304,371)	$ 234,517

Amortization of software for resale is computed using the greater of (a) the ratio of current gross revenues to the total of current and future gross revenues expected to be derived from the software or (b) the straight-line method over the remaining estimated useful life of generally five to ten years. Software for resale amortization expense recorded during the three months ended September 30, 2020 and 2019, totaled $2.1 million and $2.8 million, respectively. Software for resale amortization expense recorded during the nine months ended September 30, 2020 and 2019, totaled $6.1 million and $8.8 million, respectively. These software amortization expense amounts are reflected in cost of revenue in the condensed consolidated statements of operations.

Amortization of software for internal use is computed using the straight-line method over an estimated useful life of generally one to ten years. Software for internal use amortization expense recorded during the three months ended September 30, 2020 and 2019, totaled $17.9 million and $15.7 million, respectively. Software for internal use amortization expense recorded during the nine months ended September 30, 2020 and 2019, totaled $53.1 million and $39.4 million, respectively. These software amortization expense amounts are reflected in depreciation and amortization in the condensed consolidated statements of operations.

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

	September 30, 2020			December 31, 2019		
	Gross Carrying Amount	Accumulated Amortization	Net Balance	Gross Carrying Amount	Accumulated Amortization	Net Balance
Customer relationships	$ 506,270	$ (185,981)	$ 320,289	$ 507,785	$ (160,775)	$ 347,010
Trademarks and trade names	27,385	(19,417)	7,968	27,312	(17,353)	9,959
Total other intangible assets	$ 533,655	$ (205,398)	$ 328,257	$ 535,097	$ (178,128)	$ 356,969

Other intangible assets amortization expense recorded during the three months ended September 30, 2020 and 2019, totaled $9.3 million and $9.4 million, respectively. Other intangible assets amortization expense recorded during the nine months ended September 30, 2020 and 2019, totaled $27.8 million and $22.5 million, respectively.

Based on capitalized intangible assets as of September 30, 2020, estimated amortization expense amounts in future fiscal years are as follows (in thousands):

Fiscal Year Ending December 31,	Software Amortization	Other Intangible Assets Amortization
Remainder of 2020	$ 18,476	$ 9,199
2021	64,445	36,632
2022	45,825	36,483
2023	29,267	36,168
2024	20,160	31,713
Thereafter	26,066	178,062
Total	$ 204,239	$ 328,257

7. Common Stock and Treasury Stock

In 2005, the board approved a stock repurchase program authorizing the Company, as market and business conditions warrant, to acquire its common stock and periodically authorize additional funds for the program. In February 2018, the board approved the repurchase of the Company's common stock of up to $200.0 million, in place of the remaining purchase amounts previously authorized.

The Company repurchased 1,000,000 shares for $28.9 million under the program during the nine months ended September 30, 2020. Under the program to date, the Company has repurchased 46,357,495 shares for approximately $612.3 million. As of September 30, 2020, the maximum remaining amount authorized for purchase under the stock repurchase program was $112.1 million.

8. Earnings Per Share

Basic earnings per share is computed in accordance with ASC 260, *Earnings Per Share*, based on weighted average outstanding common shares. Diluted earnings per share is computed based on basic weighted average outstanding common shares adjusted for the dilutive effect of stock options, RSUs, and certain contingently issuable shares for which performance targets have been achieved.

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

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Weighted average shares outstanding:				
Basic weighted average shares outstanding	116,558	116,169	116,217	116,337
Add: Dilutive effect of stock options and RSUs	1,246	2,138	1,427	2,123
Diluted weighted average shares outstanding	117,804	118,307	117,644	118,460

The diluted earnings per share computation excludes 1.5 million and 2.1 million options to purchase shares, RSUs, and contingently issuable shares during the three months ended September 30, 2020 and 2019, respectively, as their effect would be anti-dilutive. The diluted earnings per share computation excludes 1.7 million and 2.1 million options to purchase shares, RSUs, and contingently issuable shares during the nine months ended September 30, 2020 and 2019, respectively, as their effect would be anti-dilutive.

Common stock outstanding as of September 30, 2020, and December 31, 2019, was 116,730,946 and 115,986,352, respectively.

9. Other, Net

Other, net is primarily comprised of foreign currency transaction gains and losses. Other, net was $1.4 million of income and $2.4 million of expense for the three months ended September 30, 2020 and 2019, respectively. Other, net was $6.4 million and $2.9 million of expense for the nine months ended September 30, 2020 and 2019, respectively.

10. Segment Information

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

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

ACI On Demand serves the needs of banks, merchants, and billers 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 for SaaS offerings, or in a multi-tenant environment for PaaS offerings.

ACI On Premise serves customers who manage their software on site or through a third-party public cloud environment. 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.

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 unallocated expenses consist 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 for the periods indicated (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Revenue				
ACI On Demand	$ 190,369	$ 192,952	$ 563,892	$ 475,299
ACI On Premise	125,514	161,949	343,386	383,075
Total revenue	$ 315,883	$ 354,901	$ 907,278	$ 858,374
Segment Adjusted EBITDA				
ACI On Demand	$ 33,204	$ 18,561	$ 89,396	$ 35,639
ACI On Premise	69,553	99,553	159,555	184,890
Depreciation and amortization	(35,490)	(33,913)	(105,004)	(88,543)
Stock-based compensation expense	(8,061)	(9,371)	(22,943)	(30,328)
Corporate and unallocated expenses	(28,024)	(19,512)	(71,967)	(80,315)
Interest, net	(9,998)	(15,999)	(35,457)	(36,906)
Other, net	1,356	(2,369)	(6,361)	(2,879)
Income (loss) before income taxes	$ 22,540	$ 36,950	$ 7,219	$ (18,442)
Depreciation and amortization				
ACI On Demand	$ 10,227	$ 9,059	$ 30,411	$ 25,110
ACI On Premise	3,312	2,963	9,849	9,012
Corporate	21,951	21,891	64,744	54,421
Total depreciation and amortization	$ 35,490	$ 33,913	$ 105,004	$ 88,543
Stock-based compensation expense				
ACI On Demand	$ 2,255	$ 2,389	$ 6,554	$ 6,554
ACI On Premise	2,259	2,227	6,568	6,234
Corporate	3,547	4,755	9,821	17,540
Total stock-based compensation expense	$ 8,061	$ 9,371	$ 22,943	$ 30,328

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

The following is revenue by primary geographic market and primary solution category for the Company's reportable segments for the periods indicated (in thousands):

	Three Months Ended September 30, 2020			Three Months Ended September 30, 2019		
	ACI On Demand	ACI On Premise	Total	ACI On Demand	ACI On Premise	Total
Primary Geographic Markets						
Americas - United States	$ 170,817	$ 28,392	$ 199,209	$ 176,172	$ 53,986	$ 230,158
Americas - Other	2,750	12,264	15,014	2,268	22,879	25,147
EMEA	14,564	64,748	79,312	12,191	72,662	84,853
Asia Pacific	2,238	20,110	22,348	2,321	12,422	14,743
Total	$ 190,369	$ 125,514	$ 315,883	$ 192,952	$ 161,949	$ 354,901
Primary Solution Categories						
Bill Payments	$ 149,385	$ —	$ 149,385	$ 154,285	$ —	$ 154,285
Digital Channels	8,583	5,890	14,473	8,480	6,791	15,271
Merchant Payments	20,720	8,201	28,921	18,534	4,739	23,273
Payments Intelligence	9,037	8,849	17,886	8,759	13,623	22,382
Real-Time Payments	806	12,357	13,163	1,032	19,191	20,223
Retail Payments	1,838	90,217	92,055	1,862	117,605	119,467
Total	$ 190,369	$ 125,514	$ 315,883	$ 192,952	$ 161,949	$ 354,901

