

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

FORM 10-Q

(Mark One)

- Quarterly Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934**
For the quarterly period ended September 30, 2018
- Transition Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934**
For the transition period from _____ to _____

Commission file number: 1-7945



DELUXE CORPORATION

(Exact name of registrant as specified in its charter)

Minnesota

(State or other jurisdiction of incorporation or organization)

3680 Victoria St. N., Shoreview, Minnesota

(Address of principal executive offices)

41-0216800

(I.R.S. Employer Identification No.)

55126-2966

(Zip Code)

(651) 483-7111

(Registrant's telephone number, including area code)

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

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or such shorter period that the registrant was required to submit and post such files).

Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a 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.

Large accelerated filer

Accelerated filer

Non-accelerated filer

Smaller reporting company

Emerging growth company

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

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Yes No

The number of shares outstanding of registrant's common stock, par value \$1.00 per share, as of October 17, 2018 was 46,306,669.

PART I – FINANCIAL INFORMATION

Item 1. Financial Statements.

DELUXE CORPORATION
CONSOLIDATED BALANCE SHEETS
(in thousands, except share par value)
(Unaudited)

	September 30, 2018	December 31, 2017
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 57,851	\$ 59,240
Trade accounts receivable, net of allowances for uncollectible accounts	157,139	149,844
Inventories and supplies	45,118	42,249
Funds held for customers	84,407	86,192
Revenue in excess of billings	33,735	16,379
Other current assets	39,092	39,062
Total current assets	417,342	392,966
Deferred income taxes	1,606	1,428
Long-term investments	43,520	42,607
Property, plant and equipment (net of accumulated depreciation of \$364,510 and \$358,020, respectively)	83,507	84,638
Assets held for sale	3,250	12,232
Intangibles (net of accumulated amortization of \$524,499 and \$444,933, respectively)	396,641	384,266
Goodwill	1,125,954	1,130,934
Other non-current assets	195,547	159,756
Total assets	\$ 2,267,367	\$ 2,208,827
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 97,991	\$ 104,477
Accrued liabilities	234,529	277,253
Long-term debt due within one year	785	44,040
Total current liabilities	333,305	425,770
Long-term debt	890,098	665,260
Deferred income taxes	46,339	50,543
Other non-current liabilities	42,330	52,241
Commitments and contingencies (Notes 11 and 12)		
Shareholders' equity:		
Common shares \$1 par value (authorized: 500,000 shares; outstanding: September 30, 2018 – 46,305; December 31, 2017 – 47,953)	46,305	47,953
Retained earnings	957,979	1,004,657
Accumulated other comprehensive loss	(48,989)	(37,597)
Total shareholders' equity	955,295	1,015,013
Total liabilities and shareholders' equity	\$ 2,267,367	\$ 2,208,827

See Condensed Notes to Unaudited Consolidated Financial Statements

DELUXE CORPORATION
CONSOLIDATED STATEMENTS OF COMPREHENSIVE (LOSS) INCOME
(in thousands, except per share amounts)
(Unaudited)

	Quarter Ended September 30,		Nine Months Ended September 30,	
	2018	2017	2018	2017
Product revenue	\$ 352,767	\$ 361,963	\$ 1,076,110	\$ 1,097,777
Service revenue	140,423	135,706	397,239	372,889
Total revenue	493,190	497,669	1,473,349	1,470,666
Cost of products	(132,996)	(129,192)	(400,700)	(392,451)
Cost of services	(64,638)	(63,879)	(175,894)	(159,301)
Total cost of revenue	(197,634)	(193,071)	(576,594)	(551,752)
Gross profit	295,556	304,598	896,755	918,914
Selling, general and administrative expense	(208,533)	(203,349)	(629,272)	(629,150)
Net restructuring charges	(5,135)	(1,267)	(12,915)	(3,708)
Asset impairment charges	(99,170)	(46,630)	(101,319)	(54,880)
Operating (loss) income	(17,282)	53,352	153,249	231,176
Interest expense	(7,244)	(5,708)	(18,953)	(15,795)
Other income	2,356	1,303	6,081	3,616
(Loss) income before income taxes	(22,170)	48,947	140,377	218,997
Income tax provision	(8,913)	(20,146)	(47,916)	(73,551)
Net (loss) income	\$ (31,083)	\$ 28,801	\$ 92,461	\$ 145,446
Comprehensive (loss) income	\$ (30,902)	\$ 31,543	\$ 87,936	\$ 150,981
Basic (loss) earnings per share	(0.67)	0.60	1.94	3.00
Diluted (loss) earnings per share	(0.67)	0.59	1.93	2.98
Cash dividends per share	0.30	0.30	0.90	0.90

See Condensed Notes to Unaudited Consolidated Financial Statements

DELUXE CORPORATION
CONSOLIDATED STATEMENT OF SHAREHOLDERS' EQUITY
(in thousands)
(Unaudited)

	Common shares	Common shares par value	Additional paid-in capital	Retained earnings	Accumulated other comprehensive loss	Total
Balance, December 31, 2017	47,953	\$ 47,953	\$ —	\$ 1,004,657	\$ (37,597)	\$ 1,015,013
Net income	—	—	—	92,461	—	92,461
Cash dividends	—	—	—	(43,012)	—	(43,012)
Common shares issued	518	518	18,181	—	—	18,699
Common shares repurchased	(1,919)	(1,919)	(10,121)	(107,960)	—	(120,000)
Other common shares retired	(247)	(247)	(17,601)	—	—	(17,848)
Employee share-based compensation	—	—	9,541	—	—	9,541
Adoption of Accounting Standards Update No. 2014-09 (Note 2)	—	—	—	4,966	—	4,966
Adoption of Accounting Standards Update No. 2018-02 (Note 2)	—	—	—	6,867	(6,867)	—
Other comprehensive loss	—	—	—	—	(4,525)	(4,525)
Balance, September 30, 2018	<u>46,305</u>	<u>\$ 46,305</u>	<u>\$ —</u>	<u>\$ 957,979</u>	<u>\$ (48,989)</u>	<u>\$ 955,295</u>

See Condensed Notes to Unaudited Consolidated Financial Statements

DELUXE CORPORATION
CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)
(Unaudited)

	Nine Months Ended September 30,	
	2018	2017
Cash flows from operating activities:		
Net income	\$ 92,461	\$ 145,446
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation	12,724	12,013
Amortization of intangibles	84,199	79,284
Asset impairment charges	101,319	54,880
Amortization of prepaid product discounts	16,976	14,685
Deferred income taxes	(12,157)	(20,587)
Employee share-based compensation expense	9,481	11,149
Gain on sales of businesses and customer lists	(12,855)	(8,703)
Other non-cash items, net	5,482	6,211
Changes in assets and liabilities, net of effect of acquisitions:		
Trade accounts receivable	1,466	19,140
Inventories and supplies	(2,009)	800
Other current assets	(13,030)	(16,692)
Non-current assets	(5,116)	(3,748)
Accounts payable	(5,453)	(6,750)
Prepaid product discount payments	(19,125)	(20,003)
Other accrued and non-current liabilities	(35,261)	(41,229)
Net cash provided by operating activities	<u>219,102</u>	<u>225,896</u>
Cash flows from investing activities:		
Purchases of capital assets	(42,566)	(34,351)
Payments for acquisitions, net of cash acquired	(190,396)	(125,417)
Proceeds from sales of marketable securities	—	3,500
Other	1,038	2,166
Net cash used by investing activities	<u>(231,924)</u>	<u>(154,102)</u>
Cash flows from financing activities:		
Proceeds from issuing long-term debt	1,189,500	333,000
Payments on long-term debt	(1,009,139)	(336,590)
Proceeds from issuing shares under employee plans	7,300	8,218
Employee taxes paid for shares withheld	(7,969)	(6,816)
Payments for common shares repurchased	(120,000)	(50,070)
Cash dividends paid to shareholders	(42,943)	(43,672)
Other	(4,128)	(1,281)
Net cash provided (used) by financing activities	<u>12,621</u>	<u>(97,211)</u>
Effect of exchange rate change on cash	<u>(1,188)</u>	<u>2,253</u>
Net change in cash and cash equivalents	(1,389)	(23,164)
Cash and cash equivalents, beginning of year	59,240	76,574
Cash and cash equivalents, end of period	<u>\$ 57,851</u>	<u>\$ 53,410</u>

See Condensed Notes to Unaudited Consolidated Financial Statements

DELUXE CORPORATION
CONDENSED NOTES TO UNAUDITED CONSOLIDATED FINANCIAL STATEMENTS
(dollars in thousands, except per share amounts)

Note 1: Consolidated financial statements

The consolidated balance sheet as of September 30, 2018, the consolidated statements of comprehensive (loss) income for the quarters and nine months ended September 30, 2018 and 2017, the consolidated statement of shareholders' equity for the nine months ended September 30, 2018, and the consolidated statements of cash flows for the nine months ended September 30, 2018 and 2017 are unaudited. The consolidated balance sheet as of December 31, 2017 was derived from audited consolidated financial statements, but does not include all disclosures required by generally accepted accounting principles (GAAP) in the United States of America. In the opinion of management, all adjustments necessary for a fair statement of the consolidated financial statements are included. Adjustments consist only of normal recurring items, except for any discussed in the notes below. Interim results are not necessarily indicative of results for a full year. The consolidated financial statements and notes are presented in accordance with instructions for Form 10-Q and do not contain certain information included in our annual consolidated financial statements and notes. The consolidated financial statements and notes appearing in this report should be read in conjunction with the consolidated audited financial statements and related notes included in our Annual Report on Form 10-K for the year ended December 31, 2017 (the "2017 Form 10-K").

Amounts within the consolidated balance sheet as of December 31, 2017 have been modified to conform to the current year presentation. Revenue in excess of billings is now presented separately. Previously this amount was included in other current assets. Additionally, amounts within the cash flows from operating activities and the cash flows from investing activities sections of the consolidated statement of cash flows for the nine months ended September 30, 2017 have been modified to conform to the current year presentation. Within cash flows from operating activities, gain on sales of businesses and customer lists is now presented separately. In the previous year, this amount was included within other non-cash items, net. Within cash flows from investing activities, proceeds from company-owned life insurance policies presented in the previous year is now included in other.

Note 2: New accounting pronouncements

The following discusses the impact of each accounting standards update (ASU) adopted on January 1, 2018:

ASU No. 2014-09 – In May 2014, the Financial Accounting Standards Board (FASB) issued ASU No. 2014-09, *Revenue from Contracts with Customers*. The standard provides revenue recognition guidance for any entity that enters into contracts with customers to transfer goods or services or enters into contracts for the transfer of non-financial assets, unless those contracts are within the scope of other accounting standards. In addition, the FASB subsequently issued several amendments to the standard. We adopted the standard and all the related amendments on January 1, 2018 using the modified retrospective method. We applied the new guidance to uncompleted contracts as of January 1, 2018 and recorded the cumulative effect of initially applying the standard as an adjustment to retained earnings, with the offset to revenue in excess of billings, other non-current assets and deferred income tax liabilities. We have elected the practical expedient for contract modifications, allowing us to consider the impact of all contract modifications completed prior to January 1, 2018. We have also elected the practical expedient that allows us to disregard the effects of a financing component if the period between payment and performance will be 1 year or less. Election of these practical expedients did not have a significant impact on our results of operations or financial position. Prior periods have not been restated and continue to be reported under the accounting standards in effect for those periods. Adoption of this guidance did not have a significant impact on our results of operations, financial position or cash flows during the nine months ended September 30, 2018, and we do not expect it to have a significant impact on an ongoing basis. The new guidance also expands the required financial statement disclosures regarding revenue recognition. Those disclosures appear below, while information regarding the disaggregation of revenue can be found in Note 14.

Our product revenue is recognized when control of the goods is transferred to our customers, in an amount that reflects the consideration we expect to be entitled to in exchange for those goods. In most cases, control is transferred when products are shipped. We recognize the vast majority of our service revenue as the services are provided. Many of our check supply contracts with financial institutions provide for rebates on certain products. We record these rebates as reductions of revenue and as accrued liabilities on our consolidated balance sheets when the related revenue is recognized. Many of our financial institution contracts also require prepaid product discounts in the form of upfront cash payments we make to our financial institution clients. These prepaid product discounts are included in other non-current assets in our consolidated balance sheets and are amortized as reductions of revenue, generally on the straight-line basis, over the contract term. Sales tax collected concurrent with revenue-producing activities is excluded from revenue. Amounts billed to customers for shipping and handling

DELUXE CORPORATION
CONDENSED NOTES TO UNAUDITED CONSOLIDATED FINANCIAL STATEMENTS
(dollars in thousands, except per share amounts)

g are included in revenue, while the related shipping and handling costs are reflected in cost of products. We have elected the practical expedient that allows us to account for shipping and handling activities that occur after the customer has obtained control of a good as a fulfillment cost, and we accrue costs of shipping and handling when the related revenue is recognized. As part of our Financial Services rewards, incentive and loyalty programs, we receive payments from consumers or our clients for the products and services provided, including hotel stays, gift cards and merchandise, such as apparel, electronics and clothing. This revenue is recorded net of the related fulfillment costs.

Certain of our contracts for data-driven marketing solutions and treasury management outsourcing services within Financial Services have variable consideration that is contingent on either the success of the marketing campaign ("pay-for-performance") or the volume of outsourcing services provided. We recognize revenue for estimated variable consideration as services are provided based on the most likely amount to be realized. Revenue is recognized to the extent that it is probable that a significant reversal of revenue will not occur when the contingency is resolved. Estimates regarding the recognition of variable consideration are updated each quarter. Typically, the amount of consideration for these contracts is finalized within 3 months, although pricing under certain of our outsourcing contracts may be based on annual volume commitments. Revenue recognized from these contracts was approximately \$100,000 in 2017. Under the new standard, we have accelerated the recognition of a portion of this variable consideration.

Certain of our contracts for treasury management solutions result from the sale of bundled arrangements that may include hardware, software and professional services, as well as customization and modification of software, and specify the timing of customer billings over the course of the contract. Revenue for these contracts is recognized using a cost-based input method that depicts the transfer of services to the customer. The transaction price is allocated to each performance obligation based on its relative standalone selling price. We generally determine standalone selling prices based on the prices charged to customers or using expected cost plus margin. When the revenue recognized for uncompleted contracts exceeds the amount of customer billings and the right to receive the consideration is conditional, a contract asset is recorded. These amounts are included in revenue in excess of billings on the consolidated balance sheets and totaled \$20,508 as of September 30, 2018 and \$9,665 as of January 1, 2018. Additionally, we record an asset for unbilled receivables when the revenue recognized has not been billed to customers in accordance with contractually stated billing terms and the right to receive the consideration is unconditional. These assets are also included in revenue in excess of earnings on our consolidated balance sheets and totaled \$13,227 as of September 30, 2018 and \$7,674 as of January 1, 2018. When the amount of customer billings for uncompleted contracts exceeds the revenue recognized, a contract liability is reflected in our consolidated balance sheets within accrued liabilities. The amount included in accrued liabilities was \$1,563 as of September 30, 2018 and \$2,233 as of December 31, 2017.

At times, a financial institution client may terminate its check supply contract with us prior to the end of the contract term. In many cases, the financial institution is contractually required to remit a contract termination payment. Such payments are recorded as revenue when the termination agreement is executed, provided that we have no further performance obligations and collection of the funds is assured. If we have further performance obligations following the execution of a contract termination agreement, we record the related revenue over the remaining service period.

Our payment terms vary by type of customer and the products or services offered. The time period between invoicing and when payment is due is not significant. For certain products, services and customer types, we require payment before the products or services are delivered to the customer. When a customer pays in advance, primarily for treasury management solutions and web hosting services, we defer the revenue and recognize it as the services are performed, generally over a period of less than 1 year. Deferred revenue is included in accrued liabilities and other non-current liabilities in our consolidated balance sheets. The decrease of \$8,263 in deferred revenue for the nine months ended September 30, 2018 was driven primarily by the recognition of \$39,488 of revenue that was included in deferred revenue as of December 31, 2017, partially offset by cash payments received in advance of satisfying our performance obligations. In addition to the amounts included in deferred revenue, we will recognize revenue in future periods related to remaining performance obligations for certain of our data-driven marketing and treasury management solutions. Generally, these contracts have terms of 1 year or less and many have terms of 3 months or less. The amount of revenue related to these unsatisfied performance obligations is not significant to our annual consolidated revenue.

The new guidance requires that certain costs incurred to obtain contracts be recognized as assets and amortized consistent with the transfer of goods or services to the customer. As such, we are now deferring sales commissions related to obtaining check supply and treasury management solution contracts within Financial Services. These amounts are included in other non-current assets and are amortized as selling, general and administrative (SG&A) expense. Amortization of these

DELUXE CORPORATION
CONDENSED NOTES TO UNAUDITED CONSOLIDATED FINANCIAL STATEMENTS
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amounts on the straight-line basis approximates the timing of the transfer of goods or services to the customer. Generally, these amounts are being amortized over periods of 3 to 6 years. We elected the practical expedient allowing us to expense sales commissions as incurred when the amortization period would have been 1 year or less.

The cumulative effect of the changes made to our unaudited consolidated balance sheet as of January 1, 2018 for the adoption of the new revenue guidance was as follows:

(in thousands)	Balance as of December 31, 2017	Adjustments due to ASU No. 2014-09	Balance as of January 1, 2018
Revenue in excess of billings	\$ 16,379	\$ 960	\$ 17,339
Total current assets	392,966	960	393,926
Other non-current assets	159,756	5,733	165,489
Total assets	\$ 2,208,827	\$ 6,693	\$ 2,215,520
Deferred income taxes	\$ 50,543	\$ 1,727	\$ 52,270
Retained earnings	1,004,657	4,966	1,009,623
Total liabilities and shareholders' equity	\$ 2,208,827	\$ 6,693	\$ 2,215,520

The impact of adoption of the new revenue guidance on our unaudited consolidated statements of comprehensive (loss) income for the quarter and nine months ended September 30, 2018 and on our unaudited consolidated balance sheet as of September 30, 2018 was as follows:

(in thousands)	As reported	Effect of adoption	Balance without adoption of ASU No. 2014-09
Quarter Ended September 30, 2018			
Service revenue	\$ 140,423	\$ 269	\$ 140,692
Total revenue	493,190	269	493,459
Cost of services	(64,638)	(19)	(64,657)
Total cost of revenue	(197,634)	(19)	(197,653)
Gross profit	295,556	250	295,806
Selling, general and administrative expense	(208,533)	(253)	(208,786)
Operating loss	(17,282)	(3)	(17,285)
Loss before income taxes	(22,170)	(3)	(22,173)
Income tax provision	(8,913)	1	(8,912)
Net loss	\$ (31,083)	\$ (2)	\$ (31,085)
Nine Months Ended September 30, 2018			
Service revenue	\$ 397,239	\$ (300)	\$ 396,939
Total revenue	1,473,349	(300)	1,473,049
Cost of services	(175,894)	365	(175,529)
Total cost of revenue	(576,594)	365	(576,229)
Gross profit	896,755	65	896,820
Selling, general and administrative expense	(629,272)	(1,304)	(630,576)
Operating income	153,249	(1,239)	152,010
Income before income taxes	140,377	(1,239)	139,138
Income tax provision	(47,916)	320	(47,596)
Net income	\$ 92,461	\$ (919)	\$ 91,542

DELUXE CORPORATION
CONDENSED NOTES TO UNAUDITED CONSOLIDATED FINANCIAL STATEMENTS
(dollars in thousands, except per share amounts)

(in thousands)	As reported	Effect of adoption September 30, 2018	Balance without adoption of ASU No. 2014-09
Revenue in excess of billings	\$ 33,735	\$ (895)	\$ 32,840
Total current assets	417,342	(895)	416,447
Other non-current assets	195,547	(7,037)	188,510
Total assets	\$ 2,267,367	\$ (7,932)	\$ 2,259,435
Accrued liabilities	\$ 234,529	\$ (320)	\$ 234,209
Total current liabilities	333,305	(320)	332,985
Deferred income taxes	46,339	(1,727)	44,612
Retained earnings	957,979	(5,885)	952,094
Total liabilities and shareholders' equity	\$ 2,267,367	\$ (7,932)	\$ 2,259,435

ASU No. 2016-01 – In January 2016, the FASB issued ASU No. 2016-01, *Recognition and Measurement of Financial Assets and Financial Liabilities*. The standard is intended to improve the recognition, measurement, presentation and disclosure of financial instruments. We adopted this standard on January 1, 2018. This standard had no impact on our results of operations or financial position. Our financial statement disclosures in Note 7 related to financial instruments have been modified to comply with the new standard.

ASU No. 2016-16 – In October 2016, the FASB issued ASU No. 2016-16, *Intra-Entity Transfers of Assets Other Than Inventory*. The standard requires recognition of the tax effects resulting from the intercompany sale of an asset when the transfer occurs. Previously, the tax effects were deferred until the transferred asset was sold to a third party. We adopted this standard on January 1, 2018. No adjustment was required to opening retained earnings. Application of this standard has not had a significant impact on our results of operations or financial position and we do not expect it to have a significant impact on an ongoing basis.

ASU No. 2017-01 – In January 2017, the FASB issued ASU No. 2017-01, *Clarifying the Definition of a Business*. The standard revises the definition of a business, which affects many areas of accounting, such as business combinations and disposals and goodwill impairment. The revised definition of a business will likely result in more acquisitions being accounted for as asset acquisitions, as opposed to business combinations. We adopted this standard on January 1, 2018, applying the guidance to transactions occurring on or after this date. Adoption of the standard has not had a significant impact on our results of operations or financial position.

ASU No. 2017-07 – In March 2017, the FASB issued ASU No. 2017-07, *Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost*. The standard requires that the service cost component of net periodic benefit expense be recognized in the same statement of comprehensive (loss) income caption(s) as other compensation costs, and requires that the other components of net periodic benefit expense be recognized in the non-operating section of the statement of comprehensive (loss) income. In addition, only the service cost component of net periodic benefit expense is eligible for capitalization when applicable. We adopted this standard on January 1, 2018. The reclassification of the other components of our net periodic benefit income was applied on a retrospective basis. As such, we have revised our results of operations for previous periods. We utilized the practical expedient for adoption allowing us to use the amounts previously disclosed in our postretirement benefits footnote as the basis for revising prior periods. As there is no service cost associated with our plans, we reclassified the entire amount of our net periodic benefit income from cost of revenue and SG&A expense to other income in our consolidated statements of comprehensive income. In addition, we no longer include any portion of net periodic benefit income in amounts capitalized for inventory or internal-use software, as only the service cost component is eligible for capitalization. This change did not have a significant impact on our results of operations or financial position.

DELUXE CORPORATION
CONDENSED NOTES TO UNAUDITED CONSOLIDATED FINANCIAL STATEMENTS
(dollars in thousands, except per share amounts)

The impact of the revision on our unaudited consolidated statements of comprehensive income for the quarter and nine months ended September 30, 2017 was as follows:

(in thousands)	As previously reported	Effect of adoption	As revised
Quarter Ended September 30, 2017			
Cost of products	\$ (129,055)	\$ (137)	\$ (129,192)
Cost of services	(63,862)	(17)	(63,879)
Total cost of revenue	(192,917)	(154)	(193,071)
Selling, general and administrative expense	(202,999)	(350)	(203,349)
Operating income	53,856	(504)	53,352
Other income	799	504	1,303
Net income	\$ 28,801	\$ —	\$ 28,801
Nine Months Ended September 30, 2017			
Cost of products	\$ (392,040)	\$ (411)	\$ (392,451)
Cost of services	(159,250)	(51)	(159,301)
Total cost of revenue	(551,290)	(462)	(551,752)
Selling, general and administrative expense	(628,100)	(1,050)	(629,150)
Operating income	232,688	(1,512)	231,176
Other income	2,104	1,512	3,616
Net income	\$ 145,446	\$ —	\$ 145,446

ASU No. 2017-09 – In May 2017, the FASB issued ASU No. 2017-09, *Scope of Modification Accounting*. The standard provides guidance about which changes to the terms or conditions of a share-based payment award require modification accounting, which may result in a different fair value for the award. We adopted this standard on January 1, 2018, and it is being applied prospectively to awards modified on or after this date. Application of this standard has not had a significant impact on our results of operations or financial position and we do not expect it to have a significant impact on an ongoing basis.

ASU No. 2018-02 – In February 2018, the FASB issued ASU No. 2018-02, *Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income*. The standard allows companies to make an election to reclassify from accumulated other comprehensive income to retained earnings the stranded tax effects resulting from the Tax Cuts and Jobs Act of 2017 (the "2017 Act"). We elected to early adopt this standard on January 1, 2018, applying it in the period of adoption. As such, a reclassification from accumulated other comprehensive loss to retained earnings of \$6,867 was recorded during the quarter ended March 31, 2018. This represents the effect of the change in the United States federal corporate income tax rate on the gross deferred tax amount at the date of enactment of the 2017 Act related to items remaining in accumulated other comprehensive loss. Our policy is to release stranded income tax effects from accumulated other comprehensive loss when the circumstances upon which they are premised cease to exist.

ASU No. 2018-05 – In March 2018, the FASB issued ASU No. 2018-05, *Amendments to SEC Paragraphs Pursuant to SEC Staff Accounting Bulletin (SAB) No. 118*. The standard added to the FASB Codification the guidance provided by the SEC in December 2017 regarding the accounting for the 2017 Act. We complied with SAB No. 118 when preparing our annual consolidated financial statements for the year ended December 31, 2017. Reasonable estimates were used in determining several of the components of the impact of the 2017 Act, including our 2017 deferred income tax activity and the amount of post-1986 foreign deferred earnings subject to the repatriation toll charge. We are still analyzing certain aspects of the 2017 Act and refining our calculations, which could potentially affect the measurement of our deferred tax balances and the amount of the repatriation toll charge liability, and ultimately could cause us to revise our initial estimates. In addition, changes in interpretations, assumptions and guidance regarding the 2017 Act could have a material impact on our effective tax rate. During the quarter ended September 30, 2018, we recorded a decrease in income tax expense of \$1,249 as we refined our accounting for the estimated repatriation toll charge liability, and during the nine months ended September 30, 2018, we recorded a decrease in income tax expense of \$1,118.

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In order to complete our accounting for the 2017 Act, which we will finalize in the fourth quarter of 2018, the following specific items need to be completed or addressed:

- issuance of state-by-state guidance regarding conformity with or decoupling from the 2017 Act; and
- finalization of the calculation of post-1986 foreign deferred earnings, which are subject to the repatriation toll charge, including the impact on our 2017 state tax returns to be filed in the fourth quarter of 2018.

Other accounting pronouncements adopted – In August 2018, the FASB issued ASU No. 2018-13, *Disclosure Framework – Changes to the Disclosure Requirements for Fair Value Measurements*. The standard removes, modifies and adds certain disclosures related to recurring and nonrecurring fair value measurements. On September 30, 2018, we early adopted the provisions of the standard that remove and modify disclosure requirements. This adoption had minimal impact on our fair value disclosures in Note 7. The additional disclosures required under the new guidance are effective for us on January 1, 2020.

Accounting pronouncements not yet adopted – In February 2016, the FASB issued ASU No. 2016-02, *Leasing*. The standard is intended to increase transparency and comparability among organizations by requiring the recognition of lease assets and lease liabilities for virtually all leases and by requiring the disclosure of key information about leasing arrangements. In July 2018, the FASB issued two amendments to ASU No. 2016-02: ASU No. 2018-10, *Codification Improvements to Topic 842, Leases*, which amends narrow aspects of the guidance in ASU No. 2016-02, and ASU No. 2018-11, *Targeted Improvements*, which provides a new optional transition method under which comparative periods presented in financial statements in the period of adoption would not be restated. All of these standards are effective for us on January 1, 2019. They are required to be adopted using a modified retrospective approach, and we plan to elect the optional transition method under ASU No. 2018-11. We have established an implementation team to evaluate and identify the impact of these standards on our financial position, results of operations and cash flows. We are currently assessing our leasing arrangements and implementing software to meet the reporting requirements of the standard. We anticipate that we will elect the practical expedient package outlined in ASU No. 2016-02 under which we do not have to reassess whether an arrangement contains a lease, we can carryforward our previous classification of leases as either operating or capital leases, and we do not have to reassess previously recorded initial direct costs. Additionally, we anticipate that we will make the policy election allowing us to exclude leases with original terms of 12 months or less from lease assets and liabilities. We continue to assess the practical expedient allowing us to use hindsight to determine the lease term and to assess any impairment of lease assets during the lookback period, and we continue to assess certain policy elections required under the standard, including whether we will separate nonlease components from the associated lease component and how we will determine the incremental borrowing rate for leases with renewal options. Although we will recognize lease assets and liabilities for leases classified as operating leases under previous guidance, we are not able to quantify the impact of the standard at this time.

In June 2016, the FASB issued ASU No. 2016-13, *Measurement of Credit Losses on Financial Instruments*. The standard introduces new guidance for the accounting for credit losses on instruments within its scope, including trade and loans receivable and available-for-sale debt securities. The guidance is effective for us on January 1, 2020 and requires adoption using a modified retrospective approach. We do not expect the application of this standard to have a significant impact on our results of operations or financial position.

In August 2018, the FASB issued ASU No. 2018-14, *Disclosure Framework – Changes to the Disclosure Requirements for Defined Benefit Plans*. The standard modifies certain disclosures related to defined benefit pension and other postretirement plans and requires adoption on a retrospective basis to all periods presented. We plan to early adopt this standard on December 31, 2018, including the modified disclosures in our Form 10-K for the year ending December 31, 2018.

In August 2018, the FASB issued ASU No. 2018-15, *Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract*. The standard aligns the requirements for capitalizing implementation costs incurred in a hosting arrangement that is a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software. The accounting for the service element of a hosting arrangement that is a service contract is not affected by the new standard. The guidance is effective for us on January 1, 2020 and may be adopted retrospectively or prospectively to eligible costs incurred on or after the date the guidance is first applied. This new guidance will impact our results of operations and financial position as we currently expense these implementation costs as incurred. As we have not historically tracked these costs separately, we are not able to quantify the expected impact on our consolidated financial statements. We plan to adopt the standard prospectively.

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Note 3: Supplemental balance sheet information

Allowance for uncollectible accounts – Changes in the allowance for uncollectible accounts for the nine months ended September 30, 2018 and 2017 was as follows:

(in thousands)	Nine Months Ended September 30,	
	2018	2017
Balance, beginning of year	\$ 2,884	\$ 2,828
Bad debt expense	2,275	2,384
Write-offs, net of recoveries	(2,036)	(2,404)
Balance, end of period	<u>\$ 3,123</u>	<u>\$ 2,808</u>

Inventories and supplies – Inventories and supplies were comprised of the following:

(in thousands)	September 30,	December 31,
	2018	2017
Raw materials	\$ 7,508	\$ 7,357
Semi-finished goods	7,942	7,635
Finished goods	25,343	24,146
Supplies	4,325	3,111
Inventories and supplies	<u>\$ 45,118</u>	<u>\$ 42,249</u>

Available-for-sale debt securities – Available-for-sale debt securities included within funds held for customers were comprised of the following:

(in thousands)	September 30, 2018			
	Cost	Gross unrealized gains	Gross unrealized losses	Fair value
Funds held for customers: ⁽¹⁾				
Domestic money market fund	\$ 11,000	\$ —	\$ —	\$ 11,000
Canadian and provincial government securities	8,938	—	(541)	8,397
Canadian guaranteed investment certificates	7,747	—	—	7,747
Available-for-sale debt securities	<u>\$ 27,685</u>	<u>\$ —</u>	<u>\$ (541)</u>	<u>\$ 27,144</u>

⁽¹⁾Funds held for customers, as reported on the consolidated balance sheet as of September 30, 2018, also included cash of \$57,263.

(in thousands)	December 31, 2017			
	Cost	Gross unrealized gains	Gross unrealized losses	Fair value
Funds held for customers: ⁽¹⁾				
Domestic money market fund	\$ 17,300	\$ —	\$ —	\$ 17,300
Canadian and provincial government securities	9,051	—	(393)	8,658
Canadian guaranteed investment certificates	7,955	—	—	7,955
Available-for-sale debt securities	<u>\$ 34,306</u>	<u>\$ —</u>	<u>\$ (393)</u>	<u>\$ 33,913</u>

⁽¹⁾Funds held for customers, as reported on the consolidated balance sheet as of December 31, 2017, also included cash of \$52,279.

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Expected maturities of available-for-sale debt securities as of September 30, 2018 were as follows:

(in thousands)	Fair value
Due in one year or less	\$ 20,863
Due in two to five years	4,308
Due in six to ten years	1,973
Available-for-sale debt securities	<u>\$ 27,144</u>

Further information regarding the fair value of available-for-sale debt securities can be found in Note 7.

Assets held for sale – Assets held for sale as of September 30, 2018 included a small business distributor and 3 small business customer lists. Assets held for sale as of December 31, 2017 included 2 providers of printed and promotional products, both of which were sold during 2018, and 2 small business distributors, 1 of which was sold during the first quarter of 2018. Also during the nine months ended September 30, 2018, we sold several small business customer lists that previously did not meet the requirements to be reported as assets held for sale in the consolidated balance sheets. We determined that the assets sold would be better positioned for long-term growth if they were managed by independent distributors. Subsequent to the sales, the businesses and customer lists are owned by distributors that are part of our Safeguard® distributor network. As such, our revenue is not impacted by these sales, and the impact to our costs is not significant. We entered into aggregate notes receivable of \$28,028 in conjunction with these sales (non-cash investing activity), and we recognized aggregate net gains within SG&A expense of \$1,765 during the quarter ended September 30, 2018 and \$12,855 during the nine months ended September 30, 2018. During the quarter ended September 30, 2017, we sold the assets of 2 small business distributors and assets associated with certain custom printing activities. During the nine months ended September 30, 2017, we also sold a provider of printed and promotional products and an additional small business distributor. These sales resulted in aggregate net gains within SG&A expense of of \$1,924 for the quarter ended September 30, 2017 and \$8,703 for the nine months ended September 30, 2017.

During the first quarter of 2017, we recorded a pre-tax asset impairment charge of \$5,296 related to a small business distributor that was sold during the second quarter of 2017. This impairment charge reduced the carrying value of the business to its estimated fair value less costs to sell, as we negotiated the sale of the business. During the second quarter of 2017, we recorded an additional pre-tax asset impairment charge of \$2,954 as we finalized the sale of this business, resulting in a total pre-tax asset impairment charge of \$8,250 for the nine months ended September 30, 2017.

The businesses sold during 2018, as well as those held for sale as of September 30, 2018, were included in our Small Business Services segment, and their net assets consisted primarily of intangible assets. We are actively marketing the remaining assets held for sale, and we expect the selling prices will equal or exceed their current carrying values. Net assets held for sale consisted of the following:

(in thousands)	September 30, 2018	December 31, 2017	Balance sheet caption
Current assets	\$ —	\$ 4	Other current assets
Intangibles	3,250	8,459	Assets held for sale
Goodwill	—	3,566	Assets held for sale
Other non-current assets	—	207	Assets held for sale
Net assets held for sale	<u>\$ 3,250</u>	<u>\$ 12,236</u>	

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Intangibles – Intangibles were comprised of the following:

(in thousands)	September 30, 2018			December 31, 2017		
	Gross carrying amount	Accumulated amortization	Net carrying amount	Gross carrying amount	Accumulated amortization	Net carrying amount
Indefinite-lived intangibles:						
Trade name ⁽¹⁾	\$ —	\$ —	\$ —	\$ 19,100	\$ —	\$ 19,100
Amortizable intangibles:						
Internal-use software	391,747	(312,268)	79,479	359,079	(284,074)	75,005
Customer lists/relationships ⁽²⁾	401,821	(159,667)	242,154	343,589	(121,729)	221,860
Trade names	49,872	(24,405)	25,467	36,931	(19,936)	16,995
Technology-based intangibles	39,000	(12,030)	26,970	31,800	(6,400)	25,400
Software to be sold	36,900	(14,374)	22,526	36,900	(11,204)	25,696
Other	1,800	(1,755)	45	1,800	(1,590)	210
Amortizable intangibles	921,140	(524,499)	396,641	810,099	(444,933)	365,166
Intangibles	\$ 921,140	\$ (524,499)	\$ 396,641	\$ 829,199	\$ (444,933)	\$ 384,266

⁽¹⁾ During the third quarter of 2018, we recorded a pre-tax asset impairment charge of \$19,100 for our indefinite-lived trade name. Further information can be found in Note 7.

⁽²⁾ During the first nine months of 2018, we recorded pre-tax asset impairment charges of \$4,031 related to amortizable customer lists. Further information can be found in Note 7.

Amortization of intangibles was \$28,505 for the quarter ended September 30, 2018, \$27,456 for the quarter ended September 30, 2017, \$84,199 for the nine months ended September 30, 2018 and \$79,284 for the nine months ended September 30, 2017. Based on the intangibles in service as of September 30, 2018, estimated future amortization expense is as follows:

(in thousands)	Estimated amortization expense
Remainder of 2018	\$ 23,632
2019	94,468
2020	74,306
2021	57,593
2022	41,964

During the nine months ended September 30, 2018, we acquired internal-use software in the normal course of business. We also acquired intangible assets in conjunction with acquisitions (Note 6). The following intangible assets were acquired during the nine months ended September 30, 2018:

(in thousands)	Amount	Weighted-average amortization period (in years)
Customer lists/relationships ⁽¹⁾	\$ 75,775	8
Internal-use software	33,223	3
Trade names	13,700	7
Technology-based intangibles	7,200	5
Acquired intangibles	\$ 129,898	6

⁽¹⁾ Includes customer list purchases of \$1,188 that did not qualify as business combinations.

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Information regarding acquired intangibles does not include measurement-period adjustments recorded during the nine months ended September 30, 2018 for changes in the estimated fair values of intangibles acquired during 2017 through acquisitions. Information regarding these adjustments can be found in Note 6.

Goodwill – Changes in goodwill during the nine months ended September 30, 2018 were as follows:

(in thousands)	Small Business Services	Financial Services	Direct Checks	Total
Balance, December 31, 2017:				
Goodwill, gross	\$ 706,568	\$ 324,239	\$ 148,506	\$ 1,179,313
Accumulated impairment charges	(48,379)	—	—	(48,379)
Goodwill, net of accumulated impairment charges	658,189	324,239	148,506	1,130,934
Impairment charge (Note 7)	(78,188)	—	—	(78,188)
Goodwill resulting from acquisitions	41,216	29,304	—	70,520
Measurement-period adjustments for prior year acquisitions (Note 6)	1,420	2,764	—	4,184
Adjustment of assets held for sale	635	—	—	635
Currency translation adjustment	(2,131)	—	—	(2,131)
Balance, September 30, 2018:				
Goodwill, gross	747,708	356,307	148,506	1,252,521
Accumulated impairment charges	(126,567)	—	—	(126,567)
Goodwill, net of accumulated impairment charges	<u>\$ 621,141</u>	<u>\$ 356,307</u>	<u>\$ 148,506</u>	<u>\$ 1,125,954</u>

Other non-current assets – Other non-current assets were comprised of the following:

(in thousands)	September 30, 2018	December 31, 2017
Loans and notes receivable from Safeguard distributors	\$ 71,728	\$ 44,276
Prepaid product discounts ⁽¹⁾	58,539	63,895
Postretirement benefit plan asset	45,435	39,849
Deferred sales commissions ⁽²⁾	7,037	—
Deferred advertising costs	5,089	6,135
Other	7,719	5,601
Other non-current assets	<u>\$ 195,547</u>	<u>\$ 159,756</u>

⁽¹⁾ In our prior year financial statements, we referred to this asset as contract acquisition costs.

⁽²⁾ Net of amortization of \$2,033 for the nine months ended September 30, 2018.

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Changes in prepaid product discounts during the nine months ended September 30, 2018 and 2017 were as follows:

(in thousands)	Nine Months Ended September 30,	
	2018	2017
Balance, beginning of year	\$ 63,895	\$ 65,792
Additions ⁽¹⁾	11,695	15,651
Amortization	(16,976)	(14,685)
Other	(75)	(127)
Balance, end of period	<u>\$ 58,539</u>	<u>\$ 66,631</u>

⁽¹⁾ Prepaid product discounts are generally accrued upon contract execution. Cash payments made for prepaid product discounts were \$19,125 for the nine months ended September 30, 2018 and \$20,003 for the nine months ended September 30, 2017.

Accrued liabilities – Accrued liabilities were comprised of the following:

(in thousands)	September 30, 2018	December 31, 2017
	Funds held for customers	\$ 83,370
Deferred revenue	39,939	47,021
Employee profit sharing/cash bonus	25,868	31,312
Prepaid product discounts due within one year ⁽¹⁾	10,596	11,670
Customer rebates	9,887	11,508
Acquisition-related liabilities ⁽²⁾	6,734	23,878
Restructuring due within one year (Note 8)	4,719	4,380
Income tax	2,146	17,827
Other	51,270	44,566
Accrued liabilities	<u>\$ 234,529</u>	<u>\$ 277,253</u>

⁽¹⁾ In our prior year financial statements, we referred to this liability as contract acquisition costs due within one year.

⁽²⁾ Consists of holdback payments due at future dates and liabilities for contingent consideration. Further information regarding liabilities for contingent consideration can be found in Note 7.

Other non-current liabilities – Other non-current liabilities were comprised of the following:

(in thousands)	September 30, 2018	December 31, 2017
	Prepaid product discounts ⁽¹⁾	\$ 15,229
Other	27,101	30,583
Other non-current liabilities	<u>\$ 42,330</u>	<u>\$ 52,241</u>

⁽¹⁾ In our prior year financial statements, we referred to this liability as contract acquisition costs.

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Note 4: (Loss) earnings per share

The following table reflects the calculation of basic and diluted (loss) earnings per share. During each period, certain stock options, as noted below, were excluded from the calculation of diluted (loss) earnings per share because their effect would have been antidilutive.

(in thousands, except per share amounts)	Quarter Ended September 30,		Nine Months Ended September 30,	
	2018	2017	2018	2017
(Loss) earnings per share – basic:				
Net (loss) income	\$ (31,083)	\$ 28,801	\$ 92,461	\$ 145,446
Income allocated to participating securities	(53)	(176)	(396)	(961)
(Loss) income available to common shareholders	\$ (31,136)	\$ 28,625	\$ 92,065	\$ 144,485
Weighted-average shares outstanding	46,781	48,081	47,340	48,217
(Loss) earnings per share – basic	\$ (0.67)	\$ 0.60	\$ 1.94	\$ 3.00
(Loss) earnings per share – diluted:				
Net (loss) income	\$ (31,083)	\$ 28,801	\$ 92,461	\$ 145,446
Income allocated to participating securities	(53)	(175)	(394)	(956)
Re-measurement of share-based awards classified as liabilities	(98)	53	(274)	7
(Loss) income available to common shareholders	\$ (31,234)	\$ 28,679	\$ 91,793	\$ 144,497
Weighted-average shares outstanding	46,781	48,081	47,340	48,217
Dilutive impact of potential common shares	22	296	178	331
Weighted-average shares and potential common shares outstanding	46,803	48,377	47,518	48,548
(Loss) earnings per share – diluted	\$ (0.67)	\$ 0.59	\$ 1.93	\$ 2.98
Antidilutive options excluded from calculation	1,037	266	570	266

Note 5: Other comprehensive income

Reclassification adjustments – Information regarding amounts reclassified from accumulated other comprehensive loss to net income was as follows:

Accumulated other comprehensive loss components	Amounts reclassified from accumulated other comprehensive loss				Affected line item in consolidated statements of comprehensive (loss) income
	Quarter Ended September 30,		Nine Months Ended September 30,		
	2018	2017	2018	2017	
(in thousands)					
Amortization of postretirement benefit plan items:					
Prior service credit	\$ 355	\$ 355	\$ 1,066	\$ 1,066	Other income
Net actuarial loss	(721)	(909)	(2,163)	(2,728)	Other income
Total amortization	(366)	(554)	(1,097)	(1,662)	Other income
Tax benefit	47	167	447	497	Income tax provision
Total reclassifications, net of tax	\$ (319)	\$ (387)	\$ (650)	\$ (1,165)	Net (loss) income

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Accumulated other comprehensive loss – Changes in the components of accumulated other comprehensive loss during the nine months ended September 30, 2018 were as follows:

(in thousands)	Postretirement benefit plans	Net unrealized loss on marketable debt securities, net of tax ⁽¹⁾	Currency translation adjustment	Accumulated other comprehensive loss
Balance, December 31, 2017	\$ (26,829)	\$ (322)	\$ (10,446)	\$ (37,597)
Other comprehensive loss before reclassifications	—	(119)	(5,056)	(5,175)
Amounts reclassified from accumulated other comprehensive loss	650	—	—	650
Net current-period other comprehensive income (loss)	650	(119)	(5,056)	(4,525)
Adoption of ASU No. 2018-02	(6,867)	—	—	(6,867)
Balance, September 30, 2018	<u>\$ (33,046)</u>	<u>\$ (441)</u>	<u>\$ (15,502)</u>	<u>\$ (48,989)</u>

⁽¹⁾ Other comprehensive loss before reclassifications is net of income tax benefit of \$42.

Note 6: Acquisitions

We regularly complete business combinations that align with our business strategy. The assets and liabilities acquired are recorded at their estimated fair values, and the results of operations of each acquired business are included in our consolidated statements of comprehensive (loss) income from their acquisition dates. Transaction costs related to acquisitions are expensed as incurred and are included in SG&A expense in the consolidated statements of comprehensive (loss) income. Transaction costs were not significant to our consolidated statements of comprehensive income for the nine months ended September 30, 2018 and 2017. The acquisitions completed during the nine months ended September 30, 2018 were cash transactions, funded by use of our revolving credit facility. We completed these acquisitions primarily to increase our mix of marketing solutions and other services revenue, to add financial technology, logo and web services capabilities, and to reach new customers.

2018 acquisitions – In March 2018, we acquired all of the equity of Logomix Inc. (Logomix), a self-service marketing and branding platform that helps small businesses create logos and custom marketing products. The preliminary allocation of the purchase price based upon the estimated fair values of the assets acquired and liabilities assumed resulted in nondeductible goodwill of \$30,080. The acquisition resulted in goodwill as we expect to accelerate revenue growth by combining our capabilities with Logomix's platform. The operations of this business from its acquisition date are included in our Small Business Services segment. We expect to finalize the allocation of the purchase price by the end of 2018 when our valuation of the acquired capital assets is completed.

In June 2018, we acquired selected assets of Velocity Servers, Inc., doing business as ColoCrossing, a data center solutions, cloud hosting and infrastructure colocation provider of dedicated hosting services. The preliminary allocation of the purchase price based upon the estimated fair values of the assets acquired and liabilities assumed resulted in tax-deductible goodwill of \$11,136. The acquisition resulted in goodwill as we expect to accelerate revenue growth by bringing colocation services into our portfolio of hosting services. The operations of this business from its acquisition date are included in our Small Business Services segment. We expect to finalize the allocation of the purchase price in the first quarter of 2019 when our valuation of the acquired intangible assets is completed, as well as the valuation of various other assets acquired and liabilities assumed.

In August 2018, we acquired selected assets of REMITCO LLC (RemitCo), the remittance processing business of First Data Corporation. The preliminary allocation of the purchase price based upon the estimated fair values of the assets acquired and liabilities assumed resulted in tax-deductible goodwill of \$29,304. The acquisition resulted in goodwill as it expands the scale of our receivables management solutions capabilities, which allows us to take advantage of the ongoing market trend toward outsourcing technology-enabled solutions and services to trusted financial technology partners of scale. The operations of this business from its acquisition date are included in our Financial Services segment. We expect to finalize the allocation of

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the purchase price by mid-2019 when our valuation of the acquired intangible assets is completed, as well as the valuation of various other assets acquired and liabilities assumed.

Also during the nine months ended September 30, 2018, we acquired the operations of 3 small business distributors that are included in our Small Business Services segment. The assets acquired consisted primarily of customer list intangible assets. The allocation of the purchase price to the estimated fair values of the assets acquired and liabilities assumed for 1 of the distributors is preliminary and is expected to be completed by the end of 2018 when our valuation of the acquired intangible assets is completed. As these small business distributors were previously part of our Safeguard distributor network, our revenue was not impacted by these acquisitions, and the impact to our costs was not significant.

Information regarding goodwill by reportable segment and the useful lives of acquired intangibles can be found in Note 3. Information regarding the calculation of the estimated fair values of the acquired intangibles can be found in Note 7. As our acquisitions were not significant to our reported operating results both individually and in the aggregate, pro forma results of operations are not provided. The following illustrates the preliminary allocation, as of September 30, 2018, of the aggregate purchase price for the above acquisitions to the assets acquired and liabilities assumed:

(in thousands)	2018 acquisitions
Net tangible assets acquired and liabilities assumed ⁽¹⁾	\$ 8,429
Identifiable intangible assets:	
Customer lists/relationships	74,587
Trade names	13,700
Technology-based intangible	7,200
Total intangible assets	95,487
Goodwill	70,520
Total aggregate purchase price	174,436
Liabilities for holdback payments and contingent consideration	(3,365)
Non-cash consideration ⁽²⁾	(1,060)
Net cash paid for 2018 acquisitions	170,011
Holdback payments for prior year acquisitions	20,385
Payments for acquisitions, net of cash acquired of \$1,645	\$ 190,396

⁽¹⁾ Net assets acquired consisted primarily of RemitCo accounts receivable and Logomix deferred income tax liabilities.

⁽²⁾ Consists of pre-acquisition amounts owed to us by an acquired distributor.

During the nine months ended September 30, 2018, we finalized purchase accounting for all of the 2017 acquisitions for which purchase accounting was preliminary as of December 31, 2017. Information regarding these acquisitions can be found under the caption "Note 5: Acquisitions" in the Notes to Consolidated Financial Statements appearing in the 2017 Form 10-K. The resulting measurement-period adjustments increased goodwill \$4,184 during the nine months ended September 30, 2018, with the offset to various assets and liabilities, including deferred revenue, deferred income taxes and other long-term liabilities, as well as a decrease of \$1,654 in customer list intangibles and an increase in internal-use software of \$1,000.

2017 acquisitions – During the nine months ended September 30, 2017, we completed the following acquisitions:

- In February 2017, we acquired selected assets of Panthur Pty Ltd, an Australian web hosting and domain registration service provider.
- In April 2017, we acquired all of the equity of RDM Corporation of Canada, a provider of remote deposit capture software, hardware and digital imaging solutions for financial institutions and corporate clients.
- In July 2017, we acquired all of the equity of Digital Pacific Group Pty Ltd, and in September 2017, we acquired all of the equity of j2 Global Australia Pty Ltd, doing business as Web24. Both businesses are based in Australia and provide web hosting and domain registration services.
- We acquired the operations of several small business distributors. All but 1 of these distributors were previously part of our Safeguard distributor network.

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Payments for acquisitions, net of cash acquired, as presented on the consolidated statement of cash flows for the nine months ended September 30, 2017, included payments of \$117,534 for these acquisitions and \$7,883 for holdback payments for prior year acquisitions. Further information regarding our 2017 acquisitions can be found under the caption "Note 5: Acquisitions" in the Notes to Consolidated Financial Statements appearing in the 2017 Form 10-K.

Note 7: Fair value measurements

Annual impairment analyses – We evaluate the carrying value of goodwill and our indefinite-lived trade name as of July 31 of each year and between annual evaluations if events occur or circumstances change that would indicate a possible impairment. Our policy on impairment of indefinite-lived intangibles and goodwill, which is included under the caption "Note 1: Significant accounting policies" in the Notes to Consolidated Financial Statements appearing in the 2017 Form 10-K, explains our methodology for assessing impairment of these assets.

In completing the 2018 annual impairment analysis of goodwill, we elected to perform a qualitative assessment for 5 of our reporting units and a quantitative assessment for 2 of our reporting units: Small Business Services Web Services and Small Business Services Indirect. Small Business Services Web Services includes our businesses that provide hosting and domain name services, logo and web design, search engine marketing and optimization, and payroll services. Small Business Services Indirect consists primarily of our Safeguard distributor channel, former Safeguard distributors that we have purchased, and our independent dealer channel.

The qualitative analyses evaluated factors, including, but not limited to, economic, market and industry conditions, cost factors and the overall financial performance of the reporting units. We also considered the quantitative analyses completed as of July 31, 2017, which indicated that the estimated fair values of these reporting units exceeded their carrying values by approximate amounts between \$64,000 and \$1,405,000, or by amounts between 50% and 314% above the carrying values of their net assets. In completing these assessments, we noted no changes in events or circumstances that indicated that it was more likely than not that the fair value of any reporting unit was less than its carrying amount.

The quantitative analysis as of July 31, 2018 for the Small Business Services Web Services reporting unit indicated that the estimated fair value of the reporting unit exceeded its carrying value by approximately \$63,000, or 22%. The carrying value of this reporting unit's goodwill was \$225,383 as of July 31, 2018. The quantitative analysis of the Small Business Services Indirect reporting unit indicated that the reporting unit's goodwill was fully impaired, resulting in a pre-tax goodwill impairment charge of \$78,188 during the quarter ended September 30, 2018. The impairment charge was measured as the amount by which the reporting unit's carrying value exceeded its estimated fair value, limited to the carrying amount of goodwill. The analysis of this reporting unit, which incorporated the results of the annual strategic planning process completed during the third quarter of 2018, indicated lowered projected long-term revenue growth and profitability levels resulting from changes in strategy and focus and in the mix of products and services sold, including the continuing decline in check and forms usage. Additionally, our strategic plan reflected a shift in company resources to our growing businesses. Our indefinite-lived Safeguard trade name is included in the Small Business Services Indirect reporting unit. As of July 31, 2018, we completed a quantitative analysis of this asset that indicated the asset was fully impaired (level 3 fair value measurement), resulting in a pre-tax asset impairment charge of \$19,100. This impairment charge was driven by the same factors that resulted in the goodwill impairment charge, which indicated that any royalties attributable to the asset under our relief from royalty calculation had no future value.

The annual impairment analysis completed as of July 31, 2017 resulted in a pre-tax goodwill impairment charge of \$28,379 related to our former Small Business Services Safeguard reporting unit. We subsequently realigned a portion of our reporting units due to changes in our internal reporting structure. As such, the assets of this reporting unit are now included in the Small Business Services Indirect reporting unit. Further information regarding the 2017 annual impairment analyses can be found under the caption "Note 7: Fair value measurements" in the Notes to Consolidated Financial Statements appearing in the 2017 Form 10-K.

Other non-recurring asset impairment analyses – During the third quarter of 2018, we recorded pre-tax asset impairment charges of \$1,882 for Financial Services customer list intangible assets related to 2 small distributors we acquired in 2015. Based on higher than anticipated customer attrition, we determined that the customer lists were partially impaired as of July 31, 2018. During the first quarter of 2018, we recorded a pre-tax asset impairment charge of \$2,149 related to a Small

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Business Services customer list intangible asset. Based on changes in the customer base of one of our small business distributors, we determined that the customer list asset was fully impaired as of March 31, 2018. We utilized the discounted value of estimated future cash flows to estimate the fair values of these asset groups.

During the quarter ended September 30, 2017, we decided that we would no longer utilize our Small Business Services NEBS® trade name in the marketplace, and we recorded a pre-tax asset impairment charge of \$14,752 to write down the remaining book value of this trade name to a fair value of \$0. Also during the quarter ended September 30, 2017, we recorded pre-tax asset impairment charges of \$3,499 related to other long-lived assets within Small Business Services, primarily internal-use software related to an order capture system. During the third quarter of 2017, we signed a contract for customer relationship management services that resulted in our decision to no longer utilize a portion of this software. As such, the remaining net book value of the assets was written down to a fair value of \$0.

During the nine months ended September 30, 2017, we recorded aggregate pre-tax asset impairment charges of \$8,250 related to a small business distributor that was classified as held for sale in the consolidated balance sheets prior to its sale during the second quarter of 2017. The impairment charges were calculated based on ongoing negotiations for the sale of the business and reduced its carrying value to its fair value less costs to sell by reducing the carrying value of the related customer list intangible asset. Further information regarding assets held for sale can be found in Note 3.

Information regarding these other non-recurring asset impairment analyses was as follows:

(in thousands)	Fair value as of measurement date	Fair value measurements using			Impairment charge
		Quoted prices in active markets for identical assets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)	
<i>2018 analyses:</i>					
Customer list (Small Business Services)	\$ —	\$ —	\$ —	\$ —	\$ 2,149
Customer lists (Financial Services) ⁽¹⁾	4,223	—	—	4,223	1,882
Total					\$ 4,031
<i>2017 analyses:</i>					
Trade name	\$ —	\$ —	\$ —	\$ —	\$ 14,752
Assets held for sale	3,500	—	—	3,500	8,250
Other	—	—	—	—	3,499
Total					\$ 26,501

⁽¹⁾The fair value presented is for the entire asset group that includes the impaired customer lists.

2018 acquisitions – For all acquisitions, we are required to measure the fair value of the net identifiable tangible and intangible assets and liabilities acquired. Information regarding the acquisitions completed during the nine months ended September 30, 2018 can be found in Note 6. The identifiable net assets acquired during the nine months ended September 30, 2018 were comprised primarily of customer list intangible assets, trade names and a technology-related intangible asset. The estimated fair values of the trade names and the technology-related asset were calculated using the relief from royalty method, which calculates the cost savings associated with owning rather than licensing the trade name or the technology. Assumed royalty rates were applied to projected revenue for the estimated remaining useful lives of the assets to estimate the royalty savings. Royalty rates are selected based on the attributes of the asset, including its recognition and reputation in the industry, and in the case of trade names, with consideration of the specific profitability of the products sold under a trade name and supporting assets. We also consider, when available, observations of negotiated royalty rates for use of similar assets.

The estimated fair values of the Logomix, ColoCrossing and RemitCo customer lists were calculated using the multi-period excess earnings method. This valuation model estimates revenues and cash flows derived from the asset and then deducts portions of the cash flow that can be attributed to supporting assets, such as a brand name or fixed assets, that

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contributed to the generation of the cash flows. The resulting cash flow, which is attributable solely to the customer list asset, is then discounted at a rate of return commensurate with the risk of the asset to calculate a present value. The estimated fair value of the other acquired customer lists was calculated by discounting the estimated cash flows expected to be generated by the assets. Key assumptions used in the calculations included same-customer revenue growth rates and estimated customer retention rates based on the acquirees' historical information.

Recurring fair value measurements – Funds held for customers included cash equivalents and available-for-sale debt securities (Note 3). The cash equivalents consisted of a money market fund investment that is traded in an active market. Because of the short-term nature of the underlying investments, the cost of this investment approximates its fair value. Available-for-sale debt securities consisted of a mutual fund investment that invests in Canadian and provincial government securities and investments in Canadian guaranteed investment certificates (GICs) with maturities of 1 year. The mutual fund is not traded in an active market and its fair value is determined by obtaining quoted prices in active markets for the underlying securities held by the fund. The fair value of the GICs approximated cost due to their relatively short duration. Unrealized gains and losses, net of tax, are included in accumulated other comprehensive loss in the consolidated balance sheets. The cost of securities sold is determined using the average cost method. Realized gains and losses are included in revenue in the consolidated statements of comprehensive (loss) income and were not significant for the quarters or nine months ended September 30, 2018 and 2017.

The fair value of accrued contingent consideration is remeasured each reporting period. Increases or decreases in projected revenue, gross profit or operating income, as appropriate, and the related probabilities of achieving the forecasted results, may result in a higher or lower fair value measurement. Changes in fair value resulting from changes in the timing, amount of, or likelihood of contingent payments are included in SG&A expense in the consolidated statements of comprehensive (loss) income. Changes in fair value resulting from accretion for the passage of time are included in interest expense in the consolidated statements of comprehensive (loss) income.

Changes in accrued contingent consideration during the nine months ended September 30, 2018 were as follows:

(in thousands)	Nine Months Ended September 30, 2018	
Balance, December 31, 2017	\$	3,623
Acquisition date fair value		100
Change in fair value		634
Payments		(1,437)
Balance, September 30, 2018	\$	<u>2,920</u>

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Information regarding the fair values of our financial instruments was as follows:

(in thousands)	September 30, 2018		Fair value measurements using		
	Carrying value	Fair value	Quoted prices in active markets for identical assets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)
Measured at fair value through net income:					
Accrued contingent consideration	\$ (2,920)	\$ (2,920)	\$ —	\$ —	\$ (2,920)
Measured at fair value through comprehensive income:					
Cash equivalents (funds held for customers)	11,000	11,000	11,000	—	—
Available-for-sale debt securities (funds held for customers)	16,144	16,144	—	16,144	—
Amortized cost:					
Cash	57,851	57,851	57,851	—	—
Cash (funds held for customers)	57,263	57,263	57,263	—	—
Loans and notes receivable from Safeguard distributors	74,149	59,134	—	—	59,134
Long-term debt ⁽¹⁾	889,000	889,000	—	889,000	—

⁽¹⁾ Amounts exclude capital lease obligations.

(in thousands)	December 31, 2017		Fair value measurements using		
	Carrying value	Fair value	Quoted prices in active markets for identical assets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)
Measured at fair value through net income:					
Accrued contingent consideration	\$ (3,623)	\$ (3,623)	\$ —	\$ —	\$ (3,623)
Measured at fair value through comprehensive income:					
Cash equivalents (funds held for customers)	17,300	17,300	17,300	—	—
Available-for-sale debt securities (funds held for customers)	16,613	16,613	—	16,613	—
Amortized cost:					
Cash	59,240	59,240	59,240	—	—
Cash (funds held for customers)	52,279	52,279	52,279	—	—
Loans and notes receivable from Safeguard distributors	46,409	44,650	—	—	44,650
Long-term debt ⁽¹⁾	707,386	707,938	—	707,938	—

⁽¹⁾ Amounts exclude capital lease obligations.

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Note 8: Restructuring and Chief Executive Officer transition costs

Restructuring charges – Net restructuring charges for each period consisted of the following components:

(in thousands, except number of employees)	Quarter Ended September 30,		Nine Months Ended September 30,	
	2018	2017	2018	2017
Severance accruals	\$ 2,118	\$ 1,248	\$ 6,766	\$ 3,596
Severance reversals	(1,157)	(78)	(1,387)	(596)
Operating lease obligations	291	—	291	23
Net restructuring accruals	1,252	1,170	5,670	3,023
Other costs	3,852	72	8,127	669
Net restructuring charges	<u>\$ 5,104</u>	<u>\$ 1,242</u>	<u>\$ 13,797</u>	<u>\$ 3,692</u>
Number of employees included in severance accruals	75	30	180	80

The net restructuring charges are reflected in the consolidated statements of comprehensive (loss) income as follows:

(in thousands)	Quarter Ended September 30,		Nine Months Ended September 30,	
	2018	2017	2018	2017
Total cost of revenue	\$ (31)	\$ (25)	\$ 882	\$ (16)
Operating expenses	5,135	1,267	12,915	3,708
Net restructuring charges	<u>\$ 5,104</u>	<u>\$ 1,242</u>	<u>\$ 13,797</u>	<u>\$ 3,692</u>

During the quarters and nine months ended September 30, 2018 and 2017, the net restructuring accruals included severance charges related to employee reductions across functional areas as we continued to reduce costs, primarily within our sales, marketing and fulfillment functions. These charges were reduced by the reversal of restructuring accruals recorded in previous periods, as fewer employees received severance benefits than originally estimated. Other restructuring costs, which were expensed as incurred, included items such as information technology costs, employee and equipment moves, training and travel related to our restructuring and integration activities.

Restructuring accruals of \$4,719 as of September 30, 2018 and \$4,380 as of December 31, 2017 are reflected in the consolidated balance sheets as accrued liabilities. The majority of the employee reductions are expected to be completed by the end of 2018, and we expect most of the related severance payments to be paid by mid-2019, utilizing cash from operations. As of September 30, 2018, approximately 75 of the employees included in our restructuring accruals had not yet started to receive severance benefits.

Accruals for our restructuring initiatives, summarized by year, were as follows:

(in thousands)	2018 initiatives	2017 initiatives	2016 initiatives	Total
Balance, December 31, 2017	\$ —	\$ 4,348	\$ 32	\$ 4,380
Restructuring charges	6,924	133	—	7,057
Restructuring reversals	(849)	(533)	(5)	(1,387)
Payments	(1,484)	(3,820)	(27)	(5,331)
Balance, September 30, 2018	<u>\$ 4,591</u>	<u>\$ 128</u>	<u>\$ —</u>	<u>\$ 4,719</u>
Cumulative amounts:				
Restructuring charges	\$ 6,924	\$ 7,355	\$ 7,801	\$ 22,080
Restructuring reversals	(849)	(694)	(750)	(2,293)
Payments	(1,484)	(6,533)	(7,051)	(15,068)
Balance, September 30, 2018	<u>\$ 4,591</u>	<u>\$ 128</u>	<u>\$ —</u>	<u>\$ 4,719</u>

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The components of our restructuring accruals, by segment, were as follows:

(in thousands)	Employee severance benefits				Operating lease obligations			Total
	Small Business Services	Financial Services	Direct Checks	Corporate ⁽¹⁾	Small Business Services	Financial Services	Total	
Balance, December 31, 2017	\$ 789	\$ 1,398	\$ 140	\$ 2,049	\$ 4	\$ —	\$ 4,380	
Restructuring charges	2,214	3,838	—	714	—	291	7,057	
Restructuring reversals	(351)	(870)	(5)	(161)	—	—	(1,387)	
Payments	(1,036)	(2,013)	(135)	(2,143)	(4)	—	(5,331)	
Balance, September 30, 2018	\$ 1,616	\$ 2,353	\$ —	\$ 459	\$ —	\$ 291	\$ 4,719	
Cumulative amounts: ⁽²⁾								
Restructuring charges	\$ 6,850	\$ 7,940	\$ 286	\$ 6,631	\$ 82	\$ 291	\$ 22,080	
Restructuring reversals	(705)	(945)	(11)	(632)	—	—	(2,293)	
Payments	(4,529)	(4,642)	(275)	(5,540)	(82)	—	(15,068)	
Balance, September 30, 2018	\$ 1,616	\$ 2,353	\$ —	\$ 459	\$ —	\$ 291	\$ 4,719	

⁽¹⁾ As discussed in Note 14, corporate costs are allocated to our business segments. As such, the net corporate restructuring charges are reflected in the business segment operating income presented in Note 14 in accordance with our allocation methodology.

⁽²⁾ Includes accruals related to our cost reduction initiatives for 2016 through 2018.

Chief Executive Officer (CEO) transition costs – In April 2018, we announced the upcoming retirement of Lee Schram, our CEO. Mr. Schram will continue to serve as CEO until his successor assumes the role, and he will remain employed under the terms of a transition agreement through March 1, 2019. Under the terms of the transition agreement, if Mr. Schram remains employed through March 1, 2019, assists with the transition, and complies with certain covenants, we will provide to Mr. Schram certain benefits, including a transition bonus in the amount of \$2,000, accelerated vesting of certain restricted stock unit awards and continued vesting and settlement of a pro-rata portion of outstanding performance share awards to the extent such awards are earned based on the attainment of certain performance goals. We anticipate the modifications to Mr. Schram's share-based payment awards will result in expense of \$2,088, which will be recognized through March 2019. In October 2018, we signed an employment agreement with Mr. Schram's successor. This individual will become president, CEO and a member of the board of directors on November 26, 2018. We have agreed to announce this appointment on November 6, 2018 as an accommodation to the individual's current employer.

We also offered retention agreements to certain members of our management team under which each employee will be entitled to receive a cash bonus equal to his or her annual base salary or up to 1.5 times his or her annual base salary if he or she remains employed during the retention period, generally from July 1, 2018 to December 31, 2019, and complies with certain covenants. The retention bonus will be paid to an employee if his or her employment is terminated without cause before the end of the retention period. In addition, we are incurring costs related to the CEO transition process, such as executive search, legal, travel and board of directors fees. CEO transition costs included within SG&A expense totaled \$2,622 for the quarter ended September 30, 2018 and \$4,152 for the nine months ended September 30, 2018, including the impact of modifications to Mr. Schram's share-based payment awards.

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Note 9: Income tax provision

The effective tax rate on pre-tax income reconciles to the United States federal statutory tax rate of 21% for 2018 and 35% for 2017 as follows:

	Nine Months Ended September 30, 2018	Year Ended December 31, 2017
Income tax at federal statutory rate	21.0%	35.0%
Goodwill impairment charge	11.3 %	1.5%
State income tax expense, net of federal benefit	3.1%	2.7%
Net tax benefit of share-based compensation	(1.2%)	(1.6%)
Impact of the 2017 Act	(0.8%)	(6.6%)
Qualified production activities deduction	—	(3.2%)
Other	0.7%	(1.4%)
Effective tax rate	<u>34.1%</u>	<u>26.4%</u>

Further information regarding the impact on our financial statements of the 2017 Act can be found in Note 2 and under the caption “Note 9: Income tax provision” in the Notes to Consolidated Financial Statements appearing in the 2017 Form 10-K.

Note 10: Postretirement benefits

We have historically provided certain health care benefits for a portion of our retired United States employees. In addition to our retiree health care plan, we also have a supplemental executive retirement plan in the United States. Further information regarding our postretirement benefit plans can be found under the caption “Note 12: Postretirement benefits” in the Notes to Consolidated Financial Statements appearing in the 2017 Form 10-K.

Postretirement benefit income for each period consisted of the following components:

(in thousands)	Quarter Ended September 30,		Nine Months Ended September 30,	
	2018	2017	2018	2017
Interest cost	\$ 656	\$ 724	\$ 1,969	\$ 2,172
Expected return on plan assets	(1,934)	(1,782)	(5,802)	(5,346)
Amortization of prior service credit	(355)	(355)	(1,066)	(1,066)
Amortization of net actuarial losses	721	909	2,163	2,728
Net periodic benefit income	<u>\$ (912)</u>	<u>\$ (504)</u>	<u>\$ (2,736)</u>	<u>\$ (1,512)</u>

Effective January 1, 2018, we adopted ASU No. 2017-07, *Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost*, which required us to reclassify postretirement benefit income from cost of revenue and SG&A expense to other income in our consolidated statements of comprehensive (loss) income. Further information can be found in Note 2.

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Note 11: Debt

Debt outstanding was comprised of the following:

(in thousands)	September 30, 2018	December 31, 2017
Amount drawn on revolving credit facility	\$ 889,000	\$ 413,000
Amount outstanding under term loan facility	—	294,938
Capital lease obligations	1,883	1,914
Long-term debt, principal amount	890,883	709,852
Less unamortized debt issuance costs	—	(471)
Less current portion of long-term debt	(785)	(44,121)
Long-term debt	890,098	665,260
Current portion of amount drawn under term loan facility	—	43,313
Current portion of capital lease obligations	785	808
Long-term debt due within one year, principal amount	785	44,121
Less unamortized debt issuance costs	—	(81)
Long-term debt due within one year	785	44,040
Total debt	\$ 890,883	\$ 709,300

In March 2018, we entered into a revolving credit facility in the amount of \$950,000, subject to increase under the credit agreement to an aggregate amount not exceeding \$1,425,000. The credit facility matures in March 2023. Our previous credit facility agreement was terminated contemporaneously with our entry into the new credit facility and was repaid utilizing proceeds from the new credit facility. Our quarterly commitment fee ranges from 0.175% to 0.35% based on our leverage ratio. As of September 30, 2018, \$889,000 was drawn on our revolving credit facility at a weighted-average interest rate of 3.22%. As of December 31, 2017, \$413,000 was drawn on our previous revolving credit facility at a weighted-average interest rate of 2.98%. Our previous credit facility agreement also included a term loan facility. As of December 31, 2017, \$294,938 was outstanding under the term loan facility at a weighted-average interest rate of 2.99%. This amount was repaid in March 2018, utilizing proceeds from the new revolving credit facility.

There are currently no limitations on the amount of dividends and share repurchases under the terms of our credit agreement. However, if our leverage ratio, defined as total debt less unrestricted cash to EBITDA, should exceed 2.75 to one, there would be an annual limitation on the amount of dividends and share repurchases.

Borrowings under the credit agreement are collateralized by substantially all of our personal and intangible property. The credit agreement governing our credit facility contains customary covenants regarding limits on levels of subsidiary indebtedness and capital expenditures, liens, investments, acquisitions, certain mergers, certain asset sales outside the ordinary course of business, and change in control as defined in the agreement. The agreement also requires us to maintain certain financial ratios, including a maximum leverage ratio of 3.5 and a minimum ratio of consolidated earnings before interest and taxes to consolidated interest expense, as defined in the credit agreement, of 3.0.

Daily average amounts outstanding under our current and previous credit facility were as follows:

(in thousands)	Nine Months Ended September 30, 2018	Year Ended December 31, 2017
Revolving credit facility:		
Daily average amount outstanding	\$ 680,064	\$ 436,588
Weighted-average interest rate	3.10%	2.55%
Term loan facility:		
Daily average amount outstanding	\$ 85,084	\$ 315,862
Weighted-average interest rate	2.97%	2.57%

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As of September 30, 2018, amounts were available for borrowing under our revolving credit facility as follows:

(in thousands)	Total available
Revolving credit facility commitment	\$ 950,000
Amount drawn on revolving credit facility	(889,000)
Outstanding letters of credit ⁽¹⁾	(10,221)
Net available for borrowing as of September 30, 2018	<u>\$ 50,779</u>

⁽¹⁾We use standby letters of credit to collateralize certain obligations related primarily to our self-insured workers' compensation claims, as well as claims for environmental matters, as required by certain states. These letters of credit reduce the amount available for borrowing under our revolving credit facility.

In addition to amounts outstanding under our credit facility, we had capital lease obligations of \$1,883 as of September 30, 2018 and \$1,914 as of December 31, 2017 related to information technology hardware. The lease obligations will be paid through June 2022. The related assets are included in property, plant and equipment in the consolidated balance sheets. Depreciation of the leased assets is included in depreciation expense in the consolidated statements of cash flows.

Note 12: Other commitments and contingencies

Indemnifications – In the normal course of business, we periodically enter into agreements that incorporate general indemnification language. These indemnification provisions generally encompass third-party claims arising from our products and services, including, without limitation, service failures, breach of security, intellectual property rights, governmental regulations and/or employment-related matters. Performance under these indemnities would generally be triggered by our breach of the terms of the contract. In disposing of assets or businesses, we often provide representations, warranties and/or indemnities to cover various risks, including, for example, unknown damage to the assets, environmental risks involved in the sale of real estate, liability to investigate and remediate environmental contamination at waste disposal sites and manufacturing facilities, and unidentified tax liabilities and legal matters related to periods prior to disposition. We do not have the ability to estimate the potential liability from such indemnities because they relate to unknown conditions. However, we do not believe that any liability under these indemnities would have a material adverse effect on our financial position, annual results of operations or annual cash flows. We have recorded liabilities for known indemnifications related to environmental matters.

Environmental matters – We are currently involved in environmental compliance, investigation and remediation activities at some of our former sites, primarily printing facilities of our Financial Services and Small Business Services segments that have been sold. Remediation costs are accrued on an undiscounted basis when the obligations are either known or considered probable and can be reasonably estimated. Remediation or testing costs that result directly from the sale of an asset and that we would not have otherwise incurred are considered direct costs of the sale of the asset. As such, they are included in our measurement of the carrying value of the asset sold.

Accruals for environmental matters were \$2,732 as of September 30, 2018 and \$2,646 as of December 31, 2017. These accruals are included in accrued liabilities and other non-current liabilities in the consolidated balance sheets. Accrued costs consist of direct costs of the remediation activities, primarily fees that will be paid to outside engineering and consulting firms. Although recorded accruals include our best estimates, our total costs cannot be predicted with certainty due to various factors, such as the extent of corrective action that may be required, evolving environmental laws and regulations and advances in environmental technology. Where the available information is sufficient to estimate the amount of the liability, that estimate is used. Where the information is only sufficient to establish a range of probable liability and no point within the range is more likely than any other, the lower end of the range is recorded. We do not believe that the range of possible outcomes could have a material effect on our financial condition, results of operations or liquidity. Environmental expense was not significant for the quarters or nine months ended September 30, 2018 and 2017.

We purchased an insurance policy during 2002 that covers up to \$10,000 of third-party pollution claims through 2032 at certain owned, leased and divested sites. We also purchased an insurance policy during 2009 that covers up to \$15,000 of third-party pollution claims through April 2019 at certain other sites. These policies cover liability for claims of bodily injury or property damage arising from pollution events at the covered facilities, as well as remediation coverage should we be required by a governing authority to perform remediation activities at the covered sites. No accruals have been recorded in our

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consolidated financial statements for any of the events contemplated in these insurance policies. We do not anticipate significant net cash outlays for environmental matters during 2018.

Self-insurance – We are self-insured for certain costs, primarily workers' compensation claims and medical and dental benefits for active employees and those employees on long-term disability. The liabilities associated with these items represent our best estimate of the ultimate obligations for reported claims plus those incurred, but not reported, and totaled \$6,973 as of September 30, 2018 and \$7,679 as of December 31, 2017. These accruals are included in accrued liabilities and other non-current liabilities in the consolidated balance sheets. Our workers' compensation liability is recorded at present value. The difference between the discounted and undiscounted liability was not significant as of September 30, 2018 or December 31, 2017.

Our self-insurance liabilities are estimated, in part, by considering historical claims experience, demographic factors and other actuarial assumptions. The estimated accruals for these liabilities could be significantly affected if future events and claims differ from these assumptions and historical trends.

Litigation – Recorded liabilities for legal matters were not material to our financial position, results of operations or liquidity during the nine months ended September 30, 2018 and 2017, and we do not believe that any of the currently identified claims or litigation will materially affect our financial position, results of operations or liquidity, upon resolution. However, litigation is subject to inherent uncertainties, and unfavorable rulings could occur. If an unfavorable ruling were to occur, it may cause a material adverse impact on our financial position, results of operations or liquidity in the period in which the ruling occurs or in future periods.

Note 13: Shareholders' equity

During the nine months ended September 30, 2018, we repurchased 1.9 million shares for \$120,000. These share repurchases were completed under an authorization from our board of directors in May 2016 for the repurchase of up to \$300,000 of our common stock. In October 2018, our board of directors increased our share repurchase authorization to \$500,000, inclusive of the remaining amount outstanding under the prior authorization. The authorization has no expiration date.

Note 14: Business segment information

We operate 3 reportable business segments: Small Business Services, Financial Services and Direct Checks. Our business segments are generally organized by type of customer served and reflect the way we manage the company. Small Business Services promotes and sells products and services to small businesses via direct response mail and internet advertising; referrals from financial institutions, telecommunications clients and others; networks of Safeguard distributors and independent dealers; a direct sales force that focuses on selling to and through major accounts; and an outbound telemarketing group. Financial Services' products and services are sold primarily through a direct sales force that executes product and service supply contracts with our financial institution clients, including banks, credit unions and financial services companies. Direct Checks sells products and services directly to consumers using direct marketing, including print advertising and search engine marketing and optimization strategies. All 3 segments operate primarily in the United States, although Small Business Services has operations in Canada, Australia and portions of Europe, and Financial Services has operations in Canada.

Our product and service offerings are comprised of the following:

Checks – We remain one of the largest providers of checks in the United States. During 2017, checks represented 39% of our Small Business Services segment's revenue, 43% of our Financial Services segment's revenue and 84% of our Direct Checks segment's revenue.

DELUXE CORPORATION
CONDENSED NOTES TO UNAUDITED CONSOLIDATED FINANCIAL STATEMENTS
(dollars in thousands, except per share amounts)

Marketing solutions and other services (MOS) – We offer products and services designed to meet our customers' sales and marketing needs, as well as various other service offerings. During 2017, MOS represented 34% of our Small Business Services segment's revenue, 55% of our Financial Services segment's revenue and 11% of our Direct Checks segment's revenue. Our MOS offerings generally consist of the following:

- Small business marketing solutions – Our marketing products utilize digital printing and web-to-print solutions to provide printed marketing materials and promotional solutions, such as postcards, brochures, retail packaging supplies, apparel, greeting cards and business cards.
- Web services – These service offerings for small businesses include hosting and domain name services, logo and web design, search engine marketing and optimization, and payroll services.
- Data-driven marketing solutions – These Financial Services offerings include outsourced marketing campaign targeting and execution and marketing analytics solutions that help our customers grow revenue through strategic targeting, lead optimization, retention and cross-selling services.
- Treasury management solutions – These Financial Services solutions include remote deposit capture, receivables management, payment processing, and paperless treasury management, as well as software, hardware and digital imaging solutions.
- Fraud, security, risk management and operational services – These service offerings include fraud protection and security services, electronic checks ("eChecks") and digital engagement solutions, including loyalty and rewards programs.

Forms, accessories and other products – Our Small Business Services segment provides printed forms to small businesses, including deposit tickets, billing forms, work orders, job proposals, purchase orders, invoices and personnel forms, as well as computer forms compatible with accounting software packages commonly used by small businesses. Small Business Services also offers other customized products, including envelopes, office supplies, ink stamps and labels. Our Financial Services and Direct Checks segments offer deposit tickets, check registers, checkbook covers, labels and ink stamps.

DELUXE CORPORATION
CONDENSED NOTES TO UNAUDITED CONSOLIDATED FINANCIAL STATEMENTS
(dollars in thousands, except per share amounts)

The following tables present revenue disaggregated by our product and service offerings:

Quarter Ended September 30, 2018				
(in thousands)	Small Business Services	Financial Services	Direct Checks	Consolidated
Checks	\$ 117,918	\$ 54,800	\$ 25,874	\$ 198,592
Marketing solutions and other services:				
Small business marketing solutions	69,490	—	—	69,490
Web services	41,973	—	—	41,973
Data-driven marketing solutions	—	39,808	—	39,808
Treasury management solutions	—	35,833	—	35,833
Fraud, security, risk management and operational services	6,383	12,953	3,460	22,796
Total MOS	117,846	88,594	3,460	209,900
Forms, accessories and other products	79,835	3,377	1,486	84,698
Total revenue	<u>\$ 315,599</u>	<u>\$ 146,771</u>	<u>\$ 30,820</u>	<u>\$ 493,190</u>

Nine Months Ended September 30, 2018				
(in thousands)	Small Business Services	Financial Services	Direct Checks	Consolidated
Checks	\$ 360,637	\$ 170,442	\$ 81,425	\$ 612,504
Marketing solutions and other services:				
Small business marketing solutions	205,694	—	—	205,694
Web services	120,199	—	—	120,199
Data-driven marketing solutions	—	114,275	—	114,275
Treasury management solutions	—	93,591	—	93,591
Fraud, security, risk management and operational services	19,487	37,856	10,761	68,104
Total MOS	345,380	245,722	10,761	601,863
Forms, accessories and other products	243,638	10,563	4,781	258,982
Total revenue	<u>\$ 949,655</u>	<u>\$ 426,727</u>	<u>\$ 96,967</u>	<u>\$ 1,473,349</u>

DELUXE CORPORATION
CONDENSED NOTES TO UNAUDITED CONSOLIDATED FINANCIAL STATEMENTS
(dollars in thousands, except per share amounts)

Quarter Ended September 30, 2017

(in thousands)	Small Business Services	Financial Services	Direct Checks	Consolidated
Checks	\$ 119,892	\$ 62,613	\$ 28,521	\$ 211,026
Marketing solutions and other services:				
Small business marketing solutions	63,286	—	—	63,286
Web services	35,059	—	—	35,059
Data-driven marketing solutions	—	48,195	—	48,195
Treasury management solutions	—	27,839	—	27,839
Fraud, security, risk management and operational services	6,552	15,224	3,716	25,492
Total MOS	104,897	91,258	3,716	199,871
Forms, accessories and other products	81,619	3,536	1,617	86,772
Total revenue	\$ 306,408	\$ 157,407	\$ 33,854	\$ 497,669

Nine Months Ended September 30, 2017

(in thousands)	Small Business Services	Financial Services	Direct Checks	Consolidated
Checks	\$ 364,202	\$ 190,339	\$ 90,375	\$ 644,916
Marketing solutions and other services:				
Small business marketing solutions	185,963	—	—	185,963
Web services	95,393	—	—	95,393
Data-driven marketing solutions	—	116,426	—	116,426
Treasury management solutions	—	79,658	—	79,658
Fraud, security, risk management and operational services	19,795	48,547	11,719	80,061
Total MOS	301,151	244,631	11,719	557,501
Forms, accessories and other products	252,053	10,976	5,220	268,249
Total revenue	\$ 917,406	\$ 445,946	\$ 107,314	\$ 1,470,666

Product revenue is recognized at a point in time. Total MOS revenue included product revenue of \$69,477 and service revenue of \$140,423 for the quarter ended September 30, 2018 and product revenue of \$204,624 and service revenue of \$397,239 for the nine months ended September 30, 2018. The majority of our service revenue is recognized over time as services are provided.

The following tables present our revenue disaggregated by geography, based on where items are shipped or services are performed.

(in thousands)	Small Business Services	Financial Services	Direct Checks	Total
Quarter Ended September 30, 2018:				
United States	\$ 290,752	\$ 141,979	\$ 30,820	\$ 463,551
Foreign, primarily Canada and Australia	24,847	4,792	—	29,639
Total revenue	\$ 315,599	\$ 146,771	\$ 30,820	\$ 493,190
Nine Months Ended September 30, 2018:				
United States	\$ 871,574	\$ 411,185	\$ 96,967	\$ 1,379,726
Foreign, primarily Canada and Australia	78,081	15,542	—	93,623
Total revenue	\$ 949,655	\$ 426,727	\$ 96,967	\$ 1,473,349

DELUXE CORPORATION
CONDENSED NOTES TO UNAUDITED CONSOLIDATED FINANCIAL STATEMENTS
(dollars in thousands, except per share amounts)

(in thousands)	Small Business Services	Financial Services	Direct Checks	Total
Quarter Ended September 30, 2017:				
United States	\$ 281,573	\$ 151,587	\$ 33,854	\$ 467,014
Foreign, primarily Canada and Australia	24,835	5,820	—	30,655
Total revenue	<u>\$ 306,408</u>	<u>\$ 157,407</u>	<u>\$ 33,854</u>	<u>\$ 497,669</u>
Nine Months Ended September 30, 2017:				
United States	\$ 854,239	\$ 434,921	\$ 107,314	\$ 1,396,474
Foreign, primarily Canada and Australia	63,167	11,025	—	74,192
Total revenue	<u>\$ 917,406</u>	<u>\$ 445,946</u>	<u>\$ 107,314</u>	<u>\$ 1,470,666</u>

The accounting policies of the segments are the same as those described in the Notes to Consolidated Financial Statements included in the 2017 Form 10-K. We allocate corporate costs for our shared services functions to our business segments, including costs of our executive management, human resources, supply chain, finance, information technology and legal functions. Where costs incurred are directly attributable to a business segment, those costs are charged directly to that segment. During 2017, costs that were not directly attributable to a business segment were allocated to the segments based on segment revenue. Effective January 1, 2018, we completed a more detailed analysis of our corporate costs and were able to allocate substantially all of the costs directly to our business segments. The costs that were not directly attributable to a business segment, primarily certain human resources costs, were allocated to the segments based on the number of employees in each segment. This change in our allocation methodology did not have a significant impact on the operating results of our business segments. Corporate assets are not allocated to the segments and consisted primarily of long-term investments and assets related to our corporate shared services functions of manufacturing, information technology and real estate, including property, plant and equipment; internal-use software; and inventories and supplies.

We are an integrated enterprise, characterized by substantial intersegment cooperation, cost allocations and sharing of assets. Therefore, we do not represent that these segments, if operated independently, would report the operating income and other financial information shown.

DELUXE CORPORATION
CONDENSED NOTES TO UNAUDITED CONSOLIDATED FINANCIAL STATEMENTS
(dollars in thousands, except per share amounts)

The following is our segment information as of and for the quarters ended September 30, 2018 and 2017:

		Reportable Business Segments				
		Small Business Services	Financial Services	Direct Checks	Corporate	Consolidated
(in thousands)						
Total revenue from external customers:	2018	\$ 315,599	\$ 146,771	\$ 30,820	\$ —	\$ 493,190
	2017	306,408	157,407	33,854	—	497,669
Operating (loss) income:	2018	(45,254)	17,612	10,360	—	(17,282)
	2017	12,893	29,198	11,261	—	53,352
Depreciation and amortization expense:	2018	17,173	15,424	809	—	33,406
	2017	14,502	15,935	809	—	31,246
Asset impairment charges:	2018	97,288	1,882	—	—	99,170
	2017	46,630	—	—	—	46,630
Total assets:	2018	1,056,086	753,240	157,806	300,235	2,267,367
	2017	1,051,076	692,511	159,526	276,867	2,179,980
Capital asset purchases:	2018	—	—	—	14,526	14,526
	2017	—	—	—	11,563	11,563

The following is our segment information as of and for the nine months ended September 30, 2018 and 2017:

		Reportable Business Segments				
		Small Business Services	Financial Services	Direct Checks	Corporate	Consolidated
(in thousands)						
Total revenue from external customers:	2018	\$ 949,655	\$ 426,727	\$ 96,967	\$ —	\$ 1,473,349
	2017	917,406	445,946	107,314	—	1,470,666
Operating income:	2018	72,288	49,565	31,396	—	153,249
	2017	119,674	76,052	35,450	—	231,176
Depreciation and amortization expense:	2018	48,765	45,740	2,418	—	96,923
	2017	42,158	46,709	2,430	—	91,297
Asset impairment charges:	2018	99,437	1,882	—	—	101,319
	2017	54,880	—	—	—	54,880
Total assets:	2018	1,056,086	753,240	157,806	300,235	2,267,367
	2017	1,051,076	692,511	159,526	276,867	2,179,980
Capital asset purchases:	2018	—	—	—	42,566	42,566
	2017	—	—	—	34,351	34,351

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

Our Management's Discussion and Analysis of Financial Condition and Results of Operations (MD&A) includes the following sections:

- Executive Overview that discusses what we do, our operating results at a high level and our financial outlook for the year;
- Consolidated Results of Operations, Restructuring and CEO Transition Costs, and Segment Results that includes a more detailed discussion of our revenue and expenses;
- Cash Flows and Liquidity, Capital Resources and Other Financial Position Information that discusses key aspects of our cash flows, capital structure and financial position;

- Off-Balance Sheet Arrangements, Guarantees and Contractual Obligations that discusses our financial commitments; and
- Critical Accounting Policies that discusses the policies we believe are important to understanding the assumptions and judgments underlying our financial statements.

Please note that this MD&A discussion contains forward-looking statements that involve risks and uncertainties. Known material risks are discussed in Item 1A of our Annual Report on Form 10-K for the year ended December 31, 2017 (the "2017 Form 10-K"), as updated as set forth in Part II, Item 1A of this Form 10-Q, and are incorporated into this Item 2 of this report on Form 10-Q as if fully stated herein. Although we have attempted to compile a comprehensive list of these important factors, we want to caution you that other factors may prove to be important in affecting future operating results. New factors emerge from time to time, and it is not possible for us to predict all of these factors, nor can we assess the impact each factor or combination of factors may have on our business. We further caution you not to place undue reliance on those forward-looking statements because they speak only of our views as of the date the statements were made. We undertake no obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.

The Private Securities Litigation Reform Act of 1995 (the "Reform Act") provides a "safe harbor" for forward-looking statements to encourage companies to provide prospective information. We are filing the following cautionary statement in connection with the Reform Act. When we use the words or phrases "should result," "believe," "intend," "plan," "are expected to," "targeted," "will continue," "will approximate," "is anticipated," "estimate," "project," "outlook," "forecast" or similar expressions in this Quarterly Report on Form 10-Q, in future filings with the Securities and Exchange Commission, in our press releases and in oral statements made by our representatives, they indicate forward-looking statements within the meaning of the Reform Act.

Our unaudited consolidated statements of comprehensive income for the quarter and nine months ended September 30, 2017 have been revised to reflect the adoption of Accounting Standards Update (ASU) No. 2017-07, *Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost*. In accordance with this standard, we reclassified the entire amount of our net periodic benefit income from cost of revenue and selling, general and administrative (SG&A) expense to other income in our consolidated statements of comprehensive income. This revision had no impact on net income.

EXECUTIVE OVERVIEW

We operate 3 reportable business segments: Small Business Services, Financial Services and Direct Checks. Our business segments are generally organized by type of customer served and reflect the way we manage the company. Further information regarding our segments and our product and service offerings can be found under the caption "Note 14: Business segment information" in the Condensed Notes to Unaudited Consolidated Financial Statements appearing in Item 1 of this report.

Over the past several years, we have focused on opportunities to increase revenue and operating income despite the continuing secular decline in check and forms usage. These opportunities have included new product and service offerings, brand awareness and positioning initiatives, investing in technology for our service offerings, enhancing our information technology capabilities and infrastructure, improving customer segmentation, extending the reach of our sales channels, and reducing costs. In addition, we invested in various acquisitions that extend the range of products and services we offer to our customers, primarily marketing solutions and other services (MOS) offerings. Information about our acquisitions can be found under the captions "Note 6: Acquisitions" in the Condensed Notes to Unaudited Consolidated Financial Statements appearing in Item 1 of this report and under the caption "Note 5: Acquisitions" in the Notes to Consolidated Financial Statements appearing in the 2017 Form 10-K. During the remainder of 2018, we plan to continue our focus in these areas, with an emphasis on profitable revenue growth and increasing the mix of MOS revenue, primarily data-driven marketing solutions, treasury management solutions and web services. We continue to assess acquisitions that complement our large customer bases, with a focus on MOS offerings. A more detailed discussion of our business strategies can be found under the caption "Business Segments" appearing in Item 1 of the 2017 Form 10-K.

Earnings for the first nine months of 2018 included pre-tax asset impairment charges of \$101.3 million, as compared to pre-tax asset impairment charges of \$54.9 million during the first nine months of 2017. Further information regarding these charges can be found under the caption "Note 7: Fair value measurements" in the Condensed Notes to Unaudited Consolidated Financial Statements appearing in Item 1 of this report and in the Critical Accounting Policies section of this MD&A. Earnings were also negatively impacted by volume reductions in personal and business checks and forms due primarily to the continuing secular decline in check and forms usage, higher restructuring costs, lower Deluxe Rewards revenue driven primarily by the

loss of Verizon Communications Inc. as a customer, continued check pricing allowances within Financial Services, and CEO transition costs of \$4.2 million in 2018. These decreases in earnings were partially offset by a lower effective income tax rate in 2018, largely due to the Tax Cuts and Jobs Act of 2017 (the "2017 Act"), continuing initiatives to reduce our cost structure, primarily within our sales, marketing and fulfillment organizations, and the benefit of Small Business Services price increases. In addition, we recognized gains from sales of businesses and customer lists within Small Business Services of \$12.9 million, compared to gains recognized in the first nine months of 2017 of \$8.7 million.

Business Challenges/Market Risks

Our business, consolidated results of operations, financial condition and cash flows could be adversely affected by various risks and uncertainties. We have disclosed material risks in Item 1A of the 2017 Form 10-K, including discussion of the declining market for checks and business forms, competition, factors affecting our financial institution clients, data security risks, risks related to acquisitions, the impact of economic conditions and the ability to attract and retain key employees. All of these factors could cause our actual results to differ materially from the statements we make from time to time regarding our expected future results, including, but not limited to, forecasts regarding estimated revenue, MOS revenue, earnings per share, cash provided by operating activities and expected cost savings. There were no significant changes in these factors during the first nine months of 2018, other than as set forth in Part II, Item 1A of this Form 10-Q.

Cost Reduction Initiatives

We anticipate that we will realize net cost reductions of approximately \$55.0 million in 2018, as compared to our 2017 results of operations, primarily from our sales, marketing and fulfillment organizations. Approximately 75% of these savings are expected to impact SG&A expense, with the remaining 25% affecting cost of revenue. Further information regarding our cost reduction initiatives can be found in the MD&A section of the 2017 Form 10-K.

Outlook for 2018

We anticipate that consolidated revenue will be between \$1.995 billion and \$2.005 billion for 2018, compared to \$1.966 billion for 2017. In Small Business Services, we expect revenue to increase between 3% and 4% compared to 2017 revenue of \$1.24 billion. In Financial Services, we expect revenue to increase between 1% and 2% compared to 2017 revenue of \$585.3 million and in Direct Checks, we expect revenue to decline approximately 10% compared to 2017 revenue of \$140.5 million. We expect increased revenue from MOS, including the impact of MOS-focused acquisitions, to be partially offset by continued year-over-year secular declines in check and forms usage and the expected loss of approximately \$11.0 million in Deluxe Rewards revenue due to the loss of Verizon Communications Inc. as a customer. We also expect some impact from continued pricing pressure in our check programs.

We expect that 2018 diluted earnings per share will be between \$3.24 and \$3.31, including net charges of \$2.39 per share primarily related to non-cash asset impairment charges, restructuring costs and Chief Executive Officer (CEO) transition costs, partially offset by a benefit from federal tax reform under the 2017 Act. This estimate of diluted earnings per share for 2018 compares to \$4.72 for 2017, which included net charges of \$0.55 per share related to non-cash asset impairment charges and restructuring and transaction costs, partially offset by a benefit from federal tax reform under the 2017 Act. We expect that the benefits of additional cost reduction activities will be partially offset by the continuing secular decline in check and forms usage, continued investments in technology and integrations, and investments in data-driven marketing and treasury management talent, technology and process improvements to accelerate strategic sales and drive more development innovation. We also expect material costs and delivery rates to increase. We estimate that our annual effective tax rate for 2018 will be approximately 30.0%, including the tax impact of the goodwill impairment charge in the third quarter of 2018 which increases this rate approximately 6.0 points.

We anticipate that net cash provided by operating activities will be between \$350.0 million and \$355.0 million in 2018, compared to \$338.4 million in 2017, driven by lower income tax payments and lower medical costs, partially offset by higher interest payments. We anticipate payments for prepaid product discounts of approximately \$25.0 million in 2018, and we estimate that capital spending will be approximately \$60.0 million in 2018, as we continue to invest in key revenue growth initiatives and order fulfillment and information technology infrastructure.

We believe that cash generated by operating activities, along with availability under our revolving credit facility, will be sufficient to support our operations for the next 12 months, including dividend payments, capital expenditures, required interest payments, and periodic share repurchases, as well as possible acquisitions. As of September 30, 2018, \$50.8 million was available for borrowing under our revolving credit facility and we have the ability to increase our credit facility \$475.0 million. We expect to maintain a disciplined approach to capital deployment that focuses on our need to continue investing in

initiatives to drive revenue growth, including acquisitions. We anticipate that our board of directors will maintain our current dividend level. However, dividends are approved by the board of directors on a quarterly basis, and thus are subject to change. To the extent we generate excess cash, we plan to opportunistically repurchase common shares and/or reduce the amount outstanding under our credit facility.

CONSOLIDATED RESULTS OF OPERATIONS

Consolidated Revenue

(in thousands, except per order amounts)	Quarter Ended September 30,			Nine Months Ended September 30,		
	2018	2017	Change	2018	2017	Change
Total revenue	\$ 493,190	\$ 497,669	(0.9%)	\$ 1,473,349	\$ 1,470,666	0.2%
Orders ⁽¹⁾	11,595	12,595	(7.9%)	35,555	37,643	(5.5%)
Revenue per order	\$ 42.53	\$ 39.51	7.6%	\$ 41.44	\$ 39.07	6.1%

⁽¹⁾Orders is our company-wide measure of volume and includes both products and services.

The decrease in total revenue for the third quarter of 2018, as compared to the third quarter of 2017, was driven primarily by lower order volume for both personal and business checks, as well as forms and accessories sold by Small Business Services. In addition, revenue for Financial Services data-driven marketing solutions decreased \$8.4 million and revenue was negatively impacted by continued check pricing allowances within Financial Services. These decreases in revenue were partially offset by incremental revenue from acquired businesses of \$22.6 million, as well as Small Business Services price increases. Information regarding our acquisitions can be found under the caption "Note 6: Acquisitions" in the Condensed Notes to Unaudited Consolidated Financial Statements appearing in Item 1 of this report and under the caption "Note 5: Acquisitions" in the Notes to Consolidated Financial Statements appearing in the 2017 Form 10-K.

The increase in total revenue for the first nine months of 2018, as compared to the first nine months of 2017, was driven primarily by incremental revenue from acquired businesses of \$57.4 million, as well as Small Business Services price increases. Information regarding our acquisitions can be found under the caption "Note 6: Acquisitions" in the Condensed Notes to Unaudited Consolidated Financial Statements appearing in Item 1 of this report and under the caption "Note 5: Acquisitions" in the Notes to Consolidated Financial Statements appearing in the 2017 Form 10-K. These increases in revenue were partially offset by lower order volume for both personal and business checks, as well as forms and accessories sold by Small Business Services. In addition, Deluxe Rewards revenue decreased \$10.0 million due to the loss of Verizon Communications Inc. as a customer, and revenue was negatively impacted by continued check pricing allowances within Financial Services.

Service revenue represented 27.0% of total revenue for the first nine months of 2018 and 25.4% for the first nine months of 2017. As such, the majority of our revenue is generated by product sales. We do not manage our business based on product versus service revenue. Instead, we analyze our products and services based on the following categories:

	Quarter Ended September 30,		Nine Months Ended September 30,	
	2018	2017	2018	2017
Checks	40.3%	42.4%	41.5%	43.9%
Marketing solutions and other services:				
Small business marketing solutions	14.1%	12.7%	14.0%	12.6%
Web services	8.5%	7.1%	8.2%	6.5%
Data-driven marketing solutions	8.1%	9.7%	7.8%	7.9%
Treasury management solutions	7.3%	5.6%	6.3%	5.4%
Fraud, security, risk management and operational services	4.6%	5.1%	4.6%	5.5%
Total MOS	42.6%	40.2%	40.9%	37.9%
Forms, accessories and other products	17.1%	17.4%	17.6%	18.2%
Total revenue	100.0%	100.0%	100.0%	100.0%

The number of orders decreased for the third quarter and first nine months of 2018, as compared to the same periods in 2017, due to the impact of the continuing secular decline in check and forms usage, partially offset by growth in MOS, including the impact of MOS-related acquisitions. Revenue per order increased for the third quarter and first nine months of 2018, as compared to the same periods in 2017, primarily due to the benefit of Small Business Services price increases and favorable product and service mix, partially offset by the impact of continued check pricing allowances in Financial Services.

Consolidated Cost of Revenue

(in thousands)	Quarter Ended September 30,			Nine Months Ended September 30,		
	2018	2017	Change	2018	2017	Change
Total cost of revenue	\$ 197,634	\$ 193,071	2.4%	\$ 576,594	\$ 551,752	4.5%
Total cost of revenue as a percentage of total revenue	40.1%	38.8%	1.3 pts.	39.1%	37.5%	1.6 pts.

Cost of revenue consists primarily of raw materials used to manufacture our products, shipping and handling costs, third-party costs for outsourced products and services, payroll and related expenses, information technology costs, depreciation and amortization of assets used in the production process and in support of digital service offerings, and related overhead.

The increase in total cost of revenue for the third quarter and first nine months of 2018, as compared to the same periods in 2017, was primarily attributable to incremental costs of acquired businesses of \$10.8 million for the third quarter of 2018 and \$25.9 million for the first nine months of 2018. In addition, delivery rates and material costs increased in 2018. Partially offsetting these increases in total cost of revenue was the impact of lower order volume for both personal and business checks, as well as forms and accessories sold by Small Business Services. In addition, total cost of revenue decreased due to manufacturing efficiencies and other benefits resulting from our continued cost reduction initiatives of approximately \$4.0 million for the third quarter of 2018 and \$10.0 million for the first nine months of 2018. Total cost of revenue as a percentage of total revenue increased in both periods, as compared to 2017, in large part due to the impact of acquisitions, as well as the increase in service revenues.

Consolidated Selling, General & Administrative Expense

(in thousands)	Quarter Ended September 30,			Nine Months Ended September 30,		
	2018	2017	Change	2018	2017	Change
SG&A expense	\$ 208,533	\$ 203,349	2.5%	\$ 629,272	\$ 629,150	—
SG&A expense as a percentage of total revenue	42.3%	40.9%	1.4 pts.	42.7%	42.8%	(0.1) pts.

The increase in SG&A expense for the third quarter of 2018, as compared to the third quarter of 2017, was primarily due to incremental costs of acquired businesses of \$10.5 million, CEO transition costs of \$2.6 million and a higher average Small Business Services commission rate. These increases in SG&A expense were partially offset by various expense reduction initiatives of approximately \$12.0 million, primarily within our sales and marketing organizations.

SG&A expense was virtually unchanged for the first nine months of 2018, as compared to the first nine months of 2017. The slight increase was due to incremental costs of acquired businesses of \$27.4 million, a higher average Small Business Services commission rate, planned innovation investments, and CEO transition costs of \$4.2 million. These increases in SG&A expense were almost entirely offset by various expense reduction initiatives of approximately \$33.0 million, primarily within our sales and marketing organizations, and decreases in performance-based compensation and medical costs of approximately \$4.0 million each. Also, during the first nine months of 2018, we recognized gains from sales of businesses and customer lists within Small Business Services of \$12.9 million, compared to gains recognized in the first nine months of 2017 of \$8.7 million. Further information regarding these asset sales can be found under the caption "Note 3: Supplemental balance sheet information" in the Condensed Notes to Unaudited Consolidated Financial Statements appearing in Item 1 of this report.

Net Restructuring Charges

(in thousands)	Quarter Ended September 30,			Nine Months Ended September 30,		
	2018	2017	Change	2018	2017	Change
Net restructuring charges	\$ 5,135	\$ 1,267	\$ 3,868	\$ 12,915	\$ 3,708	\$ 9,207

We recorded net restructuring charges related to the cost reduction initiatives discussed under *Executive Overview*. The net charges for each period related primarily to costs of our restructuring and integration activities, such as employee severance benefits, information technology costs, employee and equipment moves, training and travel. Further information can be found under *Restructuring and CEO Transition Costs*.

Asset Impairment Charges

(in thousands)	Quarter Ended September 30,			Nine Months Ended September 30,		
	2018	2017	Change	2018	2017	Change
Asset impairment charges	\$ 99,170	\$ 46,630	\$ 52,540	\$ 101,319	\$ 54,880	\$ 46,439

During the third quarter of 2018, we recorded pre-tax asset impairment charges of \$99.2 million related to Small Business Services goodwill and an indefinite-lived trade name, as well as certain customer list intangible assets within Financial Services related to 2 small distributors we acquired in 2015. During the first quarter of 2018, we recorded a pre-tax asset impairment charge of \$2.1 million related to a Small Business Services customer list intangible asset. Further information regarding these charges can be found under the caption "Note 7: Fair value measurements" of the Condensed Notes to Unaudited Consolidated Financial Statements appearing in Item 1 of this report.

During the third quarter of 2017, we recorded pre-tax asset impairment charges of \$46.6 million within Small Business Services related to goodwill, the discontinued NEBS trade name and other non-current assets, primarily internal-use software. Further information regarding these charges can be found under the caption "Note 7: Fair value measurements" of the Condensed Notes to Unaudited Consolidated Financial Statements appearing in Item 1 of this report. During the nine months ended September 30, 2017, we also recorded pre-tax asset impairment charges of \$8.3 million related to a small business distributor that was sold during the second quarter of 2017. Further information regarding these charges can be found under the caption "Note 3: Supplemental balance sheet information" of the Condensed Notes to Unaudited Consolidated Financial Statements appearing in Item 1 of this report.

Interest Expense

(in thousands)	Quarter Ended September 30,			Nine Months Ended September 30,		
	2018	2017	Change	2018	2017	Change
Interest expense	\$ 7,244	\$ 5,708	26.9%	\$ 18,953	\$ 15,795	20.0%
Weighted-average debt outstanding	841,151	759,084	10.8%	767,045	763,802	0.4%
Weighted-average interest rate	3.2%	2.7%	0.5 pts.	3.1%	2.5%	0.6 pts.

The increase in interest expense for the third quarter and first nine months of 2018, as compared to the same periods in 2017, was primarily driven by our higher weighted-average interest rate during 2018, as well as the higher weighted-average debt level in each period.

Income Tax Provision

(in thousands)	Quarter Ended September 30,			Nine Months Ended September 30,		
	2018 ⁽¹⁾	2017	Change	2018	2017	Change
Income tax provision	\$ 8,913	\$ 20,146	(55.8%)	\$ 47,916	\$ 73,551	(34.9%)
Effective income tax rate	(40.2%)	41.2%	(81.4) pts.	34.1%	33.6%	0.5pts.

⁽¹⁾ The asset impairment charges recorded during the third quarter of 2018 resulted in a loss before income taxes for the quarter. We recorded tax expense for the quarter, despite the pre-tax loss, due to the goodwill impairment charge. The majority of the goodwill had no tax basis and thus, that portion of the impairment charge is not tax deductible.

The change in our effective tax rate for the third quarter and first nine months of 2018, as compared to the same periods in 2017, was driven in large part by the impact of federal tax reform under the 2017 Act. This legislation lowered the federal statutory tax rate by 14.0 points, effective January 1, 2018. Partially offsetting this decrease in our tax rate was the impact of the larger goodwill impairment charge in 2018. Because a large portion of our goodwill impairment charges was not deductible, our tax rate increased 11.3 points for the first nine months of 2018 and 2.2 points for the first nine months of 2017. In addition, our tax rate increased due to the elimination of the production activities deduction for 2018, favorable adjustments in 2017 related to the tax basis in a small business distributor held for sale, a lower federal benefit of state income taxes due to

the lower federal tax rate, and a lower benefit from the tax effects of share-based compensation. A comparison of our effective tax rate for the first nine months of 2018, as compared to our annual effective tax rate for 2017, can be found under the caption "Note 9: Income tax provision" in the Condensed Notes to Unaudited Consolidated Financial Statements appearing in Item 1 of this report. We expect that our annual effective tax rate for 2018 will be approximately 30.0%, including the tax impact of the goodwill impairment charge in the third quarter of 2018 which increases this rate approximately 6.0 points.

RESTRUCTURING AND CEO TRANSITION COSTS

Restructuring charges – We have recorded expenses related to our restructuring activities, including accruals consisting primarily of employee severance benefits, as well as costs that are expensed when incurred, including information technology costs, employee and equipment moves, training and travel. Our restructuring activities are driven by our cost reduction and integration initiatives, including employee reductions in various functional areas, as well as the closing of facilities. During 2018, we closed 2 fulfillment facilities and an administrative facility and during 2017, we closed a retail packaging sales location, a fulfillment facility, and 2 administrative facilities. Restructuring costs have been reduced by the reversal of severance accruals when fewer employees receive severance benefits than originally estimated.

Net restructuring charges for each period were as follows:

(in thousands, except number of employees)	Quarter Ended September 30,		Nine Months Ended September 30,	
	2018	2017	2018	2017
Severance accruals	\$ 2,118	\$ 1,248	\$ 6,766	\$ 3,596
Severance reversals	(1,157)	(78)	(1,387)	(596)
Operating lease obligations	291	—	291	23
Net restructuring accruals	1,252	1,170	5,670	3,023
Other costs	3,852	72	8,127	669
Net restructuring charges	\$ 5,104	\$ 1,242	\$ 13,797	\$ 3,692
Number of employees included in severance accruals	75	30	180	80

The majority of the employee reductions included in our restructuring accruals are expected to be completed by the end of 2018, and we expect most of the related severance payments to be paid by mid-2019, utilizing cash from operations.

As a result of our employee reductions and facility closings, we expect to realize cost savings of approximately \$3.0 million in total cost of revenue and \$14.0 million in SG&A expense in 2018, in comparison to our 2017 results of operations, which represent a portion of the estimated \$55.0 million of total net cost reductions we expect to realize in 2018. Expense reductions consist primarily of labor costs. Information about the other initiatives driving our cost savings can be found in the MD&A section of the 2017 Form 10-K.

CEO transition costs – In April 2018, we announced the upcoming retirement of Lee Schram, our CEO. Mr. Schram will continue to serve as CEO until his successor assumes the role, and he will remain employed under the terms of a transition agreement through March 1, 2019. Under the terms of the transition agreement, if Mr. Schram remains employed through March 1, 2019, assists with the transition, and complies with certain covenants, we will provide to Mr. Schram certain benefits, including a transition bonus in the amount of \$2.0 million. In addition, modifications were made to certain of his share-based payment awards. We also offered retention agreements to certain members of our management team under which each employee will be entitled to receive a cash bonus equal to his or her annual base salary or up to 1.5 times his or her annual base salary if he or she remains employed during the retention period, generally from July 1, 2018 to December 31, 2019, and complies with certain covenants. In addition, we are incurring costs related to the CEO transition process, such as executive search, legal, travel and board of directors fees. CEO retirement and transition costs included within SG&A expense were \$2.6 million for the quarter ended September 30, 2018 and \$4.2 million for the nine months ended September 30, 2018. We estimate that CEO transition costs will total approximately \$11.0 million. Expense of approximately \$6.0 million is expected to be recorded in 2018 and approximately \$5.0 million is expected to be recorded in 2019. We expect Mr. Schram's transition bonus will be paid in the first quarter of 2019 and the majority of the management retention bonuses will be paid in the first quarter of 2020, utilizing cash from operations.

In October 2018, we signed an employment agreement with Mr. Schram's successor. This individual will become president, CEO and a member of the board of directors on November 26, 2018. We have agreed to announce this appointment on November 6, 2018 as an accommodation to the individual's current employer.

SEGMENT RESULTS

Additional financial information regarding our business segments appears under the caption "Note 14: Business segment information" in the Condensed Notes to Unaudited Consolidated Financial Statements appearing in Item 1 of this report.

Small Business Services

This segment's products and services are promoted through direct response mail and internet advertising; referrals from financial institutions, telecommunications clients and others; networks of Safeguard distributors and independent dealers; a direct sales force that focuses on selling to and through major accounts; and an outbound telemarketing group. Results for this segment were as follows:

(in thousands)	Quarter Ended September 30,			Nine Months Ended September 30,		
	2018	2017	Change	2018	2017	Change
Total revenue	\$ 315,599	\$ 306,408	3.0%	\$ 949,655	\$ 917,406	3.5%
Operating (loss) income	(45,254)	12,893	(451.0%)	72,288	119,674	(39.6%)
Operating margin	(14.3%)	4.2%	(18.5) pts.	7.6%	13.0%	(5.4) pts.

The increase in total revenue for the third quarter and first nine months of 2018, as compared to the same periods in 2017, was driven by incremental revenue from acquired businesses of approximately \$13.7 million for the third quarter of 2018 and \$42.9 million for the first nine months of 2018, as well as the benefit of price increases. Information about our acquisitions can be found under the caption "Note 6: Acquisitions" in the Condensed Notes to Unaudited Consolidated Financial Statements appearing in Item 1 of this report and under the caption "Note 5: Acquisitions" in the Notes to Consolidated Financial Statements appearing in the 2017 Form 10-K. These increases in revenue were partially offset by lower order volume, primarily related to checks, forms and accessories, as secular check and forms usage continues to decline.

The operating loss for the third quarter of 2018, as compared to operating income in the third quarter of 2017, was primarily driven by an increase in pre-tax asset impairment charges of \$50.7 million. These charges resulted in a 30.8 point reduction in operating margin for the third quarter of 2018. Further information regarding the asset impairment charges can be found under the caption "Note 7: Fair value measurements" in the Condensed Notes to Unaudited Consolidated Financial Statements appearing in Item 1 of this report. In addition, operating loss increased due to lower order volume for checks, forms and accessories, driven by the continuing secular decline in check and forms usage, and higher average commission, material and delivery rates in 2018. In addition, restructuring charges increased \$2.4 million for the third quarter of 2018, driven by our integration activities. Partially offsetting these increases in operating loss were price increases, benefits of our cost reduction initiatives and lower medical costs. The results of acquired businesses contributed operating income of \$0.9 million for the third quarter of 2018, including acquisition-related amortization, but resulted in a 0.5 point decrease in operating margin.

The decrease in operating income for the first nine months of 2018, as compared to the first nine months of 2017, was primarily driven by an increase in pre-tax asset impairment charges of \$44.6 million. These charges resulted in a 10.5 point reduction in operating margin for the first nine months of 2018. Further information regarding the asset impairment charges can be found under the caption "Note 7: Fair value measurements" in the Condensed Notes to Unaudited Consolidated Financial Statements appearing in Item 1 of this report. In addition, operating income decreased due to lower order volume for checks, forms and accessories, driven by the continuing secular decline in check and forms usage, and higher average commission, material and delivery rates in 2018. Partially offsetting these decreases in operating income were price increases, benefits of our cost reduction initiatives, and lower performance-based compensation and medical costs. In addition, we recognized gains from sales of businesses and customer lists in 2018 of \$12.9 million, compared to gains of \$8.7 million in 2017. Further information regarding these asset sales can be found under the caption "Note 3: Supplemental balance sheet information" in the Condensed Notes to Unaudited Consolidated Financial Statements appearing in Item 1 of this report. The results of acquired businesses contributed operating income of \$3.2 million for the first nine months of 2018, including acquisition-related amortization, but resulted in a 0.5 point decrease in operating margin.

Financial Services

Financial Services' products and services are sold primarily through a direct sales force, which executes product and service supply contracts with our financial institution clients, including banks, credit unions and financial services companies. Results for this segment were as follows:

(in thousands)	Quarter Ended September 30,			Nine Months Ended September 30,		
	2018	2017	Change	2018	2017	Change
Total revenue	\$ 146,771	\$ 157,407	(6.8%)	\$ 426,727	\$ 445,946	(4.3%)
Operating income	17,612	29,198	(39.7%)	49,565	76,052	(34.8%)
Operating margin	12.0%	18.5%	(6.5) pts.	11.6%	17.1%	(5.5) pts.

The decrease in total revenue for the third quarter of 2018, as compared to the third quarter of 2017, was driven by lower check order volume due to the continued secular decline in check usage, as well as an \$8.4 million decrease in data-driven marketing revenue. In addition, revenue was negatively impacted by continued check pricing allowances and Deluxe Rewards revenue decreased \$2.4 million due to the loss of Verizon Communications Inc. as a customer. These decreases in revenue were partially offset by incremental treasury management solutions revenue of approximately \$8.9 million from the acquisition of RemitCo in August 2018. Further information regarding this acquisition can be found under the caption "Note 6: Acquisitions" in the Condensed Notes to Unaudited Consolidated Financial Statements appearing in Item 1 of this report.

The decrease in total revenue for the first nine months of 2018, as compared to the first nine months 2017, was driven by lower check order volume due to the continued secular decline in check usage. In addition, Deluxe Rewards revenue decreased \$10.0 million due to the loss of Verizon Communications Inc. as a customer, and revenue was negatively impacted by continued check pricing allowances. These decreases in revenue were partially offset by incremental treasury management solutions revenue from acquired businesses of approximately \$14.5 million. Information about our acquisitions can be found under the caption "Note 6: Acquisitions" in the Condensed Notes to Unaudited Consolidated Financial Statements appearing in Item 1 of this report and under the caption "Note 5: Acquisitions" in the Notes to Consolidated Financial Statements appearing in the 2017 Form 10-K.

The decrease in operating income for the third quarter of 2018, as compared to the third quarter of 2017, was primarily due to lower check order volume, lower data-driven marketing revenue, continued check pricing allowances, the impact of the decline in Deluxe Rewards revenue, and increased delivery rates in 2018. In addition, we recorded non-cash asset impairment charges of \$1.9 million in 2018 for customer list intangible assets related to 2 small distributors we acquired in 2015 and restructuring charges were \$1.5 million higher than in 2017 driven by our integration initiatives. Further information regarding the asset impairment charges can be found under the caption "Note 7: Fair value measurements" in the Condensed Notes to Unaudited Consolidated Financial Statements appearing in Item 1 of this report. Partially offsetting these decreases in operating income were benefits of our continuing cost reduction initiatives and lower medical costs.

The decrease in operating income for the first nine months of 2018, as compared to the first nine months of 2017, was primarily due to lower check order volume, the impact of the decline in Deluxe Rewards revenue, continued check pricing allowances, and increased material and delivery rates in 2018. In addition, we recorded non-cash asset impairment charges of \$1.9 million in 2018 for customer list intangible assets related to 2 small distributors we acquired in 2015 and restructuring charges were \$2.0 million higher than in 2017 driven by our integration initiatives. Partially offsetting these decreases in operating income were benefits of our continuing cost reduction initiatives, lower legal costs due to legal settlement and expenses of \$2.5 million in 2017, and lower performance-based compensation and medical costs.

Direct Checks

Direct Checks sells products and services directly to consumers using direct marketing, including print advertising and search engine marketing and optimization strategies. Direct Checks sells under various brand names, including Checks Unlimited®, Designer Checks®, Checks.com®, Check Gallery®, The Styles Check Company®, and Artistic Checks®, among others. Results for this segment were as follows:

(in thousands)	Quarter Ended September 30,			Nine Months Ended September 30,		
	2018	2017	Change	2018	2017	Change
Total revenue	\$ 30,820	\$ 33,854	(9.0%)	\$ 96,967	\$ 107,314	(9.6%)
Operating income	10,360	11,261	(8.0%)	31,396	35,450	(11.4%)
Operating margin	33.6%	33.3%	0.3pts.	32.4%	33.0%	(0.6) pts.

The decrease in revenue for the third quarter and first nine months of 2018, as compared to the same periods in 2017, was primarily due to the reduction in orders stemming from the continued secular decline in check usage.

The decrease in operating income for the third quarter and first nine months of 2018, as compared to the same periods in 2017, was due primarily to the lower order volume and increased delivery costs in 2018. These decreases in operating income were partially offset by benefits from our cost reduction initiatives, including lower advertising expense driven by changes in circulation intended to maximize response rates, as well as lower performance-based compensation and medical costs.

CASH FLOWS AND LIQUIDITY

As of September 30, 2018, we held cash and cash equivalents of \$57.9 million. The following table shows our cash flow activity for the nine months ended September 30, 2018 and 2017, and should be read in conjunction with the consolidated statements of cash flows appearing in Item 1 of this report.

(in thousands)	Nine Months Ended September 30,		
	2018	2017	Change
Net cash provided by operating activities	\$ 219,102	\$ 225,896	\$ (6,794)
Net cash used by investing activities	(231,924)	(154,102)	(77,822)
Net cash provided (used) by financing activities	12,621	(97,211)	109,832
Effect of exchange rate change on cash	(1,188)	2,253	(3,441)
Net change in cash and cash equivalents	\$ (1,389)	\$ (23,164)	\$ 21,775

The \$6.8 million decrease in net cash provided by operating activities for the first nine months of 2018, as compared to the first nine months of 2017, was primarily due to the continuing secular decline in check and forms usage, the lower data-driven marketing and Deluxe Rewards revenue in Financial Services, the timing of collections of receivables, and a \$3.5 million increase in interest payments. These decreases in operating cash flow were partially offset by a \$32.0 million reduction in income tax payments.

Included in net cash provided by operating activities were the following operating cash outflows:

(in thousands)	Nine Months Ended September 30,		
	2018	2017	Change
Income tax payments	\$ 80,063	\$ 112,013	\$ (31,950)
Performance-based compensation payments ⁽¹⁾	21,778	20,772	1,006
Prepaid product discount payments	19,125	20,003	(878)
Interest payments	17,919	14,372	3,547
Severance payments	5,327	5,642	(315)

⁽¹⁾ Amounts reflect compensation based on total company performance.

Net cash used by investing activities for the first nine months of 2018 was \$77.8 million higher than the first nine months of 2017, driven primarily by an increase of \$65.0 million in payments for acquisitions. Further information about our acquisitions can be found under the caption “Note 6: Acquisitions” in the Condensed Notes to Unaudited Consolidated Financial Statements appearing in Item 1 of this report. In addition, purchases of capital assets increased \$8.2 million as we continue to invest in key revenue growth initiatives and order fulfillment and information technology infrastructure, and we had proceeds of \$3.5 million in 2017 from the redemption of marketable securities that were acquired as part of the acquisition of RDM Corporation in April 2017.

Net cash used by financing activities for the first nine months of 2018 was \$109.8 million lower than the first nine months of 2017, due primarily to a net increase in borrowings on long-term debt of \$184.0 million. Partially offsetting this decrease in cash used by financing activities was a \$69.9 million increase in share repurchases and a \$3.0 million increase in payments for debt issuance costs related to the revolving credit agreement executed in March 2018.

Significant cash transactions, excluding those related to operating activities, for each period were as follows:

(in thousands)	Nine Months Ended September 30,		
	2018	2017	Change
Payments for acquisitions, net of cash acquired	\$ (190,396)	\$ (125,417)	\$ (64,979)
Payments for common shares repurchased	(120,000)	(50,070)	(69,930)
Cash dividends paid to shareholders	(42,943)	(43,672)	729
Purchases of capital assets	(42,566)	(34,351)	(8,215)
Employee taxes paid for shares withheld	(7,969)	(6,816)	(1,153)
Net change in debt	180,361	(3,590)	183,951
Proceeds from issuing shares under employee plans	7,300	8,218	(918)

We anticipate that net cash provided by operating activities will be between \$350.0 million and \$355.0 million in 2018, compared to \$338.4 million in 2017, driven by lower income tax payments and lower medical costs, partially offset by higher interest payments. We anticipate that net cash provided by operating activities in 2018, along with availability under our revolving credit facility, will be utilized for dividend payments, capital expenditures of approximately \$60.0 million and interest payments, as well as possible acquisitions. We intend to focus our capital spending on key revenue growth initiatives and investments in order fulfillment and information technology infrastructure. As of September 30, 2018, \$50.8 million was available for borrowing under our revolving credit facility and we have the ability to increase our credit facility \$475.0 million. To the extent we generate excess cash, we plan to opportunistically repurchase common shares and/or reduce the amount outstanding under our credit facility.

As of September 30, 2018, our foreign subsidiaries held cash and cash equivalents of \$47.7 million. Deferred income taxes have not been recognized on unremitted earnings of our foreign subsidiaries, as these amounts are intended to be reinvested indefinitely in the operations of those subsidiaries. If we were to repatriate all of our foreign cash and cash equivalents into the United States at one time, we estimate we would incur a withholding tax liability of approximately \$2.0 million.

We believe that cash generated by operating activities, along with availability under our revolving credit facility, will be sufficient to support our operations for the next 12 months, including dividend payments, capital expenditures, interest payments, and periodic share repurchases, as well as possible acquisitions.

CAPITAL RESOURCES

Our total debt was \$890.9 million as of September 30, 2018, an increase of \$181.6 million from December 31, 2017. Further information concerning our outstanding debt can be found under the caption “Note 11: Debt” in the Condensed Notes to Unaudited Consolidated Financial Statements appearing in Item 1 of this report.

Our capital structure for each period was as follows:

(in thousands)	September 30, 2018		December 31, 2017		Change
	Amount	Weighted-average interest rate	Amount	Weighted-average interest rate	
Fixed interest rate	\$ 1,883	2.0%	\$ 1,914	2.0%	\$ (31)
Floating interest rate	889,000	3.2%	707,386	3.0%	181,614
Total debt	890,883	3.2%	709,300	3.0%	181,583
Shareholders' equity	955,295		1,015,013		(59,718)
Total capital	\$ 1,846,178		\$ 1,724,313		\$ 121,865

During the first nine months of 2018, we repurchased a total of 1.9 million shares for \$120.0 million. These share repurchases were completed under an authorization from our board of directors in May 2016 for the repurchase of up to \$300.0 million of our common stock. In October 2018, our board of directors increased our share repurchase authorization to \$500.0 million, inclusive of the remaining amount outstanding under the prior authorization. The authorization has no expiration date. Information regarding changes in shareholders' equity can be found in the consolidated statement of shareholders' equity appearing in Item 1 of this report.

In March 2018, we entered into a new revolving credit facility in the amount of \$950.0 million, subject to increase under the credit agreement to an aggregate amount not exceeding \$1,425.0 million. The credit facility matures in March 2023. Our previous credit facility agreement was terminated contemporaneously with our entry into the new credit facility and was repaid utilizing proceeds from the new revolving credit facility. Our quarterly commitment fee ranges from 0.175% to 0.35% based on our leverage ratio. Our previous credit facility agreement also included a term loan facility. As of December 31, 2017, \$294.9 million was outstanding under the term loan facility. This amount was repaid in March 2018, utilizing proceeds from the new revolving credit facility.

Borrowings under our credit agreement are collateralized by substantially all of our personal and intangible property. The credit agreement governing the credit facility contains customary covenants regarding limits on levels of subsidiary indebtedness and capital expenditures, liens, investments, acquisitions, certain mergers, certain asset sales outside the ordinary course of business, and change in control as defined in the agreement. The agreement also requires us to maintain certain financial ratios, including a maximum leverage ratio of 3.5 and a minimum ratio of consolidated earnings before interest and taxes to consolidated interest expense, as defined in the credit agreement, of 3.0. We were in compliance with all debt covenants as of September 30, 2018, and we expect to remain in compliance with all debt covenants throughout the next 12 months.

As of September 30, 2018, amounts were available for borrowing under our revolving credit facility as follows:

(in thousands)	Total available
Revolving credit facility commitment	\$ 950,000
Amount drawn on revolving credit facility	(889,000)
Outstanding letters of credit ⁽¹⁾	(10,221)
Net available for borrowing as of September 30, 2018	\$ 50,779

⁽¹⁾ We use standby letters of credit to collateralize certain obligations related primarily to our self-insured workers' compensation claims, as well as claims for environmental matters, as required by certain states. These letters of credit reduce the amount available for borrowing under our revolving credit facility.

OTHER FINANCIAL POSITION INFORMATION

Information concerning items comprising selected captions on our consolidated balance sheets can be found under the caption "Note 3: Supplemental balance sheet information" in the Condensed Notes to Unaudited Consolidated Financial Statements appearing in Item 1 of this report.

Acquisitions – The impact of acquisitions on our consolidated balance sheet as of September 30, 2018 can be found under the caption “Note 6: Acquisitions” in the Condensed Notes to Unaudited Consolidated Financial Statements appearing in Item 1 of this report.

Prepaid product discounts – Other non-current assets include prepaid product discounts of our Financial Services segment. These costs are recorded as non-current assets upon contract execution and are amortized, generally on the straight-line basis, as reductions of revenue over the related contract term. Changes in prepaid product discounts during the nine months ended September 30, 2018 and 2017 can be found under the caption “Note 3: Supplemental balance sheet information” in the Condensed Notes to Unaudited Consolidated Financial Statements appearing in Item 1 of this report. Cash payments for prepaid product discounts were \$19.1 million for the first nine months of 2018 and \$20.0 million for the first nine months of 2017. We anticipate cash payments of approximately \$25.0 million for the year ending December 31, 2018.

The number of checks being written has been declining, which has contributed to increased competitive pressure when attempting to retain or acquire clients. Both the number of financial institution clients requesting prepaid product discount payments and the amount of the payments has fluctuated from year to year. Although we anticipate that we will selectively continue to make these payments, we cannot quantify future amounts with certainty. The amount paid depends on numerous factors, such as the number and timing of contract executions and renewals, competitors’ actions, overall product discount levels and the structure of up-front product discount payments versus providing higher discount levels throughout the term of the contract.

Liabilities for prepaid product discounts are recorded upon contract execution. These obligations are monitored for each contract and are adjusted as payments are made. Prepaid product discount payments due within the next year are included in accrued liabilities in our consolidated balance sheets. These accruals were \$10.6 million as of September 30, 2018 and \$11.7 million as of December 31, 2017. Accruals for prepaid product discount payments included in other non-current liabilities in our consolidated balance sheets were \$15.2 million as of September 30, 2018 and \$21.7 million as of December 31, 2017.

OFF-BALANCE SHEET ARRANGEMENTS, GUARANTEES AND CONTRACTUAL OBLIGATIONS

It is not our general business practice to enter into off-balance sheet arrangements or to guarantee the performance of third parties. In the normal course of business, we periodically enter into agreements that incorporate general indemnification language. These indemnification provisions generally encompass third-party claims arising from our products and services, including, without limitation, service failures, breach of security, intellectual property rights, governmental regulations and/or employment-related matters. Performance under these indemnities would generally be triggered by our breach of terms of the contract. In disposing of assets or businesses, we often provide representations, warranties and/or indemnities to cover various risks, including, for example, unknown damage to the assets, environmental risks involved in the sale of real estate, liability to investigate and remediate environmental contamination at waste disposal sites and manufacturing facilities, and unidentified tax liabilities and legal matters related to periods prior to disposition. We do not have the ability to estimate the potential liability from such indemnities because they relate to unknown conditions. However, we do not believe that any liability under these indemnities would have a material adverse effect on our financial position, annual results of operations or annual cash flows. We have recorded liabilities for known indemnifications related to environmental matters. Further information regarding our environmental liabilities, as well as liabilities related to self-insurance and litigation, can be found under the caption “Note 12: Other commitments and contingencies” in the Condensed Notes to Unaudited Consolidated Financial Statements appearing in the Item 1 of this report.

We are not engaged in any transactions, arrangements or other relationships with unconsolidated entities or other third parties that are reasonably likely to have a material effect on our liquidity or on our access to, or requirements for, capital resources. In addition, we have not established any special purpose entities nor did we enter into any material related party transactions during the first nine months of 2018 or during 2017.

A table of our contractual obligations was provided in the MD&A section of the 2017 Form 10-K. There were no significant changes in these obligations during the first nine months of 2018, with the exception of the execution of our new revolving credit facility. Previously, amounts outstanding under our credit facility were scheduled to mature in February 2019. Under the new agreement, amounts outstanding are scheduled to mature in March 2023. As of September 30, 2018, \$889.0 million was outstanding under our credit facility.

CRITICAL ACCOUNTING POLICIES

A description of our critical accounting policies was provided in the MD&A section of the 2017 Form 10-K. There were no changes in these policies during the first nine months of 2018, except for revenue recognition.

Revenue recognition – As discussed under the caption “Note 2: New accounting pronouncements” in the Condensed Notes to Unaudited Consolidated Financial Statements appearing in Item 1 of this report, effective January 1, 2018, we implemented ASU No. 2014-09, *Revenue from Contracts with Customers*, and related amendments. Under the new guidance, our product revenue is recognized when control of the goods is transferred to our customers, in an amount that reflects the consideration we expect to be entitled to in exchange for those goods. In most cases, control is transferred when products are shipped. We recognize the vast majority of our service revenue as the services are provided. Many of our financial institution contracts require prepaid product discounts in the form of cash payments we make to our financial institution clients. These prepaid product discounts are included in other non-current assets in our consolidated balance sheets and are amortized as reductions of revenue, generally on the straight-line basis, over the contract term. Sales tax collected concurrent with revenue-producing activities is excluded from revenue. Amounts billed to customers for shipping and handling are included in revenue, while the related costs incurred for shipping and handling are reflected in cost of products and are accrued when the related revenue is recognized. As part of our Financial Services rewards, incentive and loyalty programs, we receive payments from consumers or our clients for the products and services provided, including hotel stays, gift cards and merchandise such as apparel, electronics and clothing. This revenue is recorded net of the related fulfillment costs.

When a customer pays in advance for services, primarily for treasury management solutions and web hosting services, we defer the revenue and recognize it as the services are performed, generally over a period of less than 1 year. Certain of our contracts for data-driven marketing solutions and treasury management outsourcing services within Financial Services have variable consideration that is contingent on either the success of the marketing campaign (“pay-for-performance”) or the volume of outsourcing services provided. We recognize revenue for estimated variable consideration as services are provided based on the the most likely amount to be realized. Revenue is recognized to the extent that it is probable that a significant reversal of revenue will not occur when the contingency is resolved. Typically, the amount of consideration for these contracts is finalized within 3 months, although pricing under certain of our outsourcing contracts may be based on annual volume commitments. Revenue recognized from these contracts was approximately \$100.0 million in 2017.

Certain of our contracts for treasury management solutions result from the sale of bundled arrangements that may include hardware, software and professional services, as well as customization and modification of software. Revenue for these contracts is recognized using a cost-based input method that depicts the transfer of services to the customer. The transaction price is allocated to each performance obligation based on its relative standalone selling price. We generally determine standalone selling prices based on the prices charged to customers or using expected cost plus margin.

At times, a financial institution client may terminate its check supply contract with us prior to the end of the contract term. In many cases, the financial institution is contractually required to remit a contract termination payment. Such payments are recorded as revenue when the termination agreement is executed, provided that we have no further performance obligations and collection of the funds is assured. If we have further performance obligations following the execution of a contract termination agreement, we record the related revenue over the remaining service period.

Certain costs incurred to obtain contracts are required to be recognized as assets and amortized consistent with the transfer of goods or services to the customer. As such, we defer sales commissions related to obtaining check supply and treasury management solution contracts within Financial Services. These amounts are included in other non-current assets and are amortized as SG&A expense. Amortization of these amounts on the straight-line basis approximates the timing of the transfer of goods or services to the customer. Generally, these amounts are being amortized over periods of 3 to 6 years. We expense sales commissions as incurred when the amortization period would have been 1 year or less.

Accounting for customer contracts can be complex and may involve the use of various techniques to estimate total contract revenue and to allocate the transaction price to each performance obligation. Estimates related to variable consideration are based on various assumptions to project the outcome of future events. We review and update our contract-related estimates regularly, and we do not anticipate that revisions to our estimates would have a material effect on our results of operations, financial position or cash flows.

Annual impairment analysis of goodwill and indefinite-lived trade name – Our policy on impairment of indefinite-lived intangibles and goodwill, which is included under the caption "Note 1: Significant accounting policies" in the Notes to Consolidated Financial Statements appearing in the 2017 Form 10-K, explains our methodology for assessing impairment of these assets.

During the third quarter of 2018, we completed the annual impairment analysis of goodwill and our indefinite-lived trade name. We elected to perform a qualitative assessment for 5 of our reporting units and a quantitative assessment for 2 of our reporting units: Small Business Services Web Services and Small Business Services Indirect. Small Business Services Web Services includes our businesses that provide hosting and domain name services, logo and web design, search engine marketing and optimization, and payroll services. Small Business Services Indirect consists primarily of our Safeguard distributor channel, former Safeguard distributors that we have purchased, and our independent dealer channel.

The qualitative analyses evaluated factors including, but not limited to, economic, market and industry conditions, cost factors and the overall financial performance of the reporting units. We also considered the quantitative analyses completed as of July 31, 2017, which indicated that the estimated fair values of these reporting units exceeded their carrying values by approximate amounts between \$64.0 million and \$1.4 billion, or by amounts between 50% and 314% above the carrying values of their net assets. In completing these assessments, we noted no changes in events or circumstances that indicated that it was more likely than not that the fair value of any reporting unit was less than its carrying amount.

The quantitative analysis as of July 31, 2018 for the Small Business Services Web Services reporting unit indicated that the estimated fair value of the reporting unit exceeded its carrying value by approximately \$63.0 million, or 22%. The carrying value of this reporting unit's goodwill was \$225.4 million as of July 31, 2018. A large portion of this reporting unit consists of businesses that were acquired in 2018 and 2017, and growing web services is a focus of our growth strategy. However, if our acquisitions fail to achieve expected operating results or if we were to change our business strategies, this could result in a decline in the fair value of this reporting unit. This impairment assessment is sensitive to changes in forecasted cash flows, as well as our assumed terminal growth rate of 3.0% and our selected discount rate of 9.8%. Holding all other assumptions constant, achieving less than 85% of our expected revenue growth in each year for 2019 through 2027 would result in an indication of impairment. Additionally, a decrease in the terminal growth rate to 0.5% or an increase in the discount rate of 1.5 points or more would result in an indication of impairment.

The quantitative analysis of the Small Business Services Indirect reporting unit indicated that the reporting unit's goodwill was fully impaired and resulted in a pre-tax goodwill impairment charge of \$78.2 million during the quarter ended September 30, 2018. The impairment charge was measured as the amount by which the reporting unit's carrying value exceeded its estimated fair value, limited to the carrying amount of goodwill. The analysis of this reporting unit, which incorporated the results of the annual strategic planning process completed during the third quarter of 2018, indicated lowered projected long-term revenue growth and profitability levels resulting from changes in strategy and focus and in the mix of products and services sold, including the continuing decline in check and forms usage. Additionally, our strategic plan reflected a shift in company resources to our growing businesses.

Our indefinite-lived Safeguard trade name is included in the Small Business Services Indirect reporting unit. As of July 31, 2018, we completed a quantitative analysis of this asset that indicated the asset was fully impaired, resulting in a pre-tax asset impairment charge of \$19.1 million. This impairment charge was driven by the same factors that resulted in the goodwill impairment charge, which indicated that any royalties attributable to the asset under our relief from royalty calculation had no future value.

New accounting pronouncements – Information regarding accounting pronouncements adopted during the first nine months of 2018 and those not yet adopted can be found under the caption "Note 2: New accounting pronouncements" in the Condensed Notes to Unaudited Consolidated Financial Statements appearing in Item 1 of this report.

Item 3. Quantitative and Qualitative Disclosures About Market Risk.

We are exposed to changes in interest rates primarily as a result of the borrowing activities used to support our capital structure, maintain liquidity and fund business operations. We do not enter into financial instruments for speculative or trading purposes. The nature and amount of debt outstanding can be expected to vary as a result of future business requirements, market conditions and other factors. As of September 30, 2018, our total debt was comprised of the following:

(in thousands)	Carrying amount	Fair value ⁽¹⁾	Weighted-average interest rate
Amount drawn on revolving credit facility	\$ 889,000	\$ 889,000	3.2%
Capital lease obligations	1,883	1,883	2.0%
Total debt	<u>\$ 890,883</u>	<u>\$ 890,883</u>	3.2%

⁽¹⁾The carrying amount reported in the consolidated balance sheets for amounts drawn under our revolving credit facility approximates fair value because our interest rates are variable and reflect current market rates. Capital lease obligations are presented at their carrying amount.

Amounts drawn on our revolving credit facility mature in March 2023. During the first quarter of 2018, we executed a new revolving credit facility. Further information regarding the credit facility can be found under the caption "Note 11: Debt" in the Condensed Notes to Unaudited Consolidated Financial Statements appearing in Item 1 of this report. Our capital lease obligations are due through June 2022.

Based on the daily average amount of outstanding variable rate debt in our portfolio, a one percentage point change in our weighted-average interest rates would have resulted in a \$5.7 million change in interest expense for the first nine months of 2018.

We are exposed to changes in foreign currency exchange rates. Investments in, loans and advances to foreign subsidiaries and branches, as well as the operations of these businesses, are denominated in foreign currencies, primarily Canadian and Australian dollars. The effect of exchange rate changes is not expected to have a significant impact on our earnings and cash flows, as our foreign operations represent a relatively small portion of our business. We have not entered into hedges against changes in foreign currency exchange rates.

Item 4. Controls and Procedures.

(a) *Disclosure Controls and Procedures* – As of the end of the period covered by this report, September 30, 2018 (the "Evaluation Date"), we carried out an evaluation, under the supervision and with the participation of management, including the Chief Executive Officer and the Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Rule 13a-15(e) of the Securities Exchange Act of 1934, as amended (the "Exchange Act")). Based upon that evaluation, the Chief Executive Officer and the Chief Financial Officer concluded that, as of the Evaluation Date, our disclosure controls and procedures were effective to ensure that information required to be disclosed in the reports that we file or submit under the Exchange Act is (i) recorded, processed, summarized and reported within the time periods specified in applicable rules and forms, and (ii) accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, to allow timely decisions regarding required disclosure.

(b) *Internal Control Over Financial Reporting* – There were no changes in our internal control over financial reporting identified in connection with our evaluation during the quarter ended September 30, 2018 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II – OTHER INFORMATION

Item 1. Legal Proceedings.

We record accruals with respect to identified claims or lawsuits when it is probable that a liability has been incurred and the amount of the loss can be reasonably estimated. Claims and lawsuits are reviewed quarterly and provisions are taken or adjusted to reflect the status of a particular matter. We believe the recorded reserves in our consolidated financial statements are adequate in light of the probable and estimable outcomes. Recorded liabilities were not material to our financial position,

results of operations or liquidity, and we do not believe that any of the currently identified claims or litigation will materially affect our financial position, results of operations or liquidity upon resolution. However, litigation is subject to inherent uncertainties, and unfavorable rulings could occur. If an unfavorable ruling were to occur, it may cause a material adverse impact on our financial position, results of operations or liquidity in the period in which the ruling occurs or in future periods.

Item 1A. Risk Factors.

Our risk factors are outlined in Item 1A of the 2017 Form 10-K. There have been no significant changes to these risk factors since we filed the 2017 Form 10-K, except with regard to our credit facility. In March 2018, we executed a new credit facility that matures in March 2023. Our previous credit facility, which was terminated contemporaneously with our entry into the new credit facility, would have matured in February 2019.

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

The following table shows purchases of our own equity securities, based on trade date, that were completed during the third quarter of 2018:

Period	Total number of shares purchased	Average price paid per share	Total number of shares purchased as part of publicly announced plans or programs	Maximum approximate dollar value of shares that may yet be purchased under the plans or programs
July 1, 2018 – July 31, 2018	76,160	\$ 59.09	76,160	\$ 194,730,979
August 1, 2018 – August 31, 2018	1,269,597	59.47	1,269,597	119,226,519
September 1, 2018 – September 30, 2018	—	—	—	119,226,519
Total	<u>1,345,757</u>	59.45	<u>1,345,757</u>	119,226,519

In May 2016, our board of directors approved an authorization for the repurchase of up to \$300.0 million of our common stock. As of September 30, 2018, \$119.2 million remained available for purchase under this authorization. In October 2018, our board of directors increased our share repurchase authorization to \$500.0 million, inclusive of the remaining amount outstanding under the prior authorization. The authorization has no expiration date.

While not considered repurchases of shares, we do at times withhold shares that would otherwise be issued under equity-based awards to cover the withholding taxes due as a result of the exercising or vesting of such awards. During the quarter ended September 30, 2018, we withheld 370 shares in conjunction with the vesting and exercise of equity-based awards.

Item 3. Defaults Upon Senior Securities.

None.

Item 4. Mine Safety Disclosures.

Not applicable.

Item 5. Other Information.

At a meeting of our board of directors held on October 23, 2018, the board approved and adopted, effective as of such date, the amendment and restatement of our Bylaws. The amendments to the Bylaws reflect certain modernizing updates, and they include prior amendments to the Minnesota Business Corporation Act.

The amendments include the following: (i) extend the deadline for shareholders to provide notice of proposals and nominations to 90 calendar days (instead of 120 calendar days) prior to the first anniversary of the preceding year's annual meeting, (ii) eliminate a parenthetical implying that shareholders could nominate directors for inclusion in our proxy statement, (iii) require information about shares beneficially owned by any shareholder proponent, (iv) provide flexibility to permit virtual (online) attendance at a shareholder meeting, (v) clarify that any Chairman of the Board is not necessarily an officer, (vi) provide that our chief executive officer can remove and appoint corporate officers, other than executive officers, and (vii) clarify that certain communications can be provided electronically. The amendments also incorporate certain other non-substantive updates and clarifications. As a result of the amendments, the revised deadline by which a shareholder must provide proper written notice to our Corporate Secretary of a proposal or nominee to be presented at the 2019 annual meeting of shareholders (other than a proposal proposed for inclusion in our proxy statement) is no later than February 1, 2019. The notice must contain the information required by the Bylaws.

The foregoing description of the amended and restated Bylaws does not purport to be complete and is qualified in its entirety by reference to the full text of the amended and restated Bylaws, attached to this Quarterly Report on Form 10-Q as Exhibit 3.2.

Item 6. Exhibits.

Exhibit Number	Description	Method of Filing
3.1	<u>Amended and Restated Articles of Incorporation (incorporated by reference to Exhibit 3.1 to the Quarterly Report on Form 10-Q for the quarter ended September 30, 2010).</u>	*
3.2	<u>Bylaws, as amended and restated on October 23, 2018</u>	Filed herewith
4.1	<u>Indenture, dated as of April 30, 2003, by and between us and Wells Fargo Bank Minnesota, N.A., as trustee (incorporated by reference to Exhibit 4.8 to the Registration Statement on Form S-3 (Registration No. 333-104858) filed with the Commission on April 30, 2003).</u>	*
31.1	<u>CEO Certification of Periodic Report pursuant to Section 302 of the Sarbanes-Oxley Act of 2002</u>	Filed herewith
31.2	<u>CFO Certification of Periodic Report pursuant to Section 302 of the Sarbanes-Oxley Act of 2002</u>	Filed herewith
32.1	<u>CEO and CFO Certification of Periodic Report pursuant to Section 906 of the Sarbanes-Oxley Act of 2002</u>	Furnished herewith
101	Interactive data files pursuant to Rule 405 of Regulation S-T: (i) Consolidated Balance Sheets as of September 30, 2018 and December 31, 2017, (ii) Consolidated Statements of Comprehensive (Loss) Income for the quarters and nine months ended September 30, 2018 and 2017, (iii) Consolidated Statement of Shareholders' Equity for the nine months ended September 30, 2018, (iv) Consolidated Statements of Cash Flows for the nine months ended September 30, 2018 and 2017, and (v) Condensed Notes to Unaudited Consolidated Financial Statements	Filed herewith

* Incorporated by reference

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.

DELUXE CORPORATION
(Registrant)

Date: October 26, 2018

/s/ Lee Schram

Lee Schram
Chief Executive Officer
(Principal Executive Officer)

Date: October 26, 2018

/s/ Keith A. Bush

Keith A. Bush
Senior Vice President, Chief Financial Officer
(Principal Financial Officer and Principal Accounting Officer)

**BYLAWS
OF
DELUXE CORPORATION
(as amended October 23, 2018)**

**ARTICLE I
Offices, Corporate Seal**

Section 1. Registered Office. The registered office of Deluxe Corporation (the “corporation”) in the State of Minnesota shall be as set forth in the corporation’s Articles of Incorporation as amended from time to time (the “articles of incorporation”) or the most recent resolution of the Corporation’s Board of Directors (the “board of directors”) filed with the secretary of state of Minnesota changing the registered office.

Section 2. Seal. The corporation shall not have a corporate seal.

**ARTICLE II
Meetings of Shareholders**

Section 1. Annual Meetings of Shareholders.

(a) Annual meetings of the corporation’s shareholders shall be held on such date and at such time and place as the board of directors shall designate.

(b) At an annual meeting of shareholders, the corporation’s shareholders, voting as provided in the articles of incorporation and these bylaws, shall elect a board of directors and shall transact such other business as may properly come before them.

(c) At any annual meeting of shareholders, a person may be a candidate for election to the board of directors only if such person is nominated (i) by the board of directors, (ii) by any nominating committee or person appointed by the board of directors and authorized to make nominations for election to the board of directors, or (iii) by a shareholder at the time of giving the notice required by this paragraph, who is a shareholder at the time of the meeting and who complies with the procedures set forth in this paragraph. To properly nominate a candidate, a shareholder shall give written notice of such nomination to the corporation’s secretary not later than the date that is at least 90 calendar days prior to the first anniversary of the preceding year’s annual meeting of shareholders (the “Notice Date”), shall attend the meeting with the candidate whom the shareholder wishes to nominate, and shall propose the candidate’s nomination for election to the board of directors at the meeting. The notice by a shareholder shall set forth as to each person whom the shareholder recommends for nomination (v) the name, age, business address and residence address of the person; (w) the principal occupation or employment of the person; (x) the number of shares of stock of the corporation beneficially owned by the person; (y) the written and acknowledged statement of the person that such person is willing to serve as a director of the corporation; and (z) any other information relating to the person that would be required to be disclosed in a solicitation of proxies for election of directors pursuant to Regulation 14A (as amended from time to time) under the Securities Exchange Act of 1934, as amended (the “Exchange Act”), had the election of the person been solicited by or behalf of the

board of directors. In no event shall any adjournment or postponement of an annual meeting or the announcement thereof commence a new time period for the giving of a shareholder's notice as described above. The notice by a shareholder shall further set forth the information required by Article II, Section 1(e) of these bylaws.

(d) To be properly brought before an annual meeting of shareholders, business, other than the election of directors, must be either (i) directed to be brought before the meeting by the board of directors or (ii) proposed to be considered at the meeting by a shareholder by giving written notice of the proposal containing the information required by Article II, Section 1(e) of these bylaws to the corporation's secretary not later than the Notice Date and shall be presented at the meeting by the proposing shareholder.

(e) A shareholder's notice to the corporation's secretary shall set forth as to each matter, including director nominees, the shareholder proposes to bring before the annual meeting (such shareholder, including any beneficial owner on whose behalf the shareholder is acting, being hereinafter referred to as the "Proponent"): (i) a brief description of the business desired to be brought before the annual meeting by the Proponent and the reasons for conducting such business at the annual meeting, (ii) the name and address of the Proponent, (iii) the class and number of shares of the corporation that are owned by the Proponent (beneficially and of record), as of the date of the Proponent's notice, and a representation that the Proponent will notify the corporation in writing of the class and number of such shares owned of record and beneficially as of the record date for the meeting promptly following the later of the record date or the date notice of the record date is first publicly disclosed, (iv) any material interest of the Proponent in such business, (v) a description of any agreement, arrangement or understanding with respect to such business between or among the Proponent and any of its affiliates or associates, and any others, including their names, acting in concert with any of the foregoing, and a representation that the Proponent will notify the corporation in writing of any such agreement, arrangement or understanding in effect as of the record date for the meeting promptly following the later of the record date or the date notice of the record date is first publicly disclosed, (vi) a description of any agreement, arrangement or understanding, including any derivative or short positions, profit interests, options, hedging transactions, and borrowed or loaned shares, that has been entered into as of the date of the Proponent's notice by, or on behalf of, the Proponent or any of its affiliates or associates, the effect or intent of which is to mitigate loss to, manage risk or benefit of share price changes for, or increase or decrease the voting power of the Proponent or any of its affiliates or associates, or others, with respect to shares of stock of the corporation, and a representation that the Proponent will notify the corporation in writing of any such agreement, arrangement or understanding in effect as of the record date for the meeting promptly following the later of the record date or the date notice of the record date is first publicly disclosed, (vii) a representation that the Proponent is a holder of record or beneficial owner of shares of the corporation entitled to vote at the annual meeting and intends to appear in person or by proxy at the meeting to propose such business, and (viii) a representation whether the Proponent intends to deliver a proxy statement and/or form of proxy to holders of at least the percentage of the corporation's outstanding shares required to approve the proposal and/or otherwise to solicit proxies from shareholders in support of the proposal.

(f) The proxies solicited by the corporation's board of directors may confer discretionary authority upon the persons named therein to vote on any matter submitted for consideration at any annual meeting of shareholders if the corporation does not receive proper notice of such matter on or before the Notice Date, or as otherwise permitted by applicable laws,

rules and regulations, including, without limitation, the Exchange Act and rules and regulations promulgated thereunder.

(g) No business shall be conducted at an annual meeting of shareholders of the corporation except business brought before the meeting in accordance with the procedures set forth in this Section; provided, however, that once business has been properly brought before the meeting in accordance with such procedures, nothing in this Section shall be deemed to preclude discussion by any shareholