CSG SYSTEMS INTERNATIONAL INC

Form 10-Q November 09, 2018		
UNITED STATES		
SECURITIES AND EXCHANGE	E COMMISSION	
Washington, D.C. 20549		
FORM 10-Q		
(Mark One)		
QUARTERLY REPORT PURSU 1934 For the quarterly period ended Se		(d) OF THE SECURITIES EXCHANGE ACT OF
OR		
TRANSITION REPORT PURSU 1934 For the transition period from	JANT TO SECTION 13 OR 15	(d) OF THE SECURITIES EXCHANGE ACT OF
Commission file number 0-27512		
Commission the number 0-2/312		
CCC CYCTEMS INTERNATION	IAI ING	
CSG SYSTEMS INTERNATION		
(Exact name of registrant as speci	fied in its charter)	
	Delaware (State or other jurisdiction of	47-0783182 (I.R.S. Employer
6175 S. Willow Drive, 10 th Floor	incorporation or organization)	Identification No.)
Greenwood Village, Colorado 80	111	

(Address of principal executive offices, including zip code)

(303) 200-2000

(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 Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files).

YES NO

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

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

Shares of common stock outstanding at November 2, 2018: 33,328,416

CSG SYSTEMS INTERNATIONAL, INC.

FORM 10-Q for the Quarter Ended September 30, 2018

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CSG SYSTEMS INTERNATIONAL, INC.

CONDENSED CONSOLIDATED BALANCE SHEETS - UNAUDITED

(in thousands, except per share amounts)

	September 30, 2018	December 31, 2017
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 197,172	\$ 122,243
Short-term investments	2,130	139,117
Total cash, cash equivalents and short-term investments	199,302	261,360
Trade accounts receivable:		
Billed, net of allowance of \$4,182 and \$4,149	246,731	219,531
Unbilled	36,847	31,187
Income taxes receivable	7,452	13,839
Other current assets	38,706	28,349
Total current assets	529,038	554,266
Non-current assets:		
Property and equipment, net of depreciation of \$108,266 and \$123,126	78,265	44,651
Software, net of amortization of \$116,761 and \$108,986	31,953	26,906
Goodwill	210,697	210,080
Client contracts, net of amortization of zero and \$97,109	-	43,626
Acquired client contracts, net of amortization of \$81,286 and zero	39,863	-
Client contract costs, net of amortization of \$37,038 and zero	35,584	-
Deferred income taxes	11,011	14,057
Other assets	10,898	10,948
Total non-current assets	418,271	350,268
Total assets	\$ 947,309	\$ 904,534
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Current portion of long-term debt	\$ 7,500	\$ 22,500
Client deposits	36,079	31,053
Trade accounts payable	39,054	38,420
Accrued employee compensation	56,578	62,984
Deferred revenue	41,388	41,885
Income taxes payable	448	1,216
Other current liabilities	21,590	24,535
Total current liabilities	202,637	222,593
Non-current liabilities:		
Long-term debt, net of unamortized discounts of \$15,641 and \$18,264	353,109	309,236
Deferred revenue	13,578	12,346
Income taxes payable	2,372	2,415
Deferred income taxes	5,881	4,584
Other non-current liabilities	11,313	10,614
Total non-current liabilities	386,253	339,195
Total liabilities	588,890	561,788
Stockholders' equity:		
Preferred stock, par value \$.01 per share; 10,000 shares authorized; zero shares issued		
and outstanding	-	-

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Common stock, par value \$.01 per share; 100,000 shares authorized; 33,451 and				
33,516 shares outstanding	693		689	
Common stock warrants; 439 warrants vested; 1,425 issued	9,082		9,082	
Additional paid-in capital	436,412		427,091	
Treasury stock, at cost; 34,470 and 34,075 shares	(831,585)	(814,732)
Accumulated other comprehensive income (loss):				
Unrealized loss on short-term investments, net of tax	(7)	(88))
Cumulative foreign currency translation adjustments	(37,364)	(28,734)
Accumulated earnings	781,188		749,438	
Total stockholders' equity	358,419		342,746	
Total liabilities and stockholders' equity	\$ 947,309		\$ 904,534	
The accompanying notes are an integral part of these condensed consolidated financia	al statements.			

CSG SYSTEMS INTERNATIONAL, INC.

CONDENSED CONSOLIDATED STATEMENTS OF INCOME - UNAUDITED

(in thousands, except per share amounts)

	Quarter Ended	Nine Months Ended
	September Meptember 30 2018 2017), September 30, September 30, 2018 2017
Revenues:		
Cloud and related solutions	\$186,473 \$ 164,789	\$ 551,390 \$ 481,445
Software and services	14,283 15,726	39,573 46,680
Maintenance	12,299 18,680	36,829 56,253
Total revenues	213,055 199,195	627,792 584,378
Cost of revenues (exclusive of depreciation, shown		
separately below):		
Cloud and related solutions	95,092 79,856	277,212 233,194
Software and services	8,669 9,725	25,816 31,404
Maintenance	5,291 10,136	16,612 30,487
Total cost of revenues	109,052 99,717	319,640 295,085
Other operating expenses:		
Research and development	31,477 30,324	91,809 85,103
Selling, general and administrative	39,243 35,816	120,515 109,981
Depreciation	4,831 3,344	13,293 9,975
Restructuring and reorganization charges	2,799 1,618	7,028 4,597
Total operating expenses	187,402 170,819	552,285 504,741
Operating income	25,653 28,376	75,507 79,637
Other income (expense):		
Interest expense	(4,456) (4,186) (13,202) (12,638)
Amortization of original issue discount	(671) (634) (1,984) (2,147)
Interest and investment income, net	675 800	2,256 2,310
Loss on extinguishment of debt		(810) -
Other, net	(709) (970) (347) (1,123)
Total other	(5,161) (4,990) (14,087) (13,598)
Income before income taxes	20,492 23,386	61,420 66,039
Income tax provision	(4,391) (8,806) (16,188) (19,641)
Net income	\$16,101 \$ 14,580	\$ 45,232 \$ 46,398
Weighted-average shares outstanding:		
Basic	32,507 32,561	32,541 32,383
Diluted	32,806 32,901	32,939 32,825
Earnings per common share:		
Basic	\$0.50 \$ 0.45	\$ 1.39 \$ 1.43
Diluted	0.49 0.44	1.37 1.41
The eccempanying notes are an integral part of these conde		

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

CSG SYSTEMS INTERNATIONAL, INC.

CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME - UNAUDITED

(in thousands)

	Quarter E September 2018			onths Ended erSeptember 30, 2017
Net income	\$16,101	\$ 14,580	\$45,232	\$ 46,398
Other comprehensive income, net of tax:				
Foreign currency translation adjustments	(109)	5,609	(8,630)	15,173
Unrealized holding gains on short-term investments arising during	,			
period	107	7	81	154
Other comprehensive income (loss), net of tax	(2)	5,616	(8,549)	15,327
Total comprehensive income, net of tax	\$16,099	\$ 20,196	\$36,683	\$ 61,725
The accompanying notes are an integral part of these condensed condense condensed condensed condensed condensed condensed condensed cond	onsolidated	d financial state	ments.	

CSG SYSTEMS INTERNATIONAL, INC.

CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS - UNAUDITED

(in thousands)

	Nine Month September 2018	ns Ended 3 0 eptember 3 2017	30,
Cash flows from operating activities:			
Net income	\$45,232	\$ 46,398	
Adjustments to reconcile net income to net cash provided by operating activities-			
Depreciation	13,293	9,975	
Amortization	31,974	21,670	
Amortization of original issue discount	1,984	2,147	
Asset impairment	1,428	2,135	
Gain on short-term investments and other	(65)	(76)
Loss on extinguishment of debt	810	-	
Deferred income taxes	2,150	1,487	
Stock-based compensation	14,805	16,659	
Changes in operating assets and liabilities, net of acquired amounts:			
Trade accounts receivable, net	(15,952)	7,567	
Other current and non-current assets	(21,763)	(1,788)
Income taxes payable/receivable	5,365	1,715	
Trade accounts payable and accrued liabilities	(13,174)	(16,007)
Deferred revenue	7,182	10,940	
Net cash provided by operating activities	73,269	102,822	
Cash flows from investing activities:			
Purchases of software, property and equipment	(44,047)	(23,370)
Purchases of short-term investments	(53,285))
Proceeds from sale/maturity of short-term investments	190,467	150,768	,
Acquisition of and investments in business, net of cash acquired	(71,443)	•	
Acquisition of and investments in client contracts	(71,443)	(10,082)
Net cash provided by investing activities	21,692	1,113	,
	,	,	
Cash flows from financing activities:			
Proceeds from issuance of common stock	1,701	1,259	
Payment of cash dividends	(21,197))
Repurchase of common stock	(24,034)	(24,764)
Proceeds from long-term debt	150,000	-	
Payments on long-term debt	(123,750)	(11,250)
Settlement of convertible notes	-	(34,771)
Payments of deferred financing costs	(1,490)	-	
Net cash used in financing activities	(18,770)	(89,931)
Effect of exchange rate fluctuations on cash	(1,262)	2,396	
Net increase in cash and cash equivalents	74,929	16,400	
The increase in easi and easi equivalents	17,747	10,400	

Cash and cash equivalents, beginning of period	122,243	126,351
Cash and cash equivalents, end of period	\$197,172	\$ 142,751
Supplemental disclosures of cash flow information:		
Cash paid during the period for-		
Interest	\$14,181	\$ 13,638
Income taxes	8,426	16,407

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

CSG SYSTEMS INTERNATIONAL, INC.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

1. GENERAL

We have prepared the accompanying unaudited condensed consolidated financial statements as of September 30, 2018 and December 31, 2017, and for the quarters and nine months ended September 30, 2018 and 2017, in accordance with accounting principles generally accepted ("GAAP") in the United States of America ("U.S.") for interim financial information, and pursuant to the instructions to Form 10-Q and the rules and regulations of the Securities and Exchange Commission (the "SEC"). Accordingly, they do not include all of the information and footnotes required by U.S. GAAP for complete financial statements. In the opinion of our management, all adjustments (consisting only of normal recurring adjustments) considered necessary for a fair presentation of our financial position and operating results have been included. The unaudited Condensed Consolidated Financial Statements (the "Financial Statements") should be read in conjunction with the Consolidated Financial Statements and notes thereto, together with Management's Discussion and Analysis of Financial Condition and Results of Operations ("MD&A"), contained in our Annual Report on Form 10-K for the year ended December 31, 2017 (our "2017 10-K"), filed with the SEC. The results of operations for the quarter and nine months ended September 30, 2018 are not necessarily indicative of the expected results for the entire year ending December 31, 2018.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Use of Estimates in Preparation of Financial Statements. The preparation of the accompanying Financial Statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of our Financial Statements, and the reported amounts of revenues and expenses during the reporting periods. Actual results could differ from those estimates.

Revenue. We adopted Topic 606 Revenue from Contracts with Customers ("ASC 606") as of January 1, 2018 using the cumulative effect method and have applied ASC 606 to all contracts with clients that had not been completed as of the date of initial application. In conjunction with the adoption of ASC 606, we recorded a cumulative adjustment increasing beginning retained earnings (net of tax) by approximately \$7 million, primarily related to contracts that we were previously required to defer revenue as we did not have vendor specific objective evidence ("VSOE") of fair value for certain undelivered elements. Since we adopted ASC 606 using the cumulative effect method, comparative information in our Financial Statements has not been adjusted and continues to be as previously reported.

The following tables summarize the impacts of adopting ASC 606 on our Financial Statements as of and for the quarter and nine months ended September 30, 2018 (in thousands, except per share amounts):

	As of September 30, 2018		
			Balances
			without
Condensed Balance Sheet			adoption
	As		of ASC
	Reported	Adjustments	606

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Unbilled trade accounts receivable	\$36,847	\$ (533) \$36,314
Other current assets	38,706	4,014	42,720
Client contracts, net of amortization	-	66,364	66,364
Acquired client contracts, net of amortization	39,863	(39,863) -
Client contract costs, net of amortization	35,584	(35,584) -
Other non-current assets	10,898	5,069	15,967
Other assets	785,411	-	785,411
Total assets (1)	\$947,309	\$ (533) \$946,776
Deferred revenue	\$54,966	\$ 2,655	\$57,621
Deferred income taxes	5,881	8	5,889
Other liabilities	528,043	-	528,043
Total liabilities	588,890	2,663	591,553
Accumulated earnings	781,188	(3,196) 777,992
Other stockholders' equity	(422,769)	_	(422,769)
Total stockholders' equity	358,419	(3,196) 355,223
Total stockholders' equity and liabilities	\$947,309	\$ (533) \$946,776

⁽¹⁾ See Note 3 for further discussion related to the reclassification of our client contracts and client contract costs.

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	Quarter En	ded Septembe	r 30, 2018
Condensed Statement of Income	As Reported	Adjustments	Balances without adoption of ASC 606
Revenues:			
Cloud and related services (2)	\$186,473	\$ (6,162	\$180,311
Software and services (2)	14,283	1,589	15,872
Maintenance (2)	12,299	5,217	17,516
Total revenues	213,055	644	213,699
Cost of revenues:			
Cloud and related services (2)	95,092	(4,544)	90,548
Software and services (2)	8,669	208	8,877
Maintenance (2)	5,291	4,336	9,627
Total cost of revenues	109,052	-	109,052
Other expenses	83,511	-	83,511
Income before income taxes	20,492	644	21,136
Income tax provision	(4,391)	(187	(4,578)
Net income	\$16,101	\$ 457	\$16,558
Net income per diluted share	\$0.49	\$ 0.01	\$0.50

	Nine Months Ended September 30, 2018			
Condensed Statement of Income	As Reported	Adjustments	Balances without adoption of ASC 5 606	
Revenues:				
Cloud and related services (2)	\$551,390	\$ (19,294) \$532,096	
Software and services (2)	39,573	4,742	44,315	
Maintenance (2)	36,829	15,542	52,371	
Total revenues	627,792	990	628,782	
Cost of revenues:				
Cloud and related services (2)	277,212	(15,542) 261,670	
Software and services (2)	25,816	660	26,476	
Maintenance (2)	16,612	13,938	30,550	
Total cost of revenues	319,640	(944) 318,696	
Other expenses	246,732	-	246,732	
Income before income taxes	61,420	1,934	63,354	
Income tax provision	(16,188)	(561) (16,749)	
Net income	\$45,232	\$ 1,373	\$46,605	
Net income per diluted share	\$1.37	\$ 0.04	\$1.41	

⁽²⁾ Adjustments are primarily related to software license products and related maintenance contracted as part of our cloud solutions contracts that were not capable of being distinct as a separate performance obligation under ASC

606 and are included in cloud solutions services in the quarter and nine months ended September 30, 2018. Costs associated with these products were also reclassified to cost of cloud solution services in the quarter and nine months ended September 30, 2018.

Nine Months Ended September 30, 2018

	2018		
Condensed Statement of Cash Flows	As Reported	Adjustments	Balances without adoption of ASC 606
Net income	\$45,232	\$ 1,373	\$46,605
Adjustments to reconcile net income to net cash provided by operating activities -			
Amortization	31,974	(3,146	28,828
Deferred income taxes	2,150	561	2,711
Other	32,255	-	32,255
Changes in operating assets and liabilities:			
Other current and non-current assets	(21,763)	10,231	(11,532)
Deferred revenue	7,182	(1,689	5,493
Other	(23,761)	-	(23,761)
Net cash provided by operating activities	73,269	7,330	80,599
Cash flows from investing activities:			
Acquisition of and investments in client contracts	-	(7,330	(7,330)
Other	21,692	-	21,692
Net cash provided by (used in) investing activities	21,692	(7,330	14,362
Net cash used in financing activities	(18,770)	-	(18,770)
Effect of exchange rate fluctuations on cash	(1,262)	-	(1,262)
Net increase cash and cash equivalents	74,929	-	74,929
Cash and cash equivalents, beginning of period	122,243	-	122,243
Cash and cash equivalents, end of period	\$197,172	\$ -	\$197,172

As a result of adopting ASC 606, we have changed our accounting policies for revenue recognition as discussed in more detail below.

In summary, our revenue from client contracts is primarily related to our cloud and related solutions and, to a lesser degree, software and service and related maintenance arrangements, and is measured based on consideration specified within each of our contracts, excluding sales incentives and amounts collected on behalf of third parties, if any. We account for various products and services separately if they are distinct. A product or service, or group of products or services, is distinct if it is separately identifiable from other items in the context of the contract and if our client can benefit from the product or service on their own or with other resources that are readily available to that client. We recognize revenue when we satisfy our performance obligations by transferring control of a particular product or service, or group of products or services, to our clients, as described in more detail below. Taxes assessed on our products and services based on governmental authorities at the time of invoicing are excluded from our revenue.

Cloud and Related Solutions.

Our cloud and related solutions revenues relate to: (i) our software-as-a-service ("SaaS"), cloud-based, revenue management and digital monetization solutions, and various related ancillary services; and (ii) our managed services offering in which we operate software solutions (primarily our software solutions) on behalf of our clients.

We contract for our cloud-based solutions using long-term arrangements whose terms have typically ranged from three to five years. The long-term cloud-based arrangements include a series of multiple services delivered daily or monthly, to include such things as: (i) revenue and customer communications management services; (ii) business support services (e.g., workforce management tools, consumer credit verifications, etc.); (iii) content monetization and delivery functions; and (iv) customer statement invoice printing and mailing services. The fees for these services typically are billed to our clients monthly based upon actual monthly volumes and/or usage of services (e.g., the number of client customers maintained on our systems, the number of transactions processed on our systems, and/or the quantity and content of the monthly statements and mailings processed through our systems).

For cloud-based solution contracts, the total contract consideration (including impacts of discounts or incentives) is primarily variable dependent upon actual monthly volumes and/or usage of services; however, these contracts can also include ancillary fixed consideration in the form of one-time, monthly or annual fees. Although there may be multiple performance obligations, there is generally no allocation of value between the individual performance obligations as all are considered cloud and related solutions revenues that are recognized based on activities performed in each daily or monthly period.

We contract for managed services solutions using long-term arrangements whose terms have typically ranged from three to five years. Under managed services agreements, we may operate software products (primarily our software solutions) on behalf of our clients: (i) out of a client's data center; (ii) out of a data center we own and operate; or (iii) out of a third-party data center we contract with for such services. Managed services can also include us providing other services, such as transitional services, fulfillment, remittance processing, operational consulting, back office, and end user billing services.

For managed services contracts, the total contract consideration is typically a fixed fee, but these contracts may also have variable fee components. The fees for these services typically are billed to our clients on a monthly basis. Unless managed services are included with a software license contract (as discussed further below), there is generally only one performance obligation and revenue is recognized for these arrangements on a ratable basis as the services are performed.

Fees related to set-up or implementation activities for both cloud-based solution and managed services contracts are deferred and recognized ratably over the related service period to which the activities relate.

Depending on the significance of variable consideration, number of products/services, complex pricing structures and long-term nature of these types of contracts, the judgments and estimates made in this area could have a significant effect on the amount and timing of revenues recognized in any period.

Prior to the adoption of ASC 606, we recognized revenue related to our cloud and related solutions contracts on a monthly basis as we provided the services. The adoption of ASC 606 did not result in any significant changes to the timing of revenue recognition related to these contracts.

Software and Services.

Our software and services revenues relate primarily to: (i) software license sales on either a perpetual or term license basis; and (ii) professional services to implement the software. Our software and services contracts are often contracted in bundled arrangements that include not only the software license and related implementation services, but can also include maintenance, managed services and/or additional professional services.

For our software arrangements, the total contract consideration is allocated between the separate performance obligations based on stand-alone selling prices for software licenses, cost plus applicable margin for services and established pricing for maintenance. The initial sale of software products generally requires significant production, modification or customization, such that the delivery of the software license and the related professional services required to implement the software represent one combined performance obligation that is satisfied over time based of hours worked (hours-based method). We are using hours worked on the project as the measure to determine progress toward completion as we believe it is the most appropriate metric to measure such progress. The software and services fees are generally billed to our clients on a milestone or date basis.

The determination of the performance obligations and allocation of value for software license arrangements require significant judgment. We generally determine stand-alone selling prices using pricing calculations (which include regional market factors) for our software license fees and maintenance, and cost-plus margins for services. Additionally, our use of an hours-based method of accounting for software license and other professional services performance obligations that are satisfied over time requires estimates of total project revenues and costs, along with the expected hours necessary to complete a project. Changes in estimates as a result of additional information or experience on a project as work progresses are inherent characteristics of this method of revenue recognition as we are exposed to various business risks in completing these types of performance obligations. The estimation process to support our hours-based recognition method is more difficult for projects of greater length and/or complexity. The

judgments and estimates made in this area could: (i) have a significant effect on revenues recognized in any period by changing the amount and/or the timing of the revenue recognized; and/or (ii) impact the expected profitability of a project, including whether an overall loss on an arrangement has occurred. To mitigate the inherent risks in using this hours-based method, we track our performance on projects and reevaluate the appropriateness of our estimates as part of our monthly accounting cycle.

In certain instances, we sell software license volume upgrades, which provide our clients the right to use our software to process higher transaction volume levels. In these instances, we analyze the contract to determine if the volume upgrade is a separate performance obligation and if so, we recognize the value associated with the software license as revenue on the effective date of the volume upgrade.

A portion of our professional services revenues are contracted separately (e.g., business consulting services, etc.). Such contracts can either be on a fixed-price or time-and-materials basis. Revenues from fixed-price, professional service contracts are recognized using an hours-based method, as these professional services represent a performance obligation that is satisfied over time. Revenues from professional services contracts billed on a time-and-materials basis are recognized as the services are performed.

Prior to the adoption of ASC 606, we recognized revenue for our software arrangements under the guidelines of contract accounting as our software products required significant production, modification or customization and if we had VSOE of fair value for undelivered elements (e.g., maintenance), which we generally had, we would allocate a portion of the total arrangement fee to the undelivered element based on its VSOE of fair value, and the balance of the arrangement fee was recognized using the percentage-of-completion ("POC") method of accounting.

Maintenance

Our maintenance revenue relates primarily to support of our software once it has been implemented. Maintenance revenues are recognized ratably over the software maintenance period as services are provided. Our maintenance consists primarily of client and product support, technical updates (e.g., bug fixes, etc.), and unspecified upgrades or enhancements to our software products. If specified upgrades or enhancements are offered in a contract, which is rare, they are accounted for as a separate performance obligation. Maintenance can be invoiced to our clients on a monthly, quarterly or annual basis.

Transaction Price Allocated to the Remaining Performance Obligations

As of September 30, 2018, our aggregate amount of the transaction price allocated to the remaining performance obligations is approximately \$527 million, which is made up of fixed fee consideration and guaranteed minimums expected to be recognized in the future related to performance obligations that are unsatisfied (or partially unsatisfied). We expect to recognize approximately 70% of this amount by the end of 2020, with the remaining amount recognized by the end of 2028. We have excluded from this amount variable consideration expected to be recognized in the future related to performance obligations that are unsatisfied (a practical expedient allowed under ASC 606). The majority of our future revenue is related to our cloud and related solution client contracts that include variable consideration dependent upon a series of monthly volumes and/or daily usage of services and have contractual terms ending from 2019 through 2028.

We have not disclosed transaction price allocation to remaining performance obligations or an explanation thereof of comparable amounts as of December 31, 2017 (a transitional practical expedient allowed under ASC 606).

Disaggregation of Revenue

In the following table, revenue is disaggregated by geographic region (using the location of the client as the basis of attributing revenues to the individual regions):

	Quarter Er	nded	Nine Months Ended		
	September 30,		September	30,	
	2018	2017	2018	2017	
Americas (principally the U.S.)	\$180,489	\$169,880	\$530,609	\$497,852	
Europe, Middle East, and Africa	21,723	15,980	64,135	51,011	
Asia Pacific	10,843	13,335	33,048	35,515	
Total revenues	\$213,055	\$199,195	\$627,792	\$584,378	

Billed and Unbilled Accounts Receivable. Billed accounts receivable represents our unconditional rights to consideration. Once invoiced, our payment terms are generally between 30-60 days, and rarely do we have contracts with financing arrangements. Unbilled accounts receivable represents our rights to consideration for work completed but not billed. Unbilled accounts receivable is transferred to billed accounts receivable when the rights become unconditional which is generally at the time of invoicing.

The following table rolls forward our unbilled accounts receivable from December 31, 2017 to September 30, 2018 (in thousands):

	Unbilled Receivables
Beginning Balance, December 31, 2017	\$ 31,187
Cumulative effect adjustments	4,193
Reclassification - Adoption of ASC 606	(2,276)
Beginning Balance, January 1, 2018	\$ 33,104
Recognized during the period	168,198
Reclassified to receivables	(163,117)
Other	(1,338)
Ending Balance, September 30, 2018	\$ 36,847

Deferred Revenue. Deferred revenue represents consideration received from clients in advance of services being performed.

The following table rolls forward our deferred revenue from December 31, 2017 to September 30, 2018 (in thousands):

	Deferred
	Revenue
Beginning Balance, December 31, 2017	\$(54,231)
Cumulative effect adjustments	4,344
Reclassification - Adoption of ASC 606	2,276
Beginning Balance, January 1, 2018	\$(47,611)
Revenue recognized that was included in deferred revenue at the beginning of the period	35,575
Consideration received in advance of services performed net of revenue recognized in the current period	(44,218)
Other	1,288
Ending Balance, September 30, 2018	\$(54,966)

Cash and Cash Equivalents. We consider all highly liquid investments with original maturities of three months or less at the date of the purchase to be cash equivalents. As of September 30, 2018 and December 31, 2017, our cash equivalents consist primarily of institutional money market funds, commercial paper, and time deposits held at major banks.

As of September 30, 2018 and December 31, 2017, we had \$3.0 million and \$4.2 million, respectively, of restricted cash that serves to collateralize outstanding letters of credit. This restricted cash is included in cash and cash equivalents in our Condensed Consolidated Balance Sheets ("Balance Sheets").

Short-term Investments and Other Financial Instruments. Our financial instruments as of September 30, 2018 and December 31, 2017 include cash and cash equivalents, short-term investments, accounts receivable, accounts payable, and debt. Because of their short maturities, the carrying amounts of cash equivalents, accounts receivable, and accounts payable approximate their fair value.

Our short-term investments and certain of our cash equivalents are considered "available-for-sale" and are reported at fair value in our Balance Sheets, with unrealized gains and losses, net of the related income tax effect, excluded from earnings and reported in a separate component of stockholders' equity. Realized and unrealized gains and losses were not material in any period presented.

Primarily all short-term investments held by us as of September 30, 2018 and December 31, 2017 have contractual maturities of less than two years from the time of acquisition. Our short-term investments as of September 30, 2018 and December 31, 2017 consisted almost entirely of fixed income securities. Proceeds from the sale/maturity of short-term investments for the nine months ended September 30, 2018 and 2017 were \$190.5 million and \$150.8 million, respectively.

Our short-term investments as of September 30, 2018 and December 31, 2017 were \$2.1 million and \$139.1 million, respectively. The significant decrease in our short-term investments between periods is due primarily to the acquisition of Business Ink in February 2018 for approximately \$70 million and positioning of cash as of September 30, 2018 for the acquisition of Forte Payment Systems, Inc., which closed on October 1, 2018 for a purchase price of

approximately \$85 million, (approximately \$80 million, net of cash acquired), less approximately \$13 million in cash subject to certain tax filings (see Note 5).

The following table represents the fair value hierarchy based upon three levels of inputs, of which Levels 1 and 2 are considered observable and Level 3 is unobservable, for our financial assets and liabilities measured at fair value (in thousands):

	September 30, 2018		Decemb			
	Level 1	Level 2	Total	Level 1	Level 2	Total
Assets:						
Cash equivalents:						
Money market funds	\$14,828	\$ —	\$14,828	\$3,544	\$ —	\$3,544
Commercial paper	_		_	_	32,467	32,467
Short-term investments:						
Corporate debt securities	_				124,182	124,182
U.S. government agency bonds	_	1,542	1,542	_	1,547	1,547
Asset-backed securities	_	588	588	_	13,388	13,388
Total	\$14,828	\$2,130	\$16,958	\$3,544	\$171,584	\$175,128

Valuation inputs used to measure the fair values of our money market funds and corporate equity securities were derived from quoted market prices. The fair values of all other financial instruments are based upon pricing provided by third-party pricing services. These prices were derived from observable market inputs.

We have chosen not to measure our debt at fair value, with changes recognized in earnings each reporting period. The following table indicates the carrying value (par value for convertible debt) and estimated fair value of our debt as of the indicated periods (in thousands):

	September 30, 2018		December	31, 2017
	Carrying	Fair	Carrying	Fair
	Value	Value	Value	Value
2015 Credit Agreement (carrying value including current maturities)	\$ —	\$ —	\$120,000	\$120,000
2018 Credit Agreement (carrying value including current maturities)	146,250	146,250		
2016 Convertible debt (par value)	230,000	242,650	230,000	251,850

The fair value for our credit agreement was estimated using a discounted cash flow methodology, while the fair value for our convertible debt was estimated based upon quoted market prices or recent sales activity, both of which are considered Level 2 inputs. See Note 4 for additional discussion regarding an amendment to our Credit Agreement.

Equity Method Investment. On July 30, 2018, we made a \$2 million investment for a 4% noncontrolling financial interest in a payment technology and services company that enables omni-channel digital payments in Latin America. We are accounting for this investment using the equity method in accordance with Topic 323 Investments – Equity Method and Joint Ventures. Accordingly, we recorded an initial investment of \$2.8 million which includes direct costs of acquiring the investment. We will record our share of earnings and losses in the investment on a one-quarter lag basis which will result in an adjustment to our initial investment during the quarter-ending December 31, 2018.

Other Accounting Pronouncements Adopted. In October 2016, the FASB issued ASU 2016-16, Income Taxes (Topic 740) Intra-Entity Transfers of Assets Other Than Inventory. This ASU requires entities to recognize at the transaction date the income tax consequences of intercompany asset transfers. This ASU is effective in annual and interim periods in fiscal years beginning after December 15, 2017, with early adoption permitted, and requires a modified retrospective transition method. We adopted this ASU in January 2018 and the adoption of this standard did not have a material impact on our Financial Statements.

Accounting Pronouncement Issued But Not Yet Effective. In February 2016, the FASB issued ASU 2016-02, Leases (Topic 842). This ASU requires lessees to recognize a lease liability and a right-to-use asset for all leases, including operating leases, with a term greater than twelve months on its balance sheet. This ASU is effective in annual and interim periods in fiscal years beginning after December 15, 2018, with early adoption permitted. An entity may choose to adopt this ASU either retrospectively or prospectively as of the start of the first period for which it applies the standard (the effective date method).

In 2018, we started the process of evaluating the impact this ASU on our accounting policies, business processes, and financial statements. We have formed a project team and started the process of lease identification, review, and data extraction for purposes of calculating the transition adjustment to be recorded on the effective date. In conjunction with these efforts, we are updating our policies to align with the new accounting guidance and our processes to ensure we properly account for new, existing, and modifications to leases subsequent to the adoption of the ASU. We continue to believe the adoption of this standard will have a material impact on our consolidated balance sheet. We currently intend to adopt the ASU in the first quarter of 2019, utilizing the effective date method of transition.

3. LONG-LIVED ASSETS

Goodwill. The changes in the carrying amount of goodwill for the nine months ended September 30, 2018, were as follows (in thousands):

January 1, 2018 balance	\$210,080
Business Ink acquisition	3,314
Effects of changes in foreign currency exchange rates	(2,697)
September 30, 2018 balance	\$210,697

See Note 5 for discussion regarding the Business Ink acquisition.

Other Intangible Assets. As part of the adoption of ASC 606, at January 1, 2018, we reclassified our investments in client contracts and capitalized costs related to conversion/set-up activities from "client contracts" to "client contract costs" on our Balance Sheet. As of September 30, 2018, our intangible assets subject to ongoing amortization consist of acquired client contracts and software. As of September 30, 2018 and December 31, 2017, the carrying values of our other intangible assets were as follows (in thousands):

	1		December			
	Gross			Gross		
	Carrying	Accumulated	Net	Carrying	Accumulated	Net
	Amount	Amortization	Amount	Amount	Amortization	Amount
Investments in client contracts	\$-	\$ -	\$-	\$26,616	\$ (9,782	\$16,834
Capitalized costs	-	-	-	26,811	(10,039	16,772
Acquired client contracts	121,149	(81,286	39,863	87,308	(77,288	10,020
Total client contracts	121,149	(81,286	39,863	140,735	(97,109	43,626
Software	148,714	(116,761	31,953	135,892	(108,986	26,906
Total intangible assets	\$269,863	\$ (198,047	\$71,816	\$276,627	\$ (206,095	\$70,532

Other intangible assets as of September 30, 2018 include assets acquired in the Business Ink business acquisition (see Note 5).

The total amortization expense related to other intangible assets for the third quarters of 2018 and 2017 were \$4.6 million and \$6.7 million, respectively, and for the nine months ended September 30, 2018 and 2017 were \$13.4 million and \$20.0 million, respectively. Based on the September 30, 2018 net carrying value of our other intangible assets, the estimated total amortization expense for each of the five succeeding fiscal years ending December 31 are: 2018 – \$18.0 million; 2019 – \$16.1 million; 2020 – \$13.2 million; 2021 – \$9.2 million; and 2022 – \$6.8 million.

Client Contract Costs. As of September 30, 2018, the carrying values of our contract cost assets, related to those contracts with a contractual term greater than one year, were as follows (in thousands):

	September 30, 2018				
	Gross				
	Carrying	Accumulated	Net		
	Amount	Amortization	Amount		
Client contract incentives (1)	\$28,366	\$ (18,053	\$10,313		
Capitalized costs (2)	37,313	(17,485	19,828		
Capitalized commission fees (3)	6,943	(1,500	5,443		
Total client contract costs	\$72,622	\$ (37,038	\$35,584		

The aggregate amortization related to our client contract costs include in our operations for the quarter and nine months ended September 30, 2018 was as follows (in thousands):

	Quarter Ended	Nine Months Ended
	September 30,	September 30,
Client contract incentives (1)	\$ 2,781	\$ 8,272
Capitalized costs (2)	2,658	7,495
Capitalized commission fees (3)	583	1,518
Total client contract costs	\$ 6,022	\$ 17,285

- (1) Client contract incentives consist principally of incentives provided to new or existing clients to convert their customer accounts to, or retain their customer's account on, our outsourced solutions and are amortized ratably over the contract period to include renewal periods if applicable, which as of September 30, 2018, have termination dates that range from 2019 to 2025. The amortization of client contract incentives is reflected as a reduction in cloud and related solutions revenue in our Income Statement.
- (2) Capitalized costs are related to client conversion/set-up activities and direct material costs to fulfill long-term cloud-based or managed services arrangements. These costs are amortized over the contract period based on the transfer of goods or services to which the assets relate, which as of September 30, 2018 range from 2019 to 2023, and are included in cost of cloud and related solutions in our Income Statement.
- (3) Capitalized commission fees are incremental commissions paid as a result of obtaining a customer contract. These fees are amortized over the contract period based on the transfer of goods or services to which the assets relate, which as of September 30, 2018, range from 2019 to 2025, and are included in selling, general and administrative expenses in our Income Statement. Incremental commission fees incurred as a result of obtaining a customer contract are expensed when incurred if the amortization period of the asset that we otherwise would have recognized is one year or less (a practical expedient allowed under ASC 606).

4. DEBT

Our long-term debt, as of September 30, 2018 and December 31, 2017, was as follows (in thousands):

	September 30, 2018	December 31, 2017
2015 Credit Agreement:		
Term loan, due February 2020, interest at adjusted LIBOR plus 1.75% (combined rate		
of 3.44% at December 31, 2017)	\$ —	\$ 120,000
Less - deferred financing costs	_	(2,274)
2015 term loan, net of unamortized discounts	_	117,726
\$200 million revolving loan facility, due February 2020, interest at adjusted LIBOR		
plus applicable margin	_	_
2018 Credit Agreement:		
Term loan, due March 2023, interest at adjusted LIBOR plus 1.5% (combined rate of		
3.89% at September 30, 2018)	146,250	_
Less - deferred financing costs	(2,424)	
2018 term loan, net of unamortized discounts	143,826	<u>—</u>

\$200 million revolving loan facility, due March 2023, interest at adjusted LIBOR plus applicable margin

Convertible Notes:				
2016 Convertible Notes – Senior convertible notes; due March 15, 2036; cash interest				
at 4.25%	230,000	230	,000	
Less – unamortized original issue discount	(9,503) (11,	487)
Less – deferred financing costs	(3,714) (4,5	03)
2016 Convertible Notes, net of unamortized discounts	216,783	214	,010	
Total debt, net of unamortized discounts	360,609	331	,736	
Current portion of long-term debt, net of unamortized discounts	(7,500) (22,	500)
Long-term debt, net of unamortized discounts	\$ 353,109	\$ 309	,236	

Credit Agreement

2018 Credit Agreement. On March 5, 2018, we entered into a new \$350 million credit agreement (the "2018 Credit Agreement") with a consortium of banks to replace the 2015 Credit Agreement.

The 2018 Credit Agreement provides borrowings in the form of: (i) a \$150 million aggregate principal five-year term loan (the "2018 Term Loan"); and (ii) a \$200 million aggregate principal five-year revolving loan facility (the "2018 Revolver"). With the \$150 million proceeds from the 2018 Term Loan, we repaid the outstanding \$120 million balance of the term loan under the 2015 Credit Agreement, resulting in a net increase of available cash by \$30 million, a portion of which was used to pay certain fees and expenses in connection with the refinancing, and the remainder of which will be used for general corporate purposes.

The interest rates under the 2018 Credit Agreement are based upon our choice of an adjusted LIBOR rate plus an applicable margin of 1.50% - 2.50%, or an alternate base rate plus an applicable margin of 0.50% -1.50%, with the applicable margin, depending on our then-net secured total leverage ratio. We will pay a commitment fee of 0.200% -0.375% of the average daily unused amount of the 2018 Revolver, with the commitment fee rate also dependent upon our then-net secured total leverage ratio. The 2018 Credit Agreement includes mandatory repayments of the aggregate principal amount of the 2018 Term Loan (payable quarterly) for the first, second, third, fourth, and fifth years, with the remaining principal balance due at maturity. The 2018 Credit Agreement has no prepayment penalties and requires mandatory repayments under certain circumstances, including: (i) asset sales or casualty proceeds; and (ii) proceeds of debt or preferred stock issuances.

The 2018 Credit Agreement contains customary affirmative covenants. In addition, the 2018 Credit Agreement has customary negative covenants that places limits on our ability to: (i) incur additional indebtedness; (ii) create liens on its property; (iii) make investments; (iv) enter into mergers and consolidations; (v) sell assets; (vi) declare dividends or repurchase shares; (vii) engage in certain transactions with affiliates; and (viii) prepay certain indebtedness; and (ix) issue capital stock of subsidiaries. We must also meet certain financial covenants to include: (i) a maximum total leverage ratio; (ii) a maximum first-lien leverage ratio; and (iii) a minimum interest coverage ratio. In conjunction with the 2018 Credit Agreement, we entered into a security agreement in favor of Bank of America N.A, as collateral agent (the "Security Agreement"). Under the Security Agreement and 2018 Credit Agreement, certain of our domestic subsidiaries have guaranteed our obligations, and have pledged substantially all of our assets to secure the obligations under the 2018 Credit Agreement and such guarantees.

During the nine months ended September 30, 2018, we made \$3.8 million of principal repayments on our 2018 Credit Agreement. As of September 30, 2018, our interest rate on the 2018 Term Loan is 3.89% (adjusted LIBOR plus 1.50% per annum), effective through December 30, 2018, and our commitment fee on the 2018 Revolver is 0.20%. As of September 30, 2018, we had no borrowings outstanding on our 2018 Revolver and had the entire \$200.0 million available to us.

In conjunction with the closing of the 2018 Credit Agreement, we incurred financing costs of \$1.5 million. When combined with the remaining deferred financing costs of the 2015 Credit Agreement, financing costs of \$2.8 million have been deferred and are being amortized to interest expense using the effective interest method over the related term of the 2018 Credit Agreement. Additionally, as certain lenders from the 2015 Credit Agreement chose not to participate in the 2018 Credit Agreement syndication group, we wrote-off \$0.8 million of unamortized debt issuance costs and recognized a loss on extinguishment of that debt.

Convertible Notes

2016 Convertible Notes. Upon conversion of the 2016 Convertible Notes, we will settle our conversion obligation by paying or delivering, as the case may be, cash, shares of our common stock, or a combination thereof, at our election. It is our current intent and policy to settle our conversion obligations as follows: (i) pay cash for 100% of the par value of the 2016 Convertible Notes that are converted; and (ii) to the extent the value of our conversion obligation exceeds the par value, we can satisfy the remaining conversion obligation in our common stock, cash or a combination thereof.

The 2016 Convertible Notes will be convertible at the option of the note holders upon the satisfaction of specified conditions and during certain periods. During the period from, and including, December 15, 2021 to the close of business on the business day immediately preceding March 15, 2022 and on or after December 15, 2035, holders may convert all or any portion of their 2016 Convertible Notes at the conversion rate then in effect at any time regardless of these conditions.

As a result of us increasing our quarterly dividend in September 2018 (see Note 10), the previous conversion rate for the 2016 Convertible Notes of 17.5057 shares of our common stock per \$1,000 principal amount of the 2016 Convertible Notes, which is equivalent to an initial conversion price of approximately \$57.12 per share of our common stock, has been adjusted to 17.5173 shares of our common stock per \$1,000 principal amount of the 2016 Convertible Notes, which is equivalent to an initial conversion price of approximately \$57.09 per share of our common stock.

Holders may require us to repurchase the 2016 Convertible Notes for cash on each of March 15, 2022, March 15, 2026, and March 15, 2031, or upon the occurrence of a fundamental change (as defined in the 2016 Convertible Notes Indenture) in each case at a purchase price equal to the principal amount thereof plus accrued and unpaid interest.

We may not redeem the 2016 Convertible Notes prior to March 20, 2020. On or after March 20, 2020, we may redeem for cash all or part of the 2016 Convertible Notes if the last reported sale price of our common stock has been at least 130% of the conversion price then in effect for at least 20 trading days (whether or not consecutive) during any 30 consecutive trading day period (including the last trading day of such period) ending on, and including, the trading day immediately preceding the date on which we provide notice of redemption. On or after March 15, 2022, we may redeem for cash all or part of the 2016 Convertible Notes regardless of the sales price condition described in the preceding sentence. In each case, the redemption price will equal the principal amount of the 2016 Convertible Notes to be redeemed, plus accrued and unpaid interest.

As of September 30, 2018, none of the conversion features have been achieved, and thus, the 2016 Convertible Notes are not convertible by the holders.

5. ACQUISITIONS

Business Ink

On February 28, 2018, we acquired Business Ink for approximately \$70 million in cash. Business Ink is a company based in Austin, Texas, with facilities in multiple locations. Business Ink provides outsourced, customized business communications services to the telecommunications, healthcare, financial services, utilities and government sectors across statements, email, mobile messaging and more. The acquisition extends the scale of our operations and platform capabilities, expands our customer base into new verticals, and further solidifies our customer communications footprint.

The following table summarizes the preliminary estimated fair values of the assets acquired and liabilities assumed at the date of acquisition (in thousands):

Current assets	\$25,726
Fixed assets	13,337
Acquired client contracts	35,150
Acquired software	4,132
Goodwill	3,314
Non-current assets	148
Total assets acquired	81,807
Current liabilities	(11,586)
Non-current liabilities	(256)
Total liabilities assumed	(11,842)
Net assets acquired	\$69,965

The above estimated fair values of assets acquired and liabilities assumed are considered provisional and are based on the information that was available as of the date of the Business Ink acquisition to estimate the fair value of assets acquired and liabilities assumed. We believe that information provides a reasonable basis for estimating the fair values of assets acquired and liabilities assumed, but we are waiting for additional information necessary to finalize those fair values. Thus, the provisional measurements of fair value set forth above are subject to change. During the nine-months ended September 30, 2018, we made certain adjustments, primarily to increase the value of the acquired client contracts by \$4.3 million. As a result of these adjustments, the amount allocated to goodwill decreased by \$0.2 million and \$4.7 million during the three and nine-months ended September 30, 2018, respectively. We expect to finalize the valuation and complete the purchase price allocation as soon as practicable, but not later than one year from the acquisition date.

The Business Ink goodwill has been assigned to our one reportable segment. The estimated lives assigned to the acquired client contracts and the acquired software assets range from approximately four months to fifteen years (weighted-average life of thirteen years), and four years, respectively. Amortization expense related to these acquired intangible assets is recognized based upon the pattern in which the economic benefits of the acquired intangible assets are expected to be received. The Business Ink goodwill and acquired intangible assets are deductible for income tax purposes.

The results of operations of Business Ink are included in the accompanying Condensed Consolidated Statements of Income for the period subsequent to the acquisition date. Pro forma information on our historical results of operations to reflect the acquisition of Business Ink is not presented as Business Ink's results of operations during prior periods are not significant to our results of operations.

Forte Payment Systems, Inc.

On October 1, 2018, we acquired Forte Payment Systems, Inc. ("Forte"), a leading provider of advanced payment solutions headquartered in Allen, Texas. The acquisition of Forte accelerates our ability to offer a comprehensive suite of next generation payment solutions that enables service providers to provide a differentiated customer experience, while also strengthening our position in the revenue management and payments sector and allowing us to grow our footprint into new verticals. We acquired 100% of the equity of Forte for a purchase price of approximately \$85 million, (approximately \$80 million, net of cash acquired), and held back approximately \$13 million in cash subject to certain tax filings. The purchase agreement includes provisions for \$18.8 million of potential future earn-out payments over a four-year measurement period. The earn-out payments are tied to performance-based goals and a defined service period by the eligible recipients.

The results of Forte will be included in our results of operations for the period subsequent to the acquisition date. We have not completed the valuation analysis and calculations necessary to finalize the required purchase price allocations. In addition to goodwill, the final purchase price allocation may include allocations to intangible assets such as trademarks and trade names, developed technology, noncompetition agreements, and customer-related assets.

6. RESTRUCTURING AND REORGANIZATION CHARGES

During the third quarters of 2018 and 2017, we recorded restructuring and reorganization charges of \$2.8 million and \$1.6 million, respectively, and for the nine months ended September 30, 2018 and 2017, we recorded restructuring and reorganization charges of \$7.0 million and \$4.6 million, respectively.

Our restructuring activities during the nine months ended September 30, 2018 were primarily made up of the following:

- We reduced our workforce by approximately 70 employees as a result of organizational changes made to pursue global opportunities and efficiencies. As a result, we incurred restructuring charges related to involuntary terminations of \$3.5 million.
- We closed one of our print facilities. As a result, we incurred restructuring charges related to involuntary terminations and the impairment of assets of \$2.1 million.

The activity in the business restructuring and reorganization reserves during the nine months ended September 30, 2018 was as follows:

	Termination	Facilities		
	Benefits	Abandonment	Other	Total
January 1, 2018 balance	\$ 1,116	\$ 3,032		\$4,148
Charged to expense during period	3,788	1,541	1,699	7,028
Cash payments	(4,065	(1,984) —	(6,049)
Adjustment for asset impairment			(1,428)	(1,428)
Other	16	130	(271)	(125)

September 30, 2018 balance \$ 855 \$ 2,719 \$— \$3,574

7. INCOME TAXES

The effective income tax rates for the third quarters and nine months ended September 30, 2018 and 2017 were as follows:

Quarter	Nine Months Ended			1	
September 30, September 30,		30,			
2018	2017	2018		2017	
21 %	38 %	26	%	30	%

The effective income tax rate for the quarter and nine months ended September 30, 2018 reflects the impact of the U.S. Tax Cut and Jobs Act (the "Tax Reform Act") that was passed into legislation in December 2017. The Tax Reform Act reduces the U.S. maximum rate of income taxation from 35% to 21% applicable to taxable years beginning after December 31, 2017. In December 2017, the SEC issued Staff Accounting Bulletin No. 118, Income Tax Accounting Implications of the Tax Cuts and Jobs Act ("SAB 118"), which allows us to record provisional amounts during a measurement period not to extend beyond one year of the enactment date. As of September 30, 2018, we have not completed our accounting for the tax effects of the enactment of the Tax Reform Act; however, in

certain cases, specifically as follows, we made a reasonable estimate of: (i) the effects on its existing deferred tax balances; and (ii) the effects of the one-time mandatory repatriation tax. We recognized a provisional tax expense of \$2.3 million in the year ended December 31, 2017 associated with the items we could reasonably estimate. Due to the timing of the release of the Tax Reform Act, the complexity of the Tax Reform Act, and regulatory guidance that has recently been released and additional guidance expected to be released, we are still analyzing the Tax Reform Act and refining its calculations, which could potentially impact the measurement of our income tax balances. We expect to complete our analysis within the measurement period in accordance with SAB 118.

During the third quarter of 2018, our estimated full-year 2018 effective income tax rate was reduced from 29% to 27% primarily due to a change in the estimate of research and development credits. The lower effective tax rate for the third quarter of 2018 reflects the full year-to-date impact of this reduction.

The lower effective income tax rate for the nine months ended September 30, 2017 reflects: (i) an approximately \$5 million net benefit resulting from Comcast Corporation's ("Comcast") exercise of 1.4 million vested stock warrants in January 2017, as the stock warrants appreciated in value since their vesting, resulting in an income tax benefit to us when exercised; and (ii) an approximately \$2 million benefit related to the adoption of ASU 2016-09, Compensation – Stock Compensation (Topic 718).

8. COMMITMENTS, GUARANTEES AND CONTINGENCIES

Warranties. We generally warrant that our solutions and related offerings will conform to published specifications, or to specifications provided in an individual client arrangement, as applicable. The typical warranty period is 90 days from the date of acceptance of the solution or offering. For certain service offerings we provide a warranty for the duration of the services provided. We generally warrant that services will be performed in a professional and workmanlike manner. The typical remedy for breach of warranty is to correct or replace any defective deliverable, and if not possible or practical, we will accept the return of the defective deliverable and refund the amount paid under the client arrangement that is allocable to the defective deliverable. Our contracts also generally contain limitation of damages provisions in an effort to reduce our exposure to monetary damages arising from breach of warranty claims. Historically, we have incurred minimal warranty costs, and as a result, do not maintain a warranty reserve.

Product and Services Indemnifications. Our arrangements with our clients generally include an indemnification provision that will indemnify and defend a client in actions brought against the client that claim our products and/or services infringe upon a copyright, trade secret, or valid patent. Historically, we have not incurred any significant costs related to such indemnification claims, and as a result, do not maintain a reserve for such exposure.

Claims for Company Non-performance. Our arrangements with our clients typically cap our liability for breach to a specified amount of the direct damages incurred by the client resulting from the breach. From time-to-time, these arrangements may also include provisions for possible liquidated damages or other financial remedies for our non-performance, or in the case of certain of our outsourced customer care and billing solutions, provisions for damages related to service level performance requirements. The service level performance requirements typically relate to system availability and timeliness of service delivery. Historically, we have not incurred significant costs associated with service level performance within our client contracts, and as a result, do not include estimates for potential credits or refunds related to service level performance in our contract consideration at the onset of the contract, but instead, account for credits or refunds as an adjustment to the transaction price of the contract as those events occur.

Indemnifications Related to Officers and the Board of Directors. We have agreed to indemnify members of our Board of Directors (the "Board") and certain of our officers if they are named or threatened to be named as a party to any proceeding by reason of the fact that they acted in such capacity. We maintain directors' and officers' (D&O) insurance coverage to protect against such losses. We have not historically incurred any losses related to these types of indemnifications, and are not aware of any pending or threatened actions or claims against any officer or member of our Board. As a result, we have not recorded any liabilities related to such indemnifications as of September 30, 2018. In addition, as a result of the insurance policy coverage, we believe these indemnification agreements are not significant to our results of operations.

Legal Proceedings. From time-to-time, we are involved in litigation relating to claims arising out of our operations in the normal course of business. We are not presently a party to any material pending or threatened legal proceedings.

9. EARNINGS PER COMMON SHARE

Basic and diluted earnings per common share ("EPS") amounts are presented on the face of the accompanying Income Statements.

No reconciliation of the basic and diluted EPS numerators is necessary as net income is used as the numerators for all periods presented. The reconciliation of the basic and diluted EPS denominators related to the common shares is included in the following table (in thousands):

	Quarter Septemb		Nine Months End September 30,	
	2018	2017	2018	2017
Basic weighted-average common shares	32,507	32,561	32,541	32,383
Dilutive effect of restricted common stock	156	340	235	442
Dilutive effect of Stock Warrants	143	-	163	-
Diluted weighted-average common shares	32,806	32,901	32,939	32,825

The Convertible Notes have a dilutive effect only in those quarterly periods in which our average stock price exceeds the current effective conversion price (see Note 4).

The Stock Warrants have a dilutive effect only in those quarterly periods in which our average stock price exceeds the exercise price of \$26.68 per warrant (under the treasury stock method), and are not subject to performance vesting conditions (see Note 10).

Potentially dilutive common shares related to non-participating unvested restricted stock excluded from the computation of diluted EPS, as the effect was antidilutive, were not material in any period presented.

10. STOCKHOLDERS' EQUITY AND EQUITY COMPENSATION PLANS

Stock Repurchase Program. We currently have a stock repurchase program, approved by our Board, authorizing us to repurchase our common stock from time-to-time as market and business conditions warrant (the "Stock Repurchase Program"). During the nine months ended September 30, 2018 and 2017, we repurchased 0.4 million shares of our common stock for \$16.9 million (weighted-average price of \$42.71 per share) and 0.4 million shares of our common stock for \$15.6 million (weighted-average price of \$40.54 per share), respectively, under a SEC Rule 10b5-1 Plan.

As of September 30, 2018, the total remaining number of shares available for repurchase under the Stock Repurchase Program totaled 5.8 million shares.

Stock Repurchases for Tax Withholdings. In addition to the above-mentioned stock repurchases, during the nine months ended September 30, 2018 and 2017, we repurchased and then cancelled 0.2 million shares of common stock for \$7.2 million and 0.2 million shares of common stock for \$9.4 million, respectively, in connection with minimum tax withholding requirements resulting from the vesting of restricted common stock under our stock incentive plans.

Stock Incentive Plan. In May 2018, our stockholders approved an increase of 2.7 million shares authorized for issuance under the 2005 Stock Incentive Plan, from 18.7 million shares to 21.4 million shares.

Cash Dividends. During the third quarter of 2018, the Board approved a quarterly cash dividend of \$0.21 per share of common stock, totaling \$7.0 million. During the third quarter of 2017, the Board approved a quarterly cash dividend of \$0.1975 per share of common stock, totaling \$6.7 million. Dividends declared for the nine months ended September 30, 2018 and 2017 totaled \$21.2 million and \$20.0 million, respectively.

Warrants. In 2014, in conjunction with the execution of an amendment to our current agreement with Comcast, we issued stock warrants (the "Warrant Agreement") for the right to purchase up to approximately 2.9 million shares of our common stock (the "Stock Warrants") as an additional incentive for Comcast to convert customer accounts onto our Advanced Convergent Platform based on various milestones. The Stock Warrants have a 10-year term and an exercise price of \$26.68 per warrant.

Upon vesting, the Stock Warrants are recorded as a client contract incentive asset with the corresponding offset to stockholders' equity. The client contract incentive asset related to the Stock Warrants is amortized as a reduction in cloud and related solutions revenues over the remaining term of the Comcast amended agreement. As of September 30, 2018 and December 31, 2017, we recorded a client contract incentive asset related to these Stock Warrants of \$25.1 million as of both periods and have recorded accumulated amortization related to these Stock Warrants of \$17.1 million and \$9.2 million, respectively. The remaining unvested

Stock Warrants will be accounted for as client contract incentive assets in the period the performance conditions necessary for vesting have been met.

As of September 30, 2018, approximately 1.4 million Stock Warrants remain issued, of which 0.4 million were vested.

Stock-Based Awards. A summary of our unvested restricted common stock activity during the quarter and nine months ended September 30, 2018 is as follows (shares in thousands):

	Quarter Ended		Nine Months Ended		
	Septem 2018	ber 30,	Septemb	er 30, 2018	
	2010	Weighted-		Weighted-	
	Average Grant			Average	
				Grant	
		Date Fair		Date Fair	
	Shares	Value	Shares	Value	
Unvested awards, beginning	1,189	\$ 41.67	1,222	\$ 36.84	
Awards granted	38	37.62	527	46.09	
Awards forfeited/cancelled	(28)	39.95	(107	40.12	
Awards vested	(40)	37.96	(483	34.55	
Unvested awards, ending	1,159	\$ 41.70	1,159	\$ 41.70	

Included in the awards granted during the nine months ended September 30, 2018 are performance-based awards for 0.1 million restricted common stock shares issued to members of executive management and certain key employees, which vest in the first quarter of 2020 upon meeting certain pre-established financial performance objectives related to 2019 performance. The performance-based awards become fully vested upon a change in control, as defined, and the subsequent involuntary termination of employment.

The other restricted common stock shares granted during the nine months ended September 30, 2018 are primarily time-based awards, which vest annually over four years with no restrictions other than the passage of time. Certain shares of the restricted common stock become fully vested upon a change in control, as defined, and the subsequent involuntary termination of employment.

We recorded stock-based compensation expense for the third quarters of 2018 and 2017 of \$4.6 million and \$5.0 million, respectively, and for the nine months ended September 30, 2018 and 2017 of \$14.8 million and \$16.7 million, respectively.

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

The information contained in this MD&A should be read in conjunction with the Financial Statements and Notes thereto included in this Form 10-Q and the audited consolidated financial statements and notes thereto in our 2017 10-K.

Forward-Looking Statements

This report contains a number of forward-looking statements relative to our future plans and our expectations concerning our business and the industries we serve. These forward-looking statements are based on assumptions about a number of important factors, and involve risks and uncertainties that could cause actual results to differ materially from estimates contained in the forward-looking statements. Some of the risks that are foreseen by management are outlined within Part II Item 1A. Risk Factors of this report and in Part I Item 1A. Risk Factors of our 2017 10-K. Readers are strongly encouraged to review those sections closely in conjunction with MD&A.

Company Overview

We are one of the world's largest and most established revenue management and digital monetization providers, primarily serving some of the most well-known communications, information, and content companies around the globe. We help our clients simplify the complexity of a rapidly changing business landscape, bringing more than thirty-five years of experience supporting the world's most respected service providers. We make their hardest decisions simpler and smarter as they work to evolve their businesses from a single-product offering to highly complex and competitive multi-product offerings, while also requiring increasingly differentiated, real-time, and personalized experiences for their customers.

We offer revenue management, customer experience, and digital monetization solutions for every stage of the customer lifecycle so service providers can deliver an outstanding customer experience that adapts to their customers' rapidly changing demands. Our solutions are built on proven public and private cloud platforms, with out-of-the-box and managed service models that adapt to fit their unique business needs and enable the transformative change required to create personalized experiences that drive loyalty and retention.

Over the years, we have focused our research and development ("R&D") and acquisition investments on expanding our offerings in a timely and efficient manner to address the complex, transformative needs of service providers. Our scalable, modular, and flexible solutions combined with our domain expertise and our ability to effectively migrate clients to our solutions, provide the industry with proven solutions to improve their profitability and consumers' experiences. We have specifically architected our solutions to offer service providers a phased, incremental approach to transforming their businesses, thereby reducing the business interruption risk associated with this evolution.

We generate approximately 65% of our revenues from the North American cable and satellite markets, approximately 20% of our revenues from global wireline and wireless communication providers, and the remainder from a variety of other verticals, such as financial services, healthcare, logistics, and transportation. Additionally, during the nine months ended September 30, 2018 we generated approximately 85% of our revenues from the Americas region, approximately 10% of our revenues from the Europe, Middle East and Africa region, and approximately 5% of our revenues from the Asia Pacific region.

We are a S&P Small Cap 600 company.

Key Impact of U.S. Tax Cuts and Jobs Act

On December 22, 2017, the U.S. Tax Cuts and Jobs Act (the "Tax Reform Act") was passed into legislation. The Tax Reform Act amends the Internal Revenue Code, reducing the corporate income tax rate, changing or eliminating

certain income tax deductions and credits and provides sweeping change to how U.S. companies are taxed on their international operations. The Tax Reform Act is generally effective for tax years beginning after December 31, 2017; however, certain provisions of the Tax Reform Act had effective dates beginning in 2017.

The Tax Reform Act reduces the U.S. maximum rate of income taxation from 35% to 21% applicable to taxable years beginning January 1, 2018. We currently expect our effective income tax rate for the full year 2018 to be approximately 27%.

See Note 7 to our 2017 10-K for additional impacts of the Tax Reform Act.

Impact of New Revenue Accounting Pronouncement

As discussed in Note 2 to our Financial Statements, in January 2018 we adopted ASC 606, a single comprehensive model which supersedes nearly all existing revenue recognition guidance under U.S. GAAP, utilizing the cumulative effect approach. Under the new guidance, revenue is recognized when promised goods or services are transferred to customers in an amount that reflects the consideration that is expected to be received for those goods or services.

In conjunction with the adoption of ASC 606, we recorded a cumulative adjustment increasing beginning retained earnings (net of tax) by approximately \$7 million, primarily related to contracts that we were required to defer revenue as we did not have VSOE for certain undelivered elements. We do not anticipate ASC 606 will have a material impact on our revenues in 2018 and beyond, as the new revenue accounting rules under ASC 606 are fairly consistent with our current policies and guidelines based on the nature of our client contracts.

As a result of adopting ASC 606, beginning in 2018, the following key reclassifications have occurred:

- Certain deferred contract costs that had been included in our client contracts and other current and non-current assets on our Balance Sheet were reclassified and presented separately as a non-current client contract asset, net of related amortization.
- Certain revenues and related costs previously recorded as software and services or maintenance on our Income Statement are now being classified as cloud and related solutions.
- Investments in client contracts on our Consolidated Statement of Cash Flows have been reclassified to operating activities from investing activities.

Since we adopted ASC 606 using the cumulative effect method, prior period comparative information in our Financial Statements have not been adjusted and continue to be as previously reported.

Refer to Note 2 for further detail and discussion regarding the adoption of ASC 606.

Acquisition Activity

Business Ink

As discussed in Note 5 to our Financial Statements, on February 28, 2018 we acquired Business Ink, a multi-channel communications company based in Austin, Texas, for approximately \$70 million, excluding acquisition-related expenses. For the third quarter and nine months ended September 30, 2018, Business Ink contributed cloud and related solutions revenues of \$13.9 million and \$34.9 million, respectively, and was slightly dilutive to our year-to-date operating results when factoring in acquired amortization expense.

Forte Payment Systems, Inc.

As discussed in Note 5 to our Financial Statements, on October 1, 2018, we acquired Forte, a leading provider of advanced payment solutions headquartered in Allen, Texas. We acquired Forte for a purchase price of approximately

\$85 million (\$80 million, net of cash acquired), and held back approximately \$13 million in cash subject to certain tax filings. This represents a purchase price approximately equal to Forte's 2018 projected revenues. In addition, the stock purchase agreement includes provisions for \$18.8 million of potential future earn-out payments over a four-year measurement period. At this time, for the remainder of 2018 we expect that Forte will contribute approximately \$20 million of revenues and be dilutive to our U.S. GAAP operating results, due to acquisition amortization and acquisition-related costs.

As we have not completed the valuation analysis and calculations necessary to finalize the required purchase price allocations, which may include allocations to goodwill and other intangible assets such as trademarks and trade names, developed technology, noncompetition agreements, and customer-related assets, the expected impact of the Forte acquisition is based on estimates for the amortization of acquired intangible assets. Because of the inherent uncertainties in making such estimates, the actual impact of Forte on our financial performance for 2018 and beyond may vary from our current expectations as we work through our integration efforts and complete the Forte purchase accounting. We undertake no duty to update or revise any forward-looking statements, whether as a result of new information, future events, or otherwise.

Management Overview of Quarterly Results

Third Quarter Highlights. A summary of our results of operations for the third quarter of 2018, when compared to the third quarter of 2017, is as follows (in thousands, except per share amounts and percentages):

	Quarter End September 2018	ded 30september 30, 2017
Revenues	\$213,055	\$ 199,195
Operating Results:		
Operating income	25,653	28,376
Operating income margin	12.0 %	5 14.2 %
Diluted EPS	\$0.49	\$ 0.44
Supplemental Data:		
Restructuring and reorganization charges	\$2,799	\$ 1,618
Acquisition-related costs	261	-
Stock-based compensation (1)	4,695	4,700
Amortization of acquired intangible assets	2,170	1,758
Amortization of OID	671	634

⁽¹⁾ Stock-based compensation included in the table above excludes amounts that have been recorded in restructuring and reorganization charges.

Revenues. Our revenues for the third quarter of 2018 were \$213.1 million, a 7% increase when compared to revenues of \$199.2 million for the third quarter of 2017, with the increase mainly attributed to the acquisition of Business Ink on February 28, 2018.

Operating Results. Operating income for the third quarter of 2018 was \$25.7 million, or a 12.0% operating margin percentage, compared to \$28.4 million, or a 14.2% operating margin percentage for the third quarter of 2017, with the decrease in operating margin percentage reflective of costs associated with the integration of Business Ink and the continuation of planned investments aimed at generating future long-term growth in our business.

Diluted EPS. Diluted EPS for the third quarter of 2018 was \$0.49 compared to \$0.44 for the third quarter of 2017, with the increase primarily attributed to a lower effective income tax rate resulting primarily from the Tax Reform Act enacted in December 2017.

Cash and Cash Flows. As of September 30, 2018, we had cash, cash equivalents and short-term investments of \$199.3 million, as compared to \$186.4 million as of June 30, 2018 and \$261.4 million as of as of December 31, 2017. Our cash flows from operating activities for the quarter ended September 30, 2018 were \$47.1 million. See the Liquidity section below for further discussion of our cash flows.

Significant Client Relationships

Client Concentration. A large percentage of our historical revenues have been generated from our largest clients, which are Comcast, Charter Corporation Inc. ("Charter"), and DISH Network Corporation ("DISH").

Revenues from these clients for the indicated periods were as follows (in thousands, except percentages):

Quarter Ended		
September 30, 2018	June 30, 2018	September 30, 2017
Amount	Amount	Amount

		% of			% of			% of	
		Revenues			Revenues	3		Revenu	es
Comcast	\$55,287	26	%	\$53,913	25	%	\$56,186	28	%
Charter	44,853	21	%	45,183	21	%	45,086	23	%
DISH	19,614	9	%	20,505	10	%	21,520	11	%

The percentages of net billed accounts receivable balances attributable to our largest clients as of the indicated dates were as follows:

	As of					
	SeptenJbene 300,			December 31,		
	2018	2018		2017		
Comcast	27%	24	%	26	%	
Charter	23%	30	%	32	%	
DISH	6 %	7	%	8	%	

See our 2017 10-K for additional discussion of our business relationships and contractual terms with Comcast, Charter, and DISH.

Comcast Contract Renewal. Our current agreement with Comcast runs through June 30, 2019, with an option for Comcast to extend the agreement for two consecutive one-year terms by exercising the renewal options no later than January 1, 2019 for the first extension and January 1, 2020 for the second extension option. We are currently engaged in discussions with Comcast regarding contract renewal terms. Although we believe our operating relationship with Comcast is good, there can be no assurances around the timing and/or the terms of any renewal arrangements at this time. The Comcast agreement and related amendments, with confidential information redacted, is included in the exhibits to our periodic filings with the SEC.

Risk of Client Concentration. We expect to continue to generate a significant percentage of our future revenues from our largest clients mentioned above. There are inherent risks whenever a large percentage of total revenues are concentrated with a limited number of clients. Should a significant client: (i) terminate or fail to renew their contracts with us, in whole or in part, for any reason; (ii) significantly reduce the number of customer accounts processed on our solutions, the price paid for our services, or the scope of services that we provide; or (iii) experience significant financial or operating difficulties, it could have a material adverse effect on our financial condition and results of operations.

Critical Accounting Policies

The preparation of our Financial Statements in conformity with U.S. GAAP requires us to select appropriate accounting policies, and to make judgments and estimates affecting the application of those accounting policies. In applying our accounting policies, different business conditions or the use of different assumptions may result in materially different amounts reported in our Financial Statements.

We have identified the most critical accounting policies that affect our financial position and the results of our operations. Those critical accounting policies were determined by considering the accounting policies that involve the most complex or subjective decisions or assessments. The most critical accounting policies identified relate to the following items: (i) revenue recognition; (ii) impairment assessments of long-lived assets; (iii) income taxes; and (iv) loss contingencies. These critical accounting policies, as well as our other significant accounting policies, are discussed in our 2017 10-K.

Results of Operations

Total Revenues. Total revenues for the: (i) third quarter of 2018 were \$213.1 million, a 7% increase when compared to \$199.2 million for the third quarter of 2017; and (ii) nine months ended September 30, 2018 were \$627.8 million, a 7% increase when compared to \$584.4 million for the nine months ended September 30, 2017. These increases in revenues can be mainly attributed to the following: (i) revenues from the Business Ink acquisition discussed above; and (ii) continued growth in our cloud solutions and managed services arrangements.

The components of total revenues, discussed in more detail below, are as follows (in thousands):

	Quarter Er September 2018		Nine Mont September 2018	
Revenues:				
Cloud and related solutions	\$186,473	\$164,789	\$551,390	\$481,445
Software and services	14,283	15,726	39,573	46,680
Maintenance	12,299	18,680	36,829	56,253
Total revenues	\$213,055	\$199,195	\$627,792	\$584,378

We use the location of the client as the basis of attributing revenues to individual countries. Revenues by geographic regions for the third quarters and nine months ended September 30, 2018 and 2017 were as follows (in thousands):

	Quarter Ended		Nine Months Ended	
	September 30,		September 30,	
	2018	2017	2018	2017
Americas (principally the U.S.)	\$180,489	\$169,880	\$530,609	\$497,852
Europe, Middle East, and Africa	21,723	15,980	64,135	51,011
Asia Pacific	10,843	13,335	33,048	35,515
Total revenues	\$213,055	\$199,195	\$627,792	\$584,378

Cloud and Related Solutions Revenues. Cloud and related solutions revenues for the: (i) third quarter of 2018 were \$186.5 million, a 13% increase when compared to \$164.8 million for the third quarter of 2017; and (ii) nine months ended September 30, 2018 were \$551.4 million, a 15% increase when compared to \$481.4 million for the nine months ended September 30, 2017. These increases in cloud and related solutions revenues for the quarter and nine months ended September 30, 2018 are mainly due to: (i) the revenues generated from the acquired Business Ink business of \$13.9 million and \$34.9 million, respectively; (ii) the application of ASC 606, which resulted in revenues of \$6.2 million and \$19.3 million, respectively, previously classified as software and services and maintenance revenues, now being classified as cloud and related solutions revenues; and (iii) the execution of and performance under additional managed services arrangements and the conversion of 1.5 million customer accounts onto ACP during the last six months of 2017.

Software and Services Revenues. Software and services revenues for the: (i) third quarter of 2018 were \$14.3 million, a 9% decrease when compared to \$15.7 million for the third quarter of 2017; and (ii) nine months ended September 30, 2018 were \$39.6 million, a 15% decrease when compared to \$46.7 million for the nine months ended September 30, 2017. The decreases in software and services revenues for the quarter and nine months ended September 30, 2018 can be attributed mainly to the shift in our focus towards managed services arrangements, which are included in our cloud and related solutions revenues, and the application of ASC 606, which resulted in revenues of \$1.6 million and \$4.7 million, respectively, previously classified as software and services now being classified as cloud and related solutions.

Maintenance Revenues. Maintenance revenues for the: (i) third quarter of 2018 were \$12.3 million, a 34% decrease when compared to \$18.7 million for the third quarter of 2017; and (ii) nine months ended September 30, 2018 were \$36.8 million, a 35% decrease when compared to \$56.3 million for the nine months ended September 30, 2017. These decreases in maintenance revenues for the quarter and nine months ended September 30, 2018 are primarily due to the application of ASC 606, which resulted in revenues of \$5.2 million and \$15.5 million, respectively, previously classified as maintenance now being classified as cloud and related solutions, with the remaining decrease attributed to the timing of maintenance renewals and related revenue recognition.

Total Expenses. Our operating expenses for the: (i) third quarter of 2018 were \$187.4 million, a 10% increase when compared to \$170.8 million for the third quarter of 2017; and (ii) nine months ended September 30, 2018 were \$552.3 million, a 9% increase when compared to \$504.7 million for the nine months ended September 30, 2017. These increases can be mainly attributed to the operating expenses of Business Ink included in our results for the third quarter and nine months ended September 30, 2018, to include acquisition amortization and acquisition-related costs, with the remaining increase reflective of our continued investment in the business.

The components of total expenses are discussed in more detail below.

Cost of Revenues. See our 2017 10-K for a description of the types of costs that are included in the individual line items for cost of revenues.

Cost of Cloud and Related Solutions (Exclusive of Depreciation). The cost of cloud and related solutions for the: (i) third quarter of 2018 increased 19% to \$95.1 million, from \$79.9 million for the third quarter of 2017; and (ii) nine months ended September 30, 2018 increased 19% to \$277.2 million, from \$233.2 million for the nine months ended September 30, 2017. These increases relate almost entirely to: (i) cloud and related solutions expense from the acquired Business Ink business; and (ii) the application of ASC 606, which resulted in \$4.5 million and \$15.5 million of costs for the third quarter and nine months ended September 30, 2018, previously classified as cost of software and services and maintenance, now being classified as cost of cloud and related solutions. Total cloud and related solutions cost as a percentage of cloud and related solutions revenues for the: (i) third quarters of 2018 and 2017 were 51.0% and 48.5%, respectively; and (ii) nine months ended September 30, 2018 and 2017 were 50.3% and 48.4%, respectively.

Cost of Software and Services (Exclusive of Depreciation). The cost of software and services for the: (i) third quarter of 2018 decreased 11% to \$8.7 million, from \$9.7 million for the third quarter of 2017; and (ii) nine months ended September 30, 2018 decreased 18% to \$25.8 million from \$31.4 million for the nine months ended September 30, 2017. These decreases are reflective of the decreases in revenue as personnel and the related costs previously allocated to professional services projects have been reassigned to other areas of the

business. Total software and services cost as a percentage of our software and services revenues for the: (i) third quarters of 2018 and 2017 were 60.7% and 61.8%, respectively; and (ii) nine months ended September 30, 2018 and 2017 were 65.2% and 67.3%, respectively.

Variability in quarterly revenues and operating results are inherent characteristics of companies that sell software licenses and perform professional services. Our quarterly revenues for software licenses and professional services may fluctuate, depending on various factors, including the timing of executed contracts and revenue recognition, and the delivery of contracted solutions. However, the costs associated with software and professional services revenues are not subject to the same degree of variability (e.g., these costs are generally fixed in nature within a relatively short period of time), and thus, fluctuations in our cost of software and services as a percentage of our software and services revenues will likely occur between periods.

Cost of Maintenance (Exclusive of Depreciation). The cost of maintenance for the: (i) third quarter of 2018 decreased 48% to \$5.3 million, from \$10.1 million for the third quarter of 2017; and (ii) nine months ended September 30, 2018 decreased 46% to \$16.6 million, from \$30.5 million for the nine months ended September 30, 2017. Total cost of maintenance as a percentage of our maintenance revenues for the: (i) third quarters of 2018 and 2017 were 43.0% and 54.3%, respectively; and (ii) nine months ended September 30, 2018 and 2017 were 45.1% and 54.2%, respectively. These decreases can be primarily attributed to the application of ASC 606, which resulted in \$4.3 million and \$13.9 million of costs for the third quarter and nine months ended September 30, 2018, previously classified as maintenance, now being classified as cost of cloud and related solutions.

R&D Expense. R&D expense for the: (i) third quarter of 2018 increased 4% to \$31.5 million, from \$30.3 million for the third quarter of 2017; and (ii) nine months ended September 30, 2018 increased 8% to \$91.8 million, from \$85.1 million for the nine months ended September 30, 2017. These increases are reflective of our heightened level of investment that began in early 2017. As a percentage of total revenues, R&D expense for the third quarters of 2018 and 2017 were approximately 15%.

Our R&D efforts are focused on the continued evolution of our solutions that enable service providers worldwide to provide a more personalized customer experience while introducing new digital products and services. This includes the continued investment in our cloud-based solutions (principally, around our Ascendon platform).

Selling, General and Administrative ("SG&A") Expense. SG&A expense for the: (i) third quarter of 2018 increased 10% to \$39.2 million, from \$35.8 million for the third quarter of 2017; and (ii) nine months ended September 30, 2018 increased 10% to \$120.5 million, from \$110.0 million for the nine months ended September 30, 2017. These increases can be primarily attributed to the SG&A costs related to Business Ink, to include the \$2.4 million of acquisition-related costs incurred during the first quarter of 2018. Our SG&A costs as a percentage of total revenues for the third quarters of 2018 and 2017 were approximately 18%.

Depreciation. Depreciation expense for the: (i) third quarter of 2018 increased 44% to \$4.8 million, from \$3.3 million for the third quarter of 2017; and (ii) nine months ended September 30, 2018 increased 33% to \$13.3 million, from \$10.0 million for the nine months ended September 30, 2017. These increases can be primarily attributed to the increased level of capital expenditures we have made over the last twelve months, to include depreciation expense for the quarter and nine months ended September 30, 2018 of \$0.7 million and \$1.6 million, respectively, from the acquired Business Ink assets.

Restructuring and Reorganization Charges. Restructuring and reorganization charges for the: (i) third quarter of 2018 and 2017 were \$2.8 million and \$1.6 million, respectively; and (ii) nine months ended September 30, 2018 and 2017 were \$7.0 million and \$4.6 million, respectively. See Note 6 to our Financial Statements for further discussion regarding our restructuring and reorganization activities.

Operating Income. Operating income for the: (i) third quarter of 2018 was \$25.7 million, or 12.0% of total revenues, compared to \$28.4 million, or 14.2% of total revenues for the third quarter of 2017; and (ii) nine months ended September 30, 2018 was \$75.5 million, or 12.0% of total revenues, compared to \$79.6 million or 13.6% of total revenues for the nine months ended September 30, 2017. These decreases in operating margin percentage can be mainly attributed to the costs associated with the acquisition and integration of Business Ink and our continued increase in planned investments in our business.

Loss on Extinguishment of Debt. In March 2018, we refinanced our 2015 Credit Agreement (see Note 4 to our Financial Statements). As a result, we incurred a loss of \$0.8 million related to the write-off of unamortized debt issuance costs.

Income Tax Provision. The effective income tax rates for the third quarters and nine months ended September 30, 2018 and 2017 were as follows:

Quarter	Nine Months Ended				
Septemb	September 30,				
2018	2017	2018		2017	
21 %	38 %	26	%	30	%

The effective income tax rates for the quarter and nine months ended September 30, 2018 reflect the impact of the Tax Reform Act that was passed into legislation in December 2017. The Tax Reform Act reduces the U.S. maximum rate of income taxation from 35% to 21% applicable to taxable years beginning after December 31, 2017. During the third quarter of 2018, our estimated full-year 2018 effective income tax rate was reduced from 29% to 27% primarily due to a change in the estimate of R&D credits. The lower effective income tax rate for the third quarter of 2018 reflects the full year-to-date impact of this reduction.

The effective income tax rate for the nine months ended September 30, 2017 reflects: (i) an approximately \$5 million net benefit resulting from Comcast's exercise of 1.4 million vested stock warrants in January 2017, as the stock warrants appreciated in value since their vesting, resulting in an income tax benefit to us when exercised; and (ii) an approximately \$2 million benefit related to the adoption of ASU 2016-09, Compensation-Stock Compensation (Topic 718).

Liquidity

Cash and Liquidity

As of September 30, 2018, our principal sources of liquidity included cash, cash equivalents and short-term investments of \$199.3 million, as compared to \$186.4 million as of June 30, 2018 and \$261.4 million as of as of December 31, 2017. We generally invest our excess cash balances in low-risk, short-term investments to limit our exposure to market and credit risks.

During the first quarter of 2018, we refinanced our 2015 Credit Agreement primarily to extend the term of the loan from February 2020 to March 2023 and obtain a reduction in the interest rate and other fees. The 2018 Credit Agreement increased our liquidity and capital resources position by approximately \$30 million.

As part of our 2018 Credit Agreement, we have a \$200 million senior secured revolving loan facility with a syndicate of financial institutions that expires in March 2023. As of September 30, 2018, there were no borrowings outstanding on the 2018 Revolver. The 2018 Credit Agreement contains customary affirmative covenants and financial covenants. As of September 30, 2018, and the date of this filing, we believe that we are in compliance with the provisions of the 2018 Credit Agreement.

Our cash, cash equivalents, and short-term investment balances as of the end of the indicated periods were located in the following geographical regions (in thousands):

	September 30,	December 31,
	2018	2017
Americas (principally the U.S.)	\$ 153,419	\$ 196,053
Europe, Middle East and Africa	38,030	48,030
Asia Pacific	7,853	17,277
Total cash, equivalents and short-term investments	\$ 199,302	\$ 261,360

Our short-term investments as of September 30, 2018 and December 31, 2017 were \$2.1 million and \$139.1 million, respectively. The significant decrease in our short-term investments between periods is due primarily to the acquisition of Business Ink in February 2018 for approximately \$70 million and positioning of cash as of September 30, 2018 for the acquisition of Forte, which closed on October 1, 2018 for a purchase price of approximately \$85 million (approximately \$80 million, net of cash acquired), less approximately \$13 million in cash subject to certain tax filings (see Note 5 to our Financial Statements for additional discussion of our acquisitions).

We generally have ready access to substantially all of our cash, cash equivalents, and short-term investment balances, but may face limitations on moving cash out of certain foreign jurisdictions due to currency controls. As of September 30, 2018, we had \$3.0 million of cash restricted as to use primarily to collateralize outstanding letters of

credit.

Cash Flows from Operating Activities

We calculate our cash flows from operating activities in accordance with U.S. GAAP, beginning with net income, adding back the impact of non-cash items or non-operating activity (e.g., depreciation, amortization, amortization of OID, impairments, gain/loss from debt extinguishments, deferred income taxes, stock-based compensation, etc.), and then factoring in the impact of changes in operating assets and liabilities. See our 2017 10-K for a description of the primary uses and sources of our cash flows from operating activities.

Our 2018 and 2017 net cash flows from operating activities, broken out between operations and changes in operating assets and liabilities, for the indicated quarterly periods are as follows (in thousands):

			Net Cash
		Changes	Provided
		in	by
		Operating	(Used In)
		Operating	Operating
		Assets and	Activities –
	Operations	Liabilities	Totals
Cash Flows from Operating Activities:			
2018:			
March 31	\$ 38,247	\$(8,392)	\$ 29,855
June 30	38,476	(42,117)	(3,641)
September 30	34,888	12,167	47,055
Total	\$111,611	\$(38,342)	\$73,269
2017:			
March 31	\$43,495	\$(13,531)	\$29,964
June 30	26,364	8,160	34,524
September 30	30,536	7,798	38,334
Total	\$ 100,395	\$2,427	\$102,822

Cash flows from operating activities for the first quarters of 2018 and 2017 reflect the negative impacts of the payment of the 2017 and 2016 year-end accrued employee incentive compensation in the first quarter subsequent to the year-end accrual for these items.

Cash flows from operating activities for the second quarter of 2018 was negatively impacted primarily by the increase in the accounts receivable balance mainly related to the timing of a recurring payment from a significant client that was delayed and received subsequent to quarter-end.

We believe the above table illustrates our ability to generate recurring quarterly cash flows from our operations, and the importance of managing our working capital items. Variations in our net cash provided by operating activities are generally related to the changes in our operating assets and liabilities (related mostly to fluctuations in timing at quarter-end of client payments and changes in accrued expenses), and generally over longer periods of time, do not significantly impact our cash flows from operations.

Significant fluctuations in key operating assets and liabilities between 2018 and 2017 that impacted our cash flows from operating activities are as follows:

Billed Trade Accounts Receivable

Management of our billed accounts receivable is one of the primary factors in maintaining consistently strong quarterly cash flows from operating activities. Our billed trade accounts receivable balance includes significant billings for several non-revenue items (primarily postage, sales tax, and deferred revenue items). As a result, we evaluate our performance in collecting our accounts receivable through our calculation of days billings outstanding ("DBO") rather than a typical days sales outstanding ("DSO") calculation.

Our gross and net billed trade accounts receivable and related allowance for doubtful accounts receivable ("Allowance") as of the end of the indicated quarterly periods, and the related DBOs for the quarters then ended, are as follows (in thousands, except DBOs):

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Quarter Ended	Gross	Allowance	Net Billed	DBOs
2018:				
March 31	\$217,018	\$ (3,967)	\$213,051	70
June 30	243,874	(3,961)	239,913	67
September 30	250,913	(4,182)	246,731	68
2017:				
March 31	\$198,135	\$ (2,824)	\$195,311	70
June 30	200,192	(2,706)	197,486	65
September 30	204,293	(2,456)	201,837	72

The increase in gross and net billed accounts receivable during 2018 is due to the addition of Business Ink's accounts receivable and the timing around certain recurring client payments (from different clients) that were delayed at the end of the second and

third quarter. As these monthly payments were received subsequent to each quarter-end, they do not raise any collectability concerns. All other changes in our gross and net billed accounts receivable reflect the normal fluctuations in the timing of client payments at quarter-end, as evidenced by our relatively consistent DBO metric over the past several quarters. As of September 30, 2018, approximately 95% of our billed accounts receivable balance is less than 60 days past due.

As a global provider of software and professional services, a portion of our accounts receivable balance relates to clients outside the U.S. This diversity in the geographic composition of our client base may adversely impact our DBOs as longer billing cycles (i.e., billing terms and cash collection cycles) are an inherent characteristic of international software and professional services transactions. For example, our ability to bill (i.e., send an invoice) and collect arrangement fees may be dependent upon, among other things: (i) the completion of various client administrative matters, local country billing protocols and processes (including local cultural differences), and/or non-client administrative matters; (ii) us meeting certain contractual invoicing milestones; or (iii) the overall project status in certain situations in which we act as a subcontractor to another vendor on a project.

Other Current and Non-Current Assets

Other current and non-current assets increased \$10.3 million to \$49.6 million as of September 30, 2018, from \$39.3 million as of December 31, 2017, due primarily to the timing of payments of various prepaid items, mainly, prepaid software and hardware maintenance fees.

Additionally, as illustrated in Note 2 to our Financial Statements, as a result of the application of ASC 606, an additional \$10.2 million of client contract costs are now being included in operating activities as changes in other current and non-current assets for the nine months ended September 30, 2018. Prior to the adoption of ASC 606, these were included with investments in client contracts and included in investing activities.

Cash Flows from Investing Activities

Our typical investing activities consist of purchases/sales of short-term investments and purchases of property and equipment, which are discussed below. Additionally, as discussed earlier, during the first quarter of 2018 we acquired Business Ink for \$68.6 million, net of cash acquired, and as discussed in Note 2 to our Financial Statements, made an investment in payment technology and services company for \$2.8 million, which is included in our cash flows from investing activities.

Purchases/Sales of Short-term Investments. For the nine months ended September 30, 2018 and 2017, we purchased \$53.3 million and \$116.2 million, respectively, and sold (or had mature) \$190.5 million and \$150.8 million, respectively, of short-term investments. We continually evaluate the appropriate mix of our investment of excess cash balances between cash equivalents and short-term investments in order to maximize our investment returns and will likely purchase and sell additional short-term investments in the future.

Software, Property and Equipment/Client Contracts. Our capital expenditures for the nine months ended September 30, 2018 and 2017, for software, property and equipment, and investments in client contracts were as follows (in thousands):

September 30, 2018 2017 Software, property and equipment \$44,047 \$23,370 Client contracts - 10,082

Our property and equipment expenditures for these periods consisted principally of investments in: (i) statement production equipment; (ii) computer hardware, software, and related equipment; and (iii) facilities and internal infrastructure items.

As a result of the application of ASC 606, \$7.3 million of investments in client contracts have been included in operating activities for the nine months ended September 30, 2018. Prior to the adoption of ASC 606, investments in client contracts were included in investing activities.

Cash Flows from Financing Activities

Our financing activities typically consist of activities associated with our common stock and our long-term debt.

Cash Dividends Paid on Common Stock. During the nine months ended September 30, 2018 and 2017, the Board approved dividend payments totaling \$21.2 million and \$20.0 million, respectively. During the nine months ended September 30, 2018 and 2017, we paid dividends of \$21.2 million and \$20.4 million, respectively (with the additional amounts attributed to dividends for incentive shares paid upon vesting).

Repurchase of Common Stock. During the nine months ended September 30, 2018 and 2017, we repurchased 0.4 million shares of our common stock in each period under the guidelines of our Stock Repurchase Program for \$16.8 million and \$15.6 million, respectively.

Outside of our Stock Repurchase Program, during the nine months ended September 30, 2018 and 2017, we repurchased from our employees and then cancelled 0.2 million shares of our common stock in each period for \$7.2 million and \$9.4 million, respectively, in connection with minimum tax withholding requirements resulting from the vesting of restricted common stock under our stock incentive plans.

Long-term Debt. During the first quarter of 2018, we refinanced our 2015 Credit Agreement and as a result, we repaid the outstanding principal balance of \$120.0 million and borrowed \$150.0 million under the 2018 Credit Agreement, resulting in a net increase of available cash of \$30.0 million. As part of the refinancing, we paid \$1.5 million of deferred financing costs.

During the nine months ended September 30, 2017, we settled our conversion obligation for the 2010 Convertible Notes as follows: (i) we paid cash of \$34.8 million for the remaining par value of the 2010 Convertible Notes; and (ii) delivered 694,240 of our common shares from treasury stock to settle the \$28.8 million conversion obligation in excess of par value.

Additionally, during the nine months ended September 30, 2018 and 2017, we made principal repayments of \$3.8 million and \$11.3 million, respectively.

See Note 4 to our Financial Statements for additional discussion of our long-term debt.

Capital Resources

The following are the key items to consider in assessing our sources and uses of capital resources:

Current Sources of Capital Resources.

Cash, Cash Equivalents and Short-term Investments. As of September 30, 2018, we had cash, cash equivalents, and short-term investments of \$199.3 million, of which approximately 75% is in U.S. Dollars and held in the U.S. We have \$3.0 million of restricted cash, used primarily to collateralize outstanding letters of credit. For the remainder of the monies denominated in foreign currencies and/or located outside the U.S., we do not anticipate any material amounts being unavailable for use in running our business. As of September 30, 2018, we had positioned cash in preparation for the closing of the acquisition of Forte on October 1, 2018. Our acquisitions are discussed in more detail below and in Note 5 to our Financial Statements.

Operating Cash Flows. As described in the Liquidity section above, we believe we have the ability to generate strong cash flows to fund our operating activities and act as a source of funds for our capital resource needs.

Long-Term Debt\Revolving Credit Facility. In March 2018, we refinanced our 2015 Credit Agreement and as a result, we repaid the outstanding term loan principal balance of \$120.0 million and borrowed \$150.0 million, resulting in a net increase in cash of \$30 million (the 2018 Credit Agreement). The 2018 Credit Agreement also includes a \$200 million revolving loan facility (2018 Revolver). As of September 30, 2018, we had no borrowing outstanding on our 2018 Revolver and had the entire \$200 million available to us. Our long-term debt obligations are discussed in more detail in Note 4 to our Financial Statements.

Uses/Potential Uses of Capital Resources. Below are the key items to consider in assessing our uses/potential uses of capital resources:

Common Stock Repurchases. We have made repurchases of our common stock in the past under our Stock Repurchase Program. As of September 30, 2018, we had 5.8 million shares authorized for repurchase remaining under our Stock Repurchase Program. Our 2018 Credit Agreement places certain limitations on our ability to

repurchase our common stock.

In September 2018, we announced an increase in our planned share repurchases of up to \$150 million under our Stock Repurchase Program over the next three years. Under our Stock Repurchase Program, we may repurchase shares in the open market or in privately negotiated transactions, including through an accelerated stock repurchase plan or under a SEC Rule 10b5-1 plan. The actual timing and amount of the share repurchases will be dependent on then current market conditions and other business-related factors over the next three years.

During the nine months ended September 30, 2018, we repurchased 0.4 million shares of our common stock for \$16.9 million (weighted-average price of \$42.71 per share).

Outside of our Stock Repurchase Program, during the nine months ended September 30, 2018, we repurchased from our employees and then cancelled 0.2 million shares of our common stock for \$7.2 million in connection with minimum tax withholding requirements resulting from the vesting of restricted common stock under our stock incentive plans.

Our common stock repurchases are discussed in more detail in Note 10 to our Financial Statements.

Cash Dividends. During the nine months ended September 30, 2018, the Board declared dividends totaling \$21.2 million. Going forward, we expect to pay cash dividends each year in March, June, September, and December, with the amount and timing subject to the Board's approval.

Acquisitions. In February 2018, we acquired Business Ink, a privately-held multi-channel business communications company based in Austin, Texas for approximately \$70 million. The acquisition was funded from currently available cash.

On October 1, 2018, we acquired Forte, a leading provider of advanced payment solutions headquartered in Allen, Texas for a purchase price of approximately \$85 million, (approximately \$80 million, net of cash acquired), and held back approximately \$13 million in cash subject to certain tax filings. The purchase agreement includes provisions for \$18.8 million of potential future earn-out payments over a four-year measurement period. The earn-out payments are tied to performance-based goals and continued employment by the eligible recipients. The acquisition was funded from currently available cash.

Our acquisitions are discussed in more detail in Note 5 to our Financial Statements. As part of our growth strategy, we are continually evaluating potential business and/or asset acquisitions and investments in market share expansion with our existing and potential new clients.

Equity Method Investment. On July 30, 2018, we made an investment of \$2.8 million for a 4% noncontrolling financial interest in a payment technology and services company that enables omni-channel digital payments in Latin America. See Note 2 to our Financial Statements for additional discussion.

Capital Expenditures. During the nine months ended September 30, 2018, we spent \$44.0 million on capital expenditures. As of September 30, 2018, we had committed to purchase approximately \$9 million of equipment. Stock Warrants. We have issued Stock Warrants with an exercise price of \$26.68 per warrant to Comcast as an incentive for Comcast to convert new customer accounts to ACP. Once vested, Comcast may exercise the Stock Warrants and elect either physical delivery of common shares or net share settlement (cashless exercise). Alternatively, the exercise of the Stock Warrants may be settled with cash based solely on our approval, or if Comcast were to beneficially own or control in excess of 19.99% of our common stock or voting of the Company. As of September 30, 2018, approximately 1.4 million Stock Warrants are outstanding, of which 0.4 million are vested.

The Stock Warrants are discussed in more detail in Note 10 to our Financial Statements.

Long-Term Debt. As discussed above, we refinanced our 2015 Credit Agreement in March 2018. As of September 30, 2018, our long-term debt consisted of the following: (i) 2016 Convertible Notes with a par value of \$230.0 million; and (ii) 2018 Credit Agreement term loan borrowings of \$146.3 million. 2016 Convertible Notes

During the next twelve months, there are no scheduled conversion triggers on our 2016 Convertible Notes. As a result, we expect our required debt service cash outlay during the next twelve months for the 2016 Convertible Notes to be limited to interest payments of \$9.8 million.

2018 Credit Agreement

Our 2018 Credit Agreement mandatory repayments and the cash interest expense (based upon current interest rates) for the next twelve months is \$7.5 million, and \$6.1 million, respectively. We have the ability to make prepayments

on our 2018 Credit Agreement without penalty.

Our long-term debt obligations are discussed in more detail in Note 4 to our Financial Statements.

In summary, we expect to continue to have material needs for capital resources going forward, as noted above. We believe that our current cash, cash equivalents and short-term investments balances and our 2018 Revolver, together with cash expected to be generated in the future from our current operating activities, will be sufficient to meet our anticipated capital resource requirements for

at least the next twelve months. We also believe we could obtain additional capital through other debt sources which may be available to us if deemed appropriate.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

Market risk is the potential loss arising from adverse changes in market rates and prices. As of September 30, 2018, we are exposed to various market risks, including changes in interest rates, fluctuations and changes in the market value of our cash equivalents and short-term investments, and changes in foreign currency exchange rates. We have not historically entered into derivatives or other financial instruments for trading or speculative purposes.

Interest Rate Risk

Long-Term Debt. The interest rate on our 2016 Convertible Notes is fixed, and thus, as it relates to our convertible debt borrowings, we are not exposed to changes in interest rates.

The interest rates under our 2018 Credit Agreement are based upon an adjusted LIBOR rate plus an applicable margin, or an alternate base rate plus an applicable margin. See Note 4 to our Financial Statements for further details of our long-term debt.

A hypothetical adverse change of 10% in the September 30, 2018 adjusted LIBOR rate would not have had a material impact upon our results of operations.

Market Risk

Cash Equivalents and Short-term Investments. Our cash and cash equivalents as of September 30, 2018 and December 31, 2017 were \$197.2 million and \$122.3 million, respectively. Certain of our cash balances are "swept" into overnight money market accounts on a daily basis, and at times, any excess funds are invested in low-risk, somewhat longer term, cash equivalent instruments and short-term investments. Our cash equivalents are invested primarily in institutional money market funds, commercial paper, and time deposits held at major banks. We have minimal market risk for our cash and cash equivalents due to the relatively short maturities of the instruments.

Our short-term investments as of September 30, 2018 and December 31, 2017 were \$2.1 million and \$139.1 million, respectively. Currently, we utilize short-term investments as a means to invest our excess cash only in the U.S. The day-to-day management of our short-term investments is performed by a large financial institution in the U.S., using strict and formal investment guidelines approved by our Board. Under these guidelines, short-term investments are limited to certain acceptable investments with: (i) a maximum maturity; (ii) a maximum concentration and diversification; and (iii) a minimum acceptable credit quality. The significant decrease in short-term investments between periods is due primarily to the acquisition of Business Ink in February 2018 for approximately \$70 million and positioning of cash as of September 30, 2018 for the acquisition of Forte, which closed on October 1, 2018 for a purchase price of approximately \$85 million (\$80 million, net of cash acquired), less approximately \$13 million in cash subject to certain tax filings (see Note 5 to our Financial Statements for additional discussion of our acquisitions).

Long-Term Debt. The fair value of our convertible debt is exposed to market risk. We do not carry our convertible debt at fair value but present the fair value for disclosure purposes (see Note 2 to our Financial Statements). Generally, the fair value of our convertible debt is impacted by changes in interest rates and changes in the price and volatility of our common stock. As of September 30, 2018, the fair value of the 2016 Convertible Notes was estimated at \$242.7 million, using quoted market prices.

Foreign Currency Exchange Rate Risk

Due to foreign operations around the world, our balance sheet and income statement are exposed to foreign currency exchange risk due to the fluctuations in the value of currencies in which we conduct business. While we attempt to maximize natural hedges by incurring expenses in the same currency in which we contract revenue, the related expenses for that revenue could be in one or more differing currencies than the revenue stream.

During the nine months ended September 30, 2018, we generated approximately 87% of our revenues in U.S. dollars. We expect that, in the foreseeable future, we will continue to generate a very large percentage of our revenues in U.S. dollars.

As of September 30, 2018 and December 31, 2017, the carrying amounts of our monetary assets and monetary liabilities on the books of our non-U.S. subsidiaries in currencies denominated in a currency other than the functional currency of those non-U.S. subsidiaries are as follows (in thousands, in U.S. dollar equivalents):

	September 30,		December 31,	
	2018		2017	
	Monetary Monetary		Monetary Monetary	
	Liabilitiesssets		Liabilitiesssets	
Pounds sterling	\$(19)	\$ 1,694	\$-	\$ 1,968
Euro	(248)	8,482	(257)	8,491
U.S. Dollar	(30)	19,410	(178)	19,354
Other	(12)	2,934	(9)	2,074
Totals	\$(309)	\$32,520	\$(444)	\$ 31,887

A hypothetical adverse change of 10% in the September 30, 2018 exchange rates would not have had a material impact upon our results of operations based on the monetary assets and liabilities as of September 30, 2018.

Item 4. Controls and Procedures

(a) Disclosure Controls and Procedures

As required by Rule 13a-15(b), our management, including the Chief Executive Officer ("CEO") and Chief Financial Officer ("CFO"), conducted an evaluation as of the end of the period covered by this report of the effectiveness of our disclosure controls and procedures as defined in Rule 13a-15(e). Based on that evaluation, the CEO and CFO concluded that our disclosure controls and procedures were effective as of the end of the period covered by this report.

(b) Internal Control Over Financial Reporting

As required by Rule 13a-15(d), our management, including the CEO and CFO, also conducted an evaluation of our internal control over financial reporting, as defined by Rule 13a-15(f), to determine whether any changes occurred during the quarter covered by this report that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting. Based on that evaluation, the CEO and CFO concluded that there has been no such change during the quarter covered by this report.

CSG SYSTEMS INTERNATIONAL, INC.

PART II. OTHER INFORMATION

Item 1. Legal Proceedings

From time-to-time, we are involved in litigation relating to claims arising out of our operations in the normal course of business. We are not presently a party to any material pending or threatened legal proceedings.

Item 1A. Risk Factors

A discussion of our risk factors can be found in Item 1A. Risk Factors in our 2017 Form 10-K. There were no material changes to the risk factors disclosed in our 2017 Form 10-K during the third quarter of 2018.

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

The following table presents information with respect to purchases of our common stock made during the third quarter of 2018 by CSG Systems International, Inc. or any "affiliated purchaser" of CSG Systems International, Inc., as defined in Rule 10b-18(a)(3) under the Exchange Act.

				Maximum Number
				(or
			Total Number of	Approximate
				Dollar Value)
			Shares Purchased	of
			as	Shares that
				May
			Part of	
	Total	Average	Publicly	Yet Be
				Purchased
	Number	Price	Announced	
	of Shares	Paid	Plans or	Under the Plan or
	Purchased	Per	Programs	
Period	(1)(2)	Share	(2)	Programs (2)
July 1 - July 31	52,786	\$41.35	51,700	5,934,417
August 1 - August 31	45,087	37.88	42,300	5,892,117
September 1 - September 30	45,546	40.07	44,450	5,847,667
Total	143,419	\$ 39.85	138,450	

(1) The total number of shares purchased that are not part of the Stock Repurchase Program represents shares purchased and cancelled in connection with stock incentive plans.
(2) See Note 10 to our Financial Statements for additional information regarding our share repurchases.
Item 3. Defaults Upon Senior Securities
None
Item 4. Mine Safety Disclosures
None
Item 5. Other Information
None
Item 6. Exhibits
The Exhibits filed or incorporated by reference herewith are as specified in the Exhibit Index.
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CSG SYSTEMS INTERNATIONAL, INC.

INDEX TO EXHIBITS

Number Description 10.22AJ* Thirty-Fourth Amendment to the CSG Master Subscriber Management System Agreement between CSG System, Inc. and Comcast Cable Communications Management, LLC 10.23BC* Sixty-Fifth Amendment to the CSG Master Subscriber Management System Agreement between CSG System, Inc. and DISH Network, LLC 10.26O* Seventh Amendment to Consolidated CSG Master Subscriber Management System Agreement between CSG Systems. Inc. and Charter Communications Operating, LLC 10.26P* Twelfth Amendment to Consolidated CSG Master Subscriber Management System Agreement between CSG Systems. Inc. and Charter Communications Operating, LLC 10.26P* Fourteenth Amendment to Consolidated CSG Master Subscriber Management System Agreement between CSG Systems. Inc. and Charter Communications Operating, LLC 10.26R* Nineteenth Amendment to Consolidated CSG Master Subscriber Management System Agreement between CSG Systems. Inc. and Charter Communications Operating, LLC 10.39 CSG Systems. Inc. and Charter Communications Operating, LLC 10.39 CSG Systems. Inc. Wealth Accumulation Plan, as restated and amended effective December 6, 2017 10.39A Adoption Agreement to CSG Systems, Inc. Wealth Accumulation Plan, executed September 13, 2018 31.01 Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 32.01 Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 32.01 Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 32.01 Starl Instance Document 101.CAL XBRL Taxonomy Extension Schema Document 101.CAL XBRL Taxonomy Extension Definition Linkbase Document 101.DEF XBRL Taxonomy Extension Definition Linkbase Document 101.LAB XBRL Taxonomy Extension Presentation Linkbase Document	Exhibit	
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^{*}Portions of the exhibit have been omitted pursuant to an application for confidential treatment, and the omitted portions have been filed separately with the Commission.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

Dated: November 9, 2018

CSG SYSTEMS INTERNATIONAL, INC.

/s/ Bret C. Griess
Bret C. Griess
President and Chief Executive Officer
(Principal Executive Officer)

/s/ Rolland B. Johns Rolland B. Johns Executive Vice President and Chief Financial Officer (Principal Financial Officer)

/s/ Jerod L. Sands
Jerod L. Sands
Chief Accounting Officer
(Principal Accounting Officer)