	Nine Months Ended September 30, 2020			Nine Months Ended September 30, 2019		
	ACI On Demand	ACI On Premise	Total	ACI On Demand	ACI On Premise	Total
Primary Geographic Markets						
Americas - United States	$ 505,191	$ 106,192	$ 611,383	$ 425,033	$ 116,104	$ 541,137
Americas - Other	8,402	31,455	39,857	7,118	46,237	53,355
EMEA	42,006	148,129	190,135	36,751	167,268	204,019
Asia Pacific	8,293	57,610	65,903	6,397	53,466	59,863
Total	$ 563,892	$ 343,386	$ 907,278	$ 475,299	$ 383,075	$ 858,374
Primary Solution Categories						
Bill Payments	$ 440,193	$ —	$ 440,193	$ 348,592	$ —	$ 348,592
Digital Channels	24,304	21,224	45,528	36,280	24,960	61,240
Merchant Payments	61,147	17,903	79,050	55,815	17,398	73,213
Payments Intelligence	29,902	16,904	46,806	26,614	27,164	53,778
Real-Time Payments	2,807	54,608	57,415	2,557	55,714	58,271
Retail Payments	5,539	232,747	238,286	5,441	257,839	263,280
Total	$ 563,892	$ 343,386	$ 907,278	$ 475,299	$ 383,075	$ 858,374

The following is the Company's long-lived assets by geographic location for the periods indicated (in thousands):

	September 30, 2020	December 31, 2019
Long-lived Assets		
United States	$ 1,469,111	$ 1,526,046
Other	732,595	759,501
Total	$ 2,201,706	$ 2,285,547

No single customer accounted for more than 10% of the Company's consolidated revenues during the three and nine months ended September 30, 2020 and 2019. No other country outside the United States accounted for more than 10% of the Company's consolidated revenues during the three and nine months ended September 30, 2020 and 2019.

11. Income Taxes

For the three and nine months ended September 30, 2020, the Company's effective tax rate was 30% and 24%, respectively, with the Company reporting tax expense on pretax income. The Company's foreign entities recognized earnings of $23.4 million and $19.7 million for the three and nine months ended September 30, 2020, respectively. The effective tax rate for the three and nine months ended September 30, 2020, was negatively impacted by a change in tax rates in certain countries.

For the three and nine months ended September 30, 2019, the Company's effective tax rate was 14% and 163%, respectively. The Company reported a tax charge on pretax income for the three months ended September 30, 2019, and a tax benefit on pretax loss for the nine months ended September 30, 2019. The Company's foreign entities recognized earnings of $16.6 million and $21.5 million for the three and nine months ended September 30, 2019, respectively. The effective tax rate for the three months ended September 30, 2019, was positively impacted by the release of an uncertain tax position due to the statute of limitations expiration. The effective tax rate for the nine months ended September 30, 2019, was positively impacted by state income tax benefits on a domestic loss. In addition, the Company released a majority of its valuation allowance established against its U.S. foreign tax credit deferred tax asset, resulting in a non-cash benefit to income tax expense of approximately $18.5 million. The Company released the valuation allowance following the acquisition of Speedpay, determining it would more likely than not be able to utilize the foreign tax credits in future years due to additional income provided by Speedpay.

The Company's effective tax rate could fluctuate on a quarterly basis due to the occurrence of significant and unusual or infrequent items, such as vesting of stock-based compensation or foreign currency gains and losses. 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.

As of September 30, 2020, and December 31, 2019, the amount of unrecognized tax benefits for uncertain tax positions was $30.1 million and $29.0 million, respectively, excluding related liabilities for interest and penalties of $1.2 million as of September 30, 2020, and December 31, 2019.

The Company believes it is reasonably possible that the total amount of unrecognized tax benefits will decrease within the next 12 months by approximately $11.7 million, due to the settlement of various audits and the expiration of statutes of limitation.

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 forward-looking statements in this report are expressly qualified by the risk factors discussed in our filings with the Securities and Exchange Commission ("SEC"). The cautionary statements in this report expressly qualify all of our forward-looking statements. Factors that could cause actual results to differ from those expressed or implied in the forward-looking statements include, but are not limited to, those discussed in our Risk Factors in Part 1, Item 1A of our Annual Report on Form 10-K for the fiscal year ended December 31, 2019, and in Part 2, Item 1A of this Form 10-Q.

The following discussion should be read together with our Annual Report on Form 10-K for the fiscal year ended December 31, 2019, and with our financial statements and related notes contained in this Form 10-Q. Results for the three and nine months ended September 30, 2020, are not necessarily indicative of results that may be attained in the future.

COVID-19 Pandemic

The COVID-19 pandemic resulted in authorities implementing numerous measures to try to contain the virus. These measures may remain in place for a significant period of time and adversely affect our business, operations and financial condition as well as the business, operations and financial conditions of our customers and business partners. The spread of the virus has also caused us to modify our business practices (including employee work locations and cancellation of physical participation in meetings) in ways that may be detrimental to our business (including working remotely and its attendant cybersecurity risks). We may take further actions as may be required by government authorities or that we determine are in the best interests of our employees and customers. There is no certainty that such measures will be sufficient to mitigate the risks posed by the virus or otherwise be satisfactory to government authorities.

We created a dedicated Crisis Management Team to oversee and execute our business continuity plans and a variety of measures designed to ensure the ongoing availability of our products, solutions and services for our customers, while taking health and safety measures for our employees, including telecommuting, travel restrictions, social distancing policies, and stepped-up facility cleaning practices.

We believe we have sufficient liquidity to continue business operations during this volatile and uncertain period. We have $472.3 million of available liquidity as of September 30, 2020, consisting of cash on hand and availability under our revolving credit facility. To begin to address the potential long-term financial impacts of the virus, we have delayed non-essential capital spending and operating expenses.

The pandemic presents potential new risks to the Company's business. We began to see the impacts of COVID-19 on certain customer transaction volumes in late March and continued to see changes through the third quarter of 2020, primarily within our Merchants and Billers customer base of our ACI On Demand segment. The effect of COVID-19 and related events, including those described above, could have an ongoing negative effect on our stock price, business prospects, financial condition, and results of operations. More specifically, for those customers under consumption-based contracts, continued declines in transaction volumes could negatively impact the Company's financial position, results of operations, and cash flows.

For the reasons discussed above, ACI cannot reasonably estimate with any degree of certainty the future impact COVID-19 may have on the Company's results of operations, financial position, and liquidity. Notwithstanding any actions by national, state, and local governments to mitigate the impact of COVID-19 or by the Company to address the adverse impacts of COVID-19, there can be no assurance that any of the foregoing activities will be successful in mitigating or preventing significant adverse effects on the Company.

Overview

ACI Worldwide powers electronic payments for more than 6,000 organizations around the world. More than 1,000 of the largest financial institutions and intermediaries, as well as thousands of global merchants, rely on ACI to execute $14 trillion each day in payments and securities. In addition, myriad organizations utilize our electronic bill presentment and payment services. Through our comprehensive suite of software solutions delivered on customers' premises, through a third-party public cloud environment or through ACI's private cloud, we provide real-time, immediate payments capabilities and enable the industry's most complete omni-channel payments experience.

Our products are sold and supported through distribution networks covering three geographic regions – the Americas; Europe, Middle East, and Africa ("EMEA"); and Asia/Pacific. Each distribution network has its own globally coordinated sales force that it supplements with independent reseller and/or distributor networks. Our products and solutions are used globally by banks, financial intermediaries, merchants, and billers, 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 brand.

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 also continue to maintain 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. In their 2019 World Payments Report, Capgemini predicts that non-cash transaction volumes will grow in volume at an annual rate of 14.0%, from 538.6 billion in 2017 to 1,045.5 billion in 2022, 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, through the sale of capacity upgrades to existing customers, and through the scalability of our platform-based solutions. Furthermore, electronic payments have taken on greater importance during the global COVID-19 crisis as consumers increasingly prefer cashless payment options and shift to shopping and paying bills online.

Adoption of real-time payments. Customer expectations, from both consumers and billers, 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, Brazil, Malaysia, Singapore, Thailand, the United States, and various countries in Europe. In Europe, the ECB TIPS and EBA RT1 schemes are driving real-time payments adoption, while in the U.S. market, Zelle and TCH Real-Time Payments are now driving adoption. 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 on and experience with the real-time execution of transactions and delivery of information through real-time tools, such as dashboards, will be valuable in addressing this trend.

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 U.S. Many of these companies are significantly larger than ACI and have significantly greater financial, technical, and marketing resources. As electronic payment transaction volumes increase, third-party processors tend to provide competitive solutions, particularly among customers that do not seek to differentiate their electronic payment offerings or are eliminating banks from the payments service. As consolidation in the financial services and financial technology industries continues, we anticipate that competition for those customers will intensify.

Adoption of cloud technology. To leverage lower-cost computing technologies, some banks, financial intermediaries, merchants, and billers are seeking to transition their systems to make use of cloud technology. Our investments and partnerships provide us the grounding to deliver cloud capabilities now and 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 billers 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 with advanced machine learning capabilities to help customers manage the growing levels of electronic payments fraud and compliance activity.

Adoption of smartcard technology. In many markets, issuers are being required to issue new cards with embedded chip technology, with the merchant liability shift having gone into effect in 2015 in the U.S. (and the fuel dispenser liability shift occurring later in 2020). 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.). While this combats card-present fraud, it results in greater card-not-present fraud (e.g., fraud at eCommerce sites).

Single Euro Payments Area (SEPA). 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 payment 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 ones that survive in the consolidated entity.

Global vendor sourcing. Global and regional banks, financial intermediaries, merchants, and billers are aiming to reduce the costs in supplier management by picking suppliers that 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 enables us to be successful in this internationally-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 payment 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 and have significantly greater financial, technical and marketing resources.

Mobile banking and payments. There is a growing demand for the ability to carry out banking services or make payments using a mobile phone. According to analysis from the Deloitte Center for Financial Services in 2018, 84% of global consumers use online banking and 72% use mobile banking applications. Additionally, digital channels are used more frequently than bank branches and ATMs across all generations and in all countries. 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. Nearly three out of four (73%) online payments are made at the billers' sites, rather than through banking websites. 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. ACI is supporting Billers during the COVID-19 crisis with new, automated tools that allow consumers to defer payments, set-up flexible payment plans, and request virtual appointments to discuss payment options.

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 accretive to our financial performance.

Chief Executive Officer

On February 18, 2020, we announced the appointment of Odilon Almeida as the Company's new President and Chief Executive Officer, effective March 9, 2020. Mr. Almeida was also appointed to serve as a member of ACI's board of directors.

Acquisition

Speedpay

On May 9, 2019, we acquired E Commerce Group Products, Inc. ("ECG"), a subsidiary of The Western Union Company, along with ECG's subsidiary, Speedpay, Inc. (collectively referred to as "Speedpay") for $754.1 million in cash, including working capital adjustments, pursuant to a Stock Purchase Agreement, among the Company, The Western Union Company, and ACI Worldwide Corp., our wholly owned subsidiary.

To fund the acquisition, we amended our existing Credit Agreement, dated February 24, 2017, for an additional $500.0 million senior secured term loan, in addition to drawing $250.0 million on the available Revolving Credit Facility. See Note 4, *Debt*, to our unaudited condensed consolidated financial statements in Part I of this Form 10-Q for terms of the Credit Agreement. The remaining acquisition consideration was funded with cash on hand.

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, service 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 we believe recognition of the related revenue will occur within the corresponding backlog period.

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.
- 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 by our customers.
- 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 consolidation activity within our markets and/or customers.

We review our customer renewal experience on an annual basis. The impact of this review and subsequent updates may result in a revision to the renewal assumptions used in computing the 60-month backlog estimates. In the event a significant 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, 2020, June 30, 2020, March 31, 2020, and December 31, 2019 (in millions). Dollar amounts reflect foreign currency exchange rates as of each period end.

	September 30, 2020	June 30, 2020	March 31, 2020	December 31, 2019
ACI On Demand	$ 3,868	$ 3,863	$ 3,781	$ 3,855
ACI On Premise	2,041	1,976	1,933	1,977
Total	$ 5,909	$ 5,839	$ 5,714	$ 5,832

	September 30, 2020	June 30, 2020	March 31, 2020	December 31, 2019
Committed	$ 2,189	$ 2,140	$ 2,095	$ 2,168
Renewal	3,720	3,699	3,619	3,664
Total	$ 5,909	$ 5,839	$ 5,714	$ 5,832

Estimates of future financial results require substantial judgment and are based on several assumptions, as described above. These assumptions may turn out to be inaccurate or wrong for reasons outside of management's control. For example, our customers may attempt to renegotiate or terminate their contracts for many reasons, including mergers, changes in their financial condition, or general changes in economic conditions (e.g. economic declines resulting from COVID-19) in the customer's industry or geographic location. We may also 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 recognized in future periods. Accordingly, there can be no assurance that amounts included in backlog estimates will 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 for items included in our condensed consolidated statements of operations (in thousands):

Three Month Period Ended September 30, 2020, Compared to the Three Month Period Ended September 30, 2019

	Three Months Ended September 30,					
	2020				2019	
	Amount	% of Total Revenue	$ Change vs 2019	% Change vs 2019	Amount	% of Total Revenue
Revenues:						
Software as a service and platform as a service	$ 190,369	60 %	$ (2,583)	(1)%	$ 192,952	54 %
License	56,773	18 %	(35,285)	(38)%	92,058	26 %
Maintenance	53,049	17 %	411	1 %	52,638	15 %
Services	15,692	5 %	(1,561)	(9)%	17,253	5 %
Total revenues	315,883	100 %	(39,018)	(11)%	354,901	100 %
Operating expenses:						
Cost of revenue	158,579	50 %	(15,589)	(9)%	174,168	49 %
Research and development	33,573	11 %	(2,970)	(8)%	36,543	10 %
Selling and marketing	22,154	7 %	(8,263)	(27)%	30,417	9 %
General and administrative	37,000	12 %	9,714	36 %	27,286	8 %
Depreciation and amortization	33,395	11 %	2,226	7 %	31,169	9 %
Total operating expenses	284,701	91 %	(14,882)	(5)%	299,583	85 %
Operating income	31,182	9 %	(24,136)	(44)%	55,318	15 %
Other income (expense):						
Interest expense	(12,925)	(4)%	6,062	(32)%	(18,987)	(5)%
Interest income	2,927	1 %	(61)	(2)%	2,988	1 %
Other, net	1,356	— %	3,725	(157)%	(2,369)	(1)%
Total other income (expense)	(8,642)	(3)%	9,726	(53)%	(18,368)	(5)%
Income before income taxes	22,540	6 %	(14,410)	(39)%	36,950	10 %
Income tax expense	6,674	2 %	1,538	30 %	5,136	1 %
Net income	$ 15,866	4 %	$ (15,948)	(50)%	$ 31,814	9 %

Revenues

Total revenue for the three months ended September 30, 2020, decreased $39.0 million, or 11%, as compared to the same period in 2019.

- The impact of certain foreign currencies strengthening against the U.S. dollar resulted in a $0.8 million increase in total revenue during the three months ended September 30, 2020, as compared to the same period in 2019.
- Adjusted for the impact of foreign currency, total revenue for the three months ended September 30, 2020, decreased $39.8 million, or 11%, compared to the same period in 2019.

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 condensed consolidated statements of operations. All fees from SaaS and PaaS arrangements that do 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.

SaaS and PaaS revenue decreased $2.6 million, or 1%, during the three months ended September 30, 2020, as compared to the same period in 2019.

- The impact of certain foreign currencies strengthening against the U.S. dollar resulted in a $0.5 million increase in SaaS and PaaS revenue during the three months ended September 30, 2020, as compared to the same period in 2019.
- Adjusted for the impact of foreign currency, SaaS and PaaS revenue for the three months ended September 30, 2020, decreased $3.1 million, or 2%, compared to the same period in 2019.
- The decrease was primarily due to a modest decline in transaction volumes within the Company's Biller customer base as a result of the impact of COVID-19.

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). The Company recognizes revenue in advance of billings for software license arrangements with extended payment terms and adjusts for the effects of the financing component, if significant.

License revenue decreased $35.3 million, or 38%, during the three months ended September 30, 2020, as compared to the same period in 2019.

- The impact of certain foreign currencies strengthening against the U.S. dollar resulted in a $0.4 million increase in license revenue during the three months ended September 30, 2020, as compared to the same period in 2019.
- Adjusted for the impact of foreign currency, license revenue for the three months ended September 30, 2020, decreased $35.7 million, or 39%, compared to the same period in 2019.
- The decrease was primarily driven the timing and relative size of license and capacity events during the three months ended September 30, 2020, as compared to the same period in 2019.

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 increased $0.4 million, or 1%, during the three months ended September 30, 2020, as compared to the same period in 2019.

- The impact of certain foreign currencies weakening against the U.S. dollar resulted in a $0.2 million decrease in maintenance revenue during the three months ended September 30, 2020, as compared to the same period in 2019.
- Adjusted for the impact of foreign currency, maintenance revenue for the three months ended September 30, 2020, increased $0.6 million, or 1%, compared to the same period in 2019.

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 $1.6 million, or 9%, during the three months ended September 30, 2020, as compared to the same period in 2019.

- The impact of foreign currencies was insignificant for services revenue during the three months ended September 30, 2020, as compared to the same period in 2019.
- The decrease was primarily driven by the timing and magnitude of project-related work during the three months ended September 30, 2020, as compared to the same period in 2019.

Operating Expenses

Total operating expenses for the three months ended September 30, 2020, decreased $14.9 million, or 5%, as compared to the same period in 2019.

- Total operating expenses for the three months ended September 30, 2020, included $12.3 million of significant transaction-related expenses associated with cost reduction strategies implemented during the period. Total operating expenses for the three months ended September 30, 2019, included $0.9 million of significant transaction-related expenses associated with the acquisition of Speedpay.
- The impact of certain foreign currencies weakening against the U.S. dollar resulted in a $0.3 million decrease in total operating expenses during the three months ended September 30, 2020, compared to the same period in 2019.
- Adjusted for the impact of significant transaction-related expenses and foreign currency, total operating expenses for the three months ended September 30, 2020, decreased $25.9 million, or 9%, compared to the same period in 2019.

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, amounts 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 $15.6 million, or 9%, during the three months ended September 30, 2020, compared to the same period in 2019.

- Cost of revenue for the three months ended September 30, 2020, included $1.2 million of significant transaction-related expenses associated with cost reduction strategies implemented during the period.
- The impact of certain foreign currencies weakening against the U.S. dollar resulted in a $0.2 million decrease in cost of revenue during the three months ended September 30, 2020, as compared to the same period in 2019.
- Adjusted for the impact of significant transaction-related expenses and foreign currency, cost of revenue decreased $16.6 million, or 10%, for the three months ended September 30, 2020, as compared to the same period in 2019.
- The decrease was primarily due to lower payment card interchange and processing fees, personnel and related expenses, and travel and entertainment expenses of $10.7 million, $4.1 million, and $1.2 million, respectively.

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 decreased $3.0 million, or 8%, during the three months ended September 30, 2020, as compared to the same period in 2019.

- The impact of foreign currencies was insignificant for R&D expense during the three months ended September 30, 2020, as compared to the same period in 2019.
- The decrease was primarily due to lower personnel and related expenses of $3.0 million.

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 decreased $8.3 million, or 27%, during the three months ended September 30, 2020, as compared to the same period in 2019.

- The impact of foreign currencies was insignificant for selling and marketing expense during the three months ended September 30, 2020, as compared to the same period in 2019.
- The decrease was primarily due to lower commissions, professional fees, and travel and entertainment expenses of $3.4 million, $2.3 million, and $1.8 million, respectively.

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 $9.7 million, or 36%, during the three months ended September 30, 2020, as compared to the same period in 2019.

- General and administrative expenses for the three months ended September 30, 2020, included $10.8 million of significant transaction-related expenses associated with cost reduction strategies implemented during the period. General and administrative expenses for the three months ended September 30, 2019, included $0.7 million of significant transaction-related expenses associated with the acquisition of Speedpay.
- The impact of certain foreign currencies weakening against the U.S. dollar resulted in a $0.2 million decrease in general and administrative expense during the three months ended September 30, 2020, as compared to the same period in 2019.
- Adjusted for the impact of significant transaction-related expenses and foreign currency, general and administrative expense decreased $0.2 million, or 1%, for the three months ended September 30, 2020, as compared to the same period in 2019, primarily due to a decrease in travel and entertainment expenses.

Depreciation and Amortization

Depreciation and amortization increased $2.2 million, or 7%, during the three months ended September 30, 2020, as compared to the same period in 2019.

- The impact of certain foreign currencies strengthening against the U.S. dollar resulted in a $0.1 million increase in depreciation and amortization during the three months ended September 30, 2020, as compared to the same period in 2019.
- Adjusted for the impact of foreign currency, depreciation and amortization increased $2.1 million, or 7%, for the three months ended September 30, 2020, as compared to the same period in 2019, primarily due to additional amortization of internal-use software in our On Demand business.

Other Income and Expense

Interest expense for the three months ended September 30, 2020, decreased $6.1 million, or 32%, as compared to the same period in 2019, primarily due to lower comparative debt balances and lower interest rates.

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, 2020 decreased $0.1 million, or 2%, as compared to the same period in 2019.

Other, net is primarily comprised of foreign currency transaction gains and losses. Other, net was $1.4 million of income and $2.4 million of expense for the three months ended September 30, 2020 and 2019, respectively.

Income Taxes

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

RESULTS OF OPERATIONS

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

Nine Month Period Ended September 30, 2020, Compared to the Nine Month Period Ended September 30, 2019

	Nine Months Ended September 30,					
	2020				2019	
	Amount	% of Total Revenue	$ Change vs 2019	% Change vs 2019	Amount	% of Total Revenue
Revenues:						
Software as a service and platform as a service	$ 563,892	62 %	$ 89,884	19 %	$ 474,008	55 %
License	135,038	15 %	(30,639)	(18)%	165,677	19 %
Maintenance	159,078	18 %	(593)	— %	159,671	19 %
Services	49,270	5 %	(9,748)	(17)%	59,018	7 %
Total revenues	907,278	100 %	48,904	6 %	858,374	100 %
Operating expenses:						
Cost of revenue	471,762	52 %	27,413	6 %	444,349	52 %
Research and development	108,175	12 %	(3,797)	(3)%	111,972	13 %
Selling and marketing	76,692	8 %	(16,117)	(17)%	92,809	11 %
General and administrative	102,684	11 %	(5,438)	(5)%	108,122	13 %
Depreciation and amortization	98,928	11 %	19,149	24 %	79,779	9 %
Total operating expenses	858,241	94 %	21,210	3 %	837,031	98 %
Operating income	49,037	6 %	27,694	130 %	21,343	2 %
Other income (expense):						
Interest expense	(44,238)	(5)%	1,686	(4)%	(45,924)	(5)%
Interest income	8,781	1 %	(237)	(3)%	9,018	1 %
Other, net	(6,361)	(1)%	(3,482)	121 %	(2,879)	— %
Total other income (expense)	(41,818)	(5)%	(2,033)	5 %	(39,785)	(4)%
Income (loss) before income taxes	7,219	1 %	25,661	(139)%	(18,442)	(2)%
Income tax expense (benefit)	1,705	— %	31,723	(106)%	(30,018)	(3)%
Net income	$ 5,514	1 %	$ (6,062)	(52)%	$ 11,576	1 %

Revenues

Total revenue for the nine months ended September 30, 2020, increased $48.9 million, or 6%, as compared to the same period in 2019.

- Speedpay contributed an incremental $123.3 million in total revenue during the nine months ended September 30, 2020, as compared to the same period in 2019.
- The impact of certain foreign currencies weakening against the U.S. dollar resulted in a $4.4 million decrease in total revenue during the nine months ended September 30, 2020, as compared to the same period in 2019.
- Adjusted for the impact of incremental Speedpay revenue and foreign currency, total revenue for the nine months ended September 30, 2020, decreased $70.0 million, or 8%, compared to the same period in 2019.

Software as a Service (“SaaS”) and Platform as a Service (“PaaS”) Revenue

SaaS and PaaS revenue increased $89.9 million, or 19%, during the nine months ended September 30, 2020, as compared to the same period in 2019.

- Speedpay contributed an incremental $123.3 million in SaaS and PaaS revenue during the nine months ended September 30, 2020, as compared to the same period in 2019.
- The impact of certain foreign currencies weakening against the U.S. dollar resulted in $0.2 million decrease in SaaS and PaaS revenue during the nine months ended September 30, 2020, as compared to the same period in 2019.
- Adjusted for the impact of incremental revenue from Speedpay and foreign currency, SaaS and PaaS revenue for the nine months ended September 30, 2020, decreased $33.3 million, or 7%, compared to the same period in 2019.
- The decrease was primarily due to declines in transaction volumes within the Company's Biller customer base as a result of the impact of COVID-19 and declines in Digital Channels associated with customer attrition.

License Revenue

License revenue decreased $30.6 million, or 18%, during the nine months ended September 30, 2020, as compared to the same period in 2019.

- The impact of certain foreign currencies weakening against the U.S. dollar resulted in a $1.4 million decrease in license revenue during the nine months ended September 30, 2020, as compared to the same period in 2019.
- Adjusted for the impact of foreign currency, license revenue for the nine months ended September 30, 2020, decreased $29.2 million, or 18%, compared to the same period in 2019.
- The decrease was primarily driven by the timing and relative size of license and capacity events during the nine months ended September 30, 2020, as compared to the same period in 2019.

Maintenance Revenue

Maintenance revenue decreased $0.6 million during the nine months ended September 30, 2020, as compared to the same period in 2019.

- The impact of certain foreign currencies weakening against the U.S. dollar resulted in a $2.1 million decrease in maintenance revenue during the nine months ended September 30, 2020, as compared to the same period in 2019.
- Adjusted for the impact of foreign currency, maintenance revenue for the nine months ended September 30, 2020, increased $1.5 million, or 1%, compared to the same period in 2019.

Services Revenue

Services revenue decreased $9.7 million, or 17%, during the nine months ended September 30, 2020, as compared to the same period in 2019.

- The impact of certain foreign currencies weakening against the U.S. dollar resulted in a $0.7 million decrease in services revenue during the nine months ended September 30, 2020, as compared to the same period in 2019.
- Adjusted for the impact of foreign currency, services revenue for the nine months ended September 30, 2020, decreased $9.0 million, or 15%, compared to the same period in 2019.
- The decrease was primarily driven by the timing and magnitude of project-related work during the nine months ended September 30, 2020, as compared to the same period in 2019.

Operating Expenses

Total operating expenses for the nine months ended September 30, 2020, increased $21.2 million, or 3%, as compared to the same period in 2019.

- Speedpay contributed an incremental $105.5 million to total operating expenses during the nine months ended September 30, 2020, as compared to the same period in 2019.
- Total operating expenses for the nine months ended September 30, 2020, included $25.8 million of significant transaction-related expenses associated with the acquisition of Speedpay and cost reduction strategies implemented during the period. Total operating expenses for the nine months ended September 30, 2019, included $22.2 million of significant transaction-related expenses associated with the acquisition of Speedpay.
- The impact of certain foreign currencies weakening against the U.S. dollar resulted in a $6.1 million decrease in total operating expenses for the nine months ended September 30, 2020, as compared to the same period in 2019.
- Adjusted for the impact of incremental Speedpay operating expenses, significant transaction-related expenses, and foreign currency, total operating expenses for the nine months ended September 30, 2020, decreased $81.7 million, or 10%, compared to the same period in 2019.

Cost of Revenue

Cost of revenue increased $27.4 million, or 6%, during the nine months ended September 30, 2020, compared to the same period in 2019.

- Speedpay contributed an incremental $84.9 million to cost of revenue during the nine months ended September 30, 2020, as compared to the same period in 2019.
- Cost of revenue for the nine months ended September 30, 2020, included $3.4 million of significant transaction-related expenses associated with the acquisition of Speedpay and cost reduction strategies implemented during the period.
- The impact of certain foreign currencies weakening against the U.S. dollar resulted in a $2.4 million decrease in cost of revenue during the nine months ended September 30, 2020, as compared to the same period in 2019.
- Adjusted for the impact of incremental Speedpay expense, significant transaction-related expenses, and foreign currency, cost of revenue decreased $58.6 million, or 13%, for the nine months ended September 30, 2020, as compared to the same period in 2019.
- The decrease was primarily due to lower payment card interchange and processing fees, personnel and related expenses, amortization of acquired software, and travel and entertainment expenses of $37.6 million, $15.6 million,$2.6 million, and $2.5 million, respectively.

Research and Development

R&D expense decreased $3.8 million, or 3%, during the nine months ended September 30, 2020, as compared to the same period in 2019.

- Speedpay contributed an incremental $4.1 million to R&D expense during the nine months ended September 30, 2020, as compared to the same period in 2019.
- The impact of certain foreign currencies weakening against the U.S. dollar resulted in a $1.7 million decrease in R&D expense during the nine months ended September 30, 2020, as compared to the same period in 2019.
- Adjusted for the impact of incremental Speedpay expense and foreign currency, R&D expense decreased $6.3 million, or 6%, for the nine months ended September 30, 2020, as compared to the same period in 2019, primarily due to lower personnel and related expenses.

Selling and Marketing

Selling and marketing expense decreased $16.1 million, or 17%, during the nine months ended September 30, 2020, as compared to the same period in 2019.

- Speedpay contributed an incremental $3.9 million to selling and marketing expense during the nine months ended September 30, 2020, as compared to the same period in 2019.
- The impact of certain foreign currencies weakening against the U.S. dollar resulted in a $1.2 million decrease in selling and marketing expense for the nine months ended September 30, 2020, as compared to the same period in 2019.
- Adjusted for the impact of incremental Speedpay expense and foreign currency, selling and marketing expense decreased $18.9 million, or 21%, for the nine months ended September 30, 2020, as compared to the same period in 2019.
- The decrease was primarily due to lower personnel and related expenses, commissions, professional fees, and travel and entertainment expenses of $6.6 million, $6.0 million, $4.4 million, and $1.9 million respectively.

General and Administrative

General and administrative expense decreased $5.4 million, or 5%, during the nine months ended September 30, 2020, as compared to the same period in 2019.

- Speedpay contributed an incremental $0.7 million to general and administrative expense during the nine months ended September 30, 2020, as compared to the same period in 2019.
- General and administrative expenses for the nine months ended September 30, 2020 included $21.8 million of significant transaction-related expenses associated with cost reduction strategies implemented during the period. General and administrative expense for the nine months ended September 30, 2019, included $21.8 million of significant transaction-related expenses associated with the acquisition of Speedpay.
- The impact of certain foreign currencies weakening against the U.S. dollar resulted in a $0.6 million decrease in general and administrative expenses during the nine months ended September 30, 2020, as compared to the same period in 2019.
- Adjusted for the impact of incremental Speedpay expense, significant transaction-related expenses, and foreign currency, general and administrative expense decreased $5.5 million, or 6%, for the nine months ended September 30, 2020, as compared to the same period in 2019.
- The decrease was primarily due to lower personnel and related expenses and travel and entertainment expenses of $4.2 million and $1.3 million, respectively.

Depreciation and Amortization

Depreciation and amortization increased $19.1 million, or 24%, during the nine months ended September 30, 2020, as compared to the same period in 2019.

- Speedpay contributed an incremental $11.9 million of depreciation and amortization expense during the nine months ended September 30, 2020, as compared to the same period in 2019.
- The impact of certain foreign currencies weakening against the U.S. dollar resulted in a $0.2 million decrease in depreciation and amortization expense during the nine months ended September 30, 2020, as compared to the same period in 2019.
- Adjusted for the impact of incremental Speedpay expense and foreign currency, depreciation and amortization increased $7.5 million, or 9%, for the nine months ended September 30, 2020, as compared to the same period in 2019, primarily due to additional amortization of internal-use software in our On Demand business.

Other Income and Expense

Interest expense for the nine months ended September 30, 2020, decreased $1.7 million, or 4%, as compared to the same period in 2019, primarily due to lower interest rates, partially offset by higher comparative debt balances.

Interest income for the nine months ended September 30, 2020, decreased $0.2 million, or 3%, as compared to the same period in 2019.

Other, net was $6.4 million and $2.9 million of expense for the nine months ended September 30, 2020 and 2019, respectively. Foreign currency loss was higher in 2020 due to the market volatility in the wake of the COVID-19 pandemic.

Income Taxes

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

Segment Results

We report financial performance based on our segments, ACI On Demand and ACI On Premise, and analyze Segment Adjusted EBITDA as a measure of segment profitability.

Our Chief Executive Officer is also our chief operating decision maker (“CODM”). The CODM, together with other senior management personnel, focus their review on consolidated financial information and the allocation of resources based on operating results, including revenues and Segment Adjusted EBITDA, for each segment, separate from the corporate operations.

ACI On Demand serves the needs of banks, merchants, and billers 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 for SaaS offerings, or in a multi-tenant environment for PaaS offerings.
ACI On Premise serves customers who manage their software on site or through a third-party public cloud environment. 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.

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. We also allocate 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 our 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 unallocated expenses consist 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 our reportable segments for the periods indicated (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Revenue				
ACI On Demand	$ 190,369	$ 192,952	$ 563,892	$ 475,299
ACI On Premise	125,514	161,949	343,386	383,075
Total revenue	$ 315,883	$ 354,901	$ 907,278	$ 858,374
Segment Adjusted EBITDA				
ACI On Demand	$ 33,204	$ 18,561	$ 89,396	$ 35,639
ACI On Premise	69,553	99,553	159,555	184,890
Depreciation and amortization	(35,490)	(33,913)	(105,004)	(88,543)
Stock-based compensation expense	(8,061)	(9,371)	(22,943)	(30,328)
Corporate and unallocated expenses	(28,024)	(19,512)	(71,967)	(80,315)
Interest, net	(9,998)	(15,999)	(35,457)	(36,906)
Other, net	1,356	(2,369)	(6,361)	(2,879)
Income (loss) before income taxes	$ 22,540	$ 36,950	$ 7,219	$ (18,442)
Depreciation and amortization				
ACI On Demand	$ 10,227	$ 9,059	$ 30,411	$ 25,110
ACI On Premise	3,312	2,963	9,849	9,012
Corporate	21,951	21,891	64,744	54,421
Total depreciation and amortization	$ 35,490	$ 33,913	$ 105,004	$ 88,543
Stock-based compensation expense				
ACI On Demand	$ 2,255	$ 2,389	$ 6,554	$ 6,554
ACI On Premise	2,259	2,227	6,568	6,234
Corporate	3,547	4,755	9,821	17,540
Total stock-based compensation expense	$ 8,061	$ 9,371	$ 22,943	$ 30,328

ACI On Demand Segment Adjusted EBITDA increased $14.6 million for the three months ended September 30, 2020, compared to the same period in 2019. The increase was primarily due to a $17.2 million decrease in cash operating expense, partially offset by a $2.6 million decrease in revenue.

ACI On Demand Segment Adjusted EBITDA increased $53.8 million for the nine months ended September 30, 2020, compared to the same period in 2019, of which $30.0 million was due to the acquisition of Speedpay. Excluding the impact of the acquisition of Speedpay, ACI On Demand Segment Adjusted EBITDA increased $23.8 million, primarily due to a $58.5 million decrease in cash operating expense, partially offset by a $34.7 million decrease in revenue.

ACI On Premise Segment Adjusted EBITDA decreased $30.0 million for the three months ended September 30, 2020, compared to the same period in 2019, primarily due to a $6.4 million decrease in cash operating expense, partially offset by a $36.4 million decrease in revenue.

ACI On Premise Segment Adjusted EBITDA decreased $25.3 million for the nine months ended September 30, 2020, compared to the same period in 2019, primarily due to a $14.4 million decrease in cash operating expense, partially offset by a $39.7 million decrease in revenue.

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.

Our cash requirements in the future may be financed through additional equity or debt financings. However, the disruption in the capital markets caused by the COVID-19 pandemic could make any new financing more challenging, and there can be no assurance that such financings will be obtained on commercially reasonable terms, or at all. We believe our liquidity will allow us to manage the anticipated impact of COVID-19 on our business operations for the foreseeable future, which could include reductions in revenue and delays in payments from customers and partners. We are compliant with our debt covenants and do not anticipate an inability to service our debt. As the challenges posed by COVID-19 on our business and the economy as a whole evolve rapidly, we will continue to evaluate our liquidity and financial position in light of future developments, particularly those relating to COVID-19.

Available Liquidity

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

	September 30, 2020	December 31, 2019
Cash and cash equivalents	$ 133,845	$ 121,398
Availability under revolving credit facility	338,500	261,000
Total liquidity	$ 472,345	$ 382,398

The increase in total liquidity is primarily attributable to positive operating cash flows of $192.1 million, partially offset by $35.6 million of payments to purchase property and equipment and software and distribution rights, $29.2 million of repayments on the Term Loans and $28.9 million of payments related to stock repurchases. We also repaid a net $79.0 million on the Revolving Credit Facility.

The Company and ACI Payments, Inc., a wholly owned subsidiary, maintain a $140.0 million uncommitted overdraft facility with Bank of America, N.A. The overdraft facility acts as a secured loan under the terms of the Credit Agreement to provide an additional funding mechanism for timing differences that can occur in the bill payment settlement process. As of September 30, 2020, the full $140.0 million was available.

Cash and cash equivalents consist of highly liquid investments with original maturities of three months or less. As of September 30, 2020, we had $133.8 million of cash and cash equivalents, of which $59.9 million 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. As of September 30, 2020, only the earnings in our Indian foreign subsidiaries are indefinitely reinvested. The earnings of all other foreign entities are no longer indefinitely reinvested. We are also permanently reinvested for outside book/tax basis difference related to foreign subsidiaries. These outside basis differences could reverse through sales of the foreign subsidiaries, as well as various other events, none of which are considered probable as of September 30, 2020.

Cash Flows

The following table sets forth summarized cash flow data for the periods indicated (in thousands):

	Nine Months Ended September 30,	
	2020	**2019**
Net cash provided by (used by):		
Operating activities	$ 192,058	$ 88,938
Investing activities	(35,647)	(813,046)
Financing activities	(148,916)	695,699

Cash Flows from Operating Activities

Net cash flows provided by operating activities during the nine months ended September 30, 2020, were $192.1 million as compared to $88.9 million during the same period in 2019. Net cash provided by operating activities primarily consists of net income adjusted to add back depreciation, amortization, and stock-based compensation. Cash flows provided by operating activities were $103.1 million higher for the nine months ended September 30, 2020, compared to the same period in 2019, primarily due to the incremental impact of Speedpay and improvements in the timing of working capital. 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 2020, we used cash of $35.6 million to purchase software, property, and equipment, as compared to $37.3 million during the same period in 2019. During the first nine months of 2019, we paid $753.9 million, net of $0.1 million in cash acquired, to acquire Speedpay and used cash of $18.5 million to invest in a payment technology and services company in India.

Cash Flows from Financing Activities

Net cash flows used by financing activities for the nine months ended September 30, 2020, were $148.9 million as compared to net cash flows provided by financing activities of $695.7 million during the same period in 2019. During the first nine months of 2020, we repaid a net $79.0 million on the Revolving Credit Facility and $29.2 million on the Term Loans. In addition, we used $28.9 million to repurchase common stock and $11.2 million for the repurchase of stock-based compensation awards for tax withholdings. We also received proceeds of $9.4 million from the exercise of stock options and the issuance of common stock under our 2017 Employee Stock Purchase Plan, as amended. During the first nine months of 2019, we received proceeds of $500.0 million from our Delayed Draw Term Loan and $280.0 million from our Revolving Credit Facility to fund our purchase of Speedpay and stock repurchases, and we repaid $19.2 million on the Initial Term Loan and $15.0 million on the Revolving Credit Facility. In addition, we received proceeds of $9.3 million from the exercise of stock options and the issuance of common stock under our 2017 Employee Stock Purchase Plan, as amended. We also used $35.6 million to repurchase common stock and $2.8 million for the repurchase of stock-based compensation awards 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 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 and debt service requirements, for the next twelve months and foreseeable future.

Debt

As of September 30, 2020, we had $160.0 million and $726.8 million outstanding under our Revolving Credit Facility and Term Loans, respectively, with up to $338.5 million of unused borrowings under the Revolving Credit Facility, as amended, and up to $1.5 million of unused borrowings under the Letter of Credit agreement. The interest rate in effect for the Credit Facility as of September 30, 2020, was 2.40%. As of September 30, 2020, we also had $400.0 million outstanding of the 2026 Notes.

On August 12, 2020, we entered a standby letter of credit agreement (the “Letter of Credit”), under the terms of the Credit Agreement, for $1.5 million. The Letter of Credit expires on July 31, 2021, with automatic renewal for twelve month periods thereafter. The Letter of Credit reduces the maximum available borrowings under our Revolving Credit Facility to $498.5 million. Upon expiration of the Letter of Credit, maximum borrowings will return to $500.0 million.

See Note 4, *Debt,* to our unaudited condensed consolidated financial statements in Part I of this Form 10-Q for additional information.

Stock Repurchase Program

We repurchased 1,000,000 shares for $28.9 million under the program during the nine months ended September 30, 2020. Under the program to date, we have repurchased 46,357,495 shares for approximately $612.3 million. As of September 30, 2020, the maximum remaining amount authorized for purchase under the stock repurchase program was approximately $112.1 million. See Note 7, *Common Stock and Treasury Stock,* to our unaudited condensed consolidated financial statements in Part I of this Form 10-Q for additional information.

Contractual Obligations and Commercial Commitments

For the nine months ended September 30, 2020, 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, 2019.

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 as of September 30, 2020, is $30.1 million.

Critical Accounting Estimates

The preparation of the condensed consolidated financial statements requires us to 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 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.

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

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

During the nine months ended September 30, 2020, there were no significant changes to our critical accounting policies and estimates. 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, 2019, 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, 2020. 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. 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. In those instances where our goods and services have already been sold, receivables may be more difficult to collect. Additionally, in jurisdictions where the revenue contracts are denominated in U.S. dollars and operating expenses are incurred in the local currency, any decline in the value of the U.S. dollar will have an unfavorable impact to operating margins. At times, we enter into revenue contracts that are denominated in the country's local currency, primarily in Australia, Canada, the United Kingdom, other European countries, Brazil, India, and Singapore. 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 speculation or arbitrage.

The primary objective of our cash investment policy is to preserve principal without significantly increasing risk. If we maintained similar cash investments for a period of one year based on our cash investments and interest rates on these investments at September 30, 2020, 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 $1.3 billion of debt outstanding as of September 30, 2020, with $886.8 million outstanding under our Credit Facility and $400.0 million in 2026 Notes. Our Credit Facility has a floating rate, which was 2.40% as of September 30, 2020. Our 2026 Notes are fixed-rate long-term debt obligations with a 5.750% interest rate. A hypothetical ten percent increase or decrease in effective interest rates would increase or decrease interest expense related to the Credit Facility by approximately $2.1 million.

ITEM 4. CONTROLS AND PROCEDURES

Disclosure Controls and Procedures

Management, under the supervision 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. Based on that evaluation, the Chief Executive Officer and Chief Financial Officer have concluded our disclosure controls and procedures are effective as of September 30, 2020.

Changes in Internal Control over Financial Reporting

There have been no changes in our internal control over financial reporting (as defined in Rules 13a-15(f) under the Exchange Act) during the quarter ended September 30, 2020, that have materially affected, or are reasonably likely to materially affect, our 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, 2019, other than as disclosed in "COVID-19 Pandemic" in Part 1, Item 2 ("Management's Discussion and Analysis of Financial Condition and Results of Operations") of this report, which is incorporated into this item by reference.

The ongoing COVID-19 pandemic could adversely affect our business, results of operations and financial condition.

The COVID-19 pandemic may also have the effect of heightening many of the other risks described in Item 1A of our Form 10-K for the fiscal year ended December 31, 2019, including risks associated with slowing global economic conditions, demand for our products, delays or cancellations of customer projects, failures to obtain renewals of customer contracts, and reluctance of prospective customers to switch to a new vendor.

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

Issuer Purchases of Equity Securities

The following table provides information regarding our repurchases of common stock during the three months ended September 30, 2020:

Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Program	Approximate Dollar Value of Shares that May Yet Be Purchased Under the Program
July 1, 2020 through July 31, 2020	—	$ —	—	$ 112,088,000
August 1, 2020 through August 31, 2020	—	—	—	112,088,000
September 1, 2020 through September 30, 2020	1,037 (1)	24.97	—	112,088,000
Total	1,037	$ 24.97	—	

(1) Pursuant to our 2016 Incentive Plan, we granted RSUs. Under the RSU arrangement, shares are issued without direct cost to the employee. During the three months ended September 30, 2020, 4,260 shares of RSUs vested. We withheld 1,037 of these RSUs to pay the employees' portion of the applicable minimum payroll withholding.

In 2005, our board approved a stock repurchase program authorizing us, as market and business conditions warrant, to acquire our common stock and periodically authorize additional funds for the program, with the intention of using existing cash and cash equivalents to fund these repurchases. In February 2018, the board approved the repurchase of the Company's common stock for up to $200.0 million, in place of the remaining purchase amounts previously authorized. As of September 30, 2020, the maximum remaining amount authorized for purchase under the stock repurchase program was approximately $112.1 million.

There is no guarantee as to the exact number of shares we will repurchase. Repurchased shares are returned to the status of authorized but unissued shares of common stock. In March 2005, our board 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 of 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.

ITEM 6. EXHIBITS

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

Exhibit No.		Description
3.01	(1)	ACI Worldwide, Inc. Restated Certificate of Incorporation
3.02	(2)	ACI Worldwide, Inc. Amended and Restated Bylaws of the Company
4.01	(3)	Form of Common Stock Certificate (P)
10.01	(4)*	Form of Nonqualified Stock Option Agreement – Employee for the Company's 2005 Equity and Performance Incentive Plan, as amended
10.02	(5)*	Form of 2015 Supplemental Nonqualified Stock Option Agreement - Employee for the Company's 2005 Equity and Performance Incentive Plan, as amended
10.03	(6)*	Form of 2015 Nonqualified Stock Option Agreement - Employee for the Company's 2005 Equity and Performance Incentive Plan, as amended
10.04	(7)*	Form of 2016 Nonqualified Stock Option Agreement for the Company's 2016 Equity and Performance Incentive Plan, as amended
10.05	(8)*	ACI Worldwide, Inc. 2020 Equity and Incentive Compensation Plan
10.06	(9)*	Form of Restricted Share Unit Award Agreement for the Company's 2020 Equity and Incentive Compensation Plan
10.07	(10)*	Form of Performance Share Award Agreement for the Company's 2020 Equity and Incentive Compensation Plan
31.01		Certification of Principal Executive Officer pursuant to SEC Rule 13a-14, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.02		Certification of Principal Financial Officer pursuant to SEC Rule 13a-14, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.01	**	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
32.02	**	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
101.INS		XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL 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
104		Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)

* Denotes exhibit that constitutes a management contract, or compensatory plan or arrangement.
** 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 10.01 to the registrant's quarterly report on Form 10-Q for the period ended March 31, 2020.
(5) Incorporated herein by reference to Exhibit 10.02 to the registrant's quarterly report on Form 10-Q for the period ended March 31, 2020.
(6) Incorporated herein by reference to Exhibit 10.03 to the registrant's quarterly report on Form 10-Q for the period ended March 31, 2020.
(7) Incorporated herein by reference to Exhibit 10.04 to the registrant's quarterly report on Form 10-Q for the period ended March 31, 2020.
(8) Incorporated herein by reference to Appendix A to the registrant's definitive proxy statement on Schedule 14A (Commission File No. 000-25346) filed April 24, 2020.
(9) Incorporated herein by reference to Exhibit 10.06 to the registrant's quarterly report on Form 10-Q for the period ended June 30, 2020.
(10) Incorporated herein by reference to Exhibit 10.07 to the registrant's quarterly report on Form 10-Q for the period ended June 30, 2020.

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 5, 2020

By: /s/ SCOTT W. BEHRENS

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

Exhibit 31.01

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER

I, Odilon Almeida, 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 5, 2020

/s/ ODILON ALMEIDA

Odilon Almeida
President, Chief Executive Officer, and Director
(Principal Executive Officer)

Exhibit 31.02

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 5, 2020

/s/ SCOTT W. BEHRENS

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

Exhibit 32.01

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, 2020, as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, Odilon Almeida, 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 5, 2020

/s/ ODILON ALMEIDA

Odilon Almeida
President, Chief Executive Officer, and Director
(Principal Executive Officer)

Exhibit 32.02

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, 2020, 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 5, 2020

/s/ SCOTT W. BEHRENS

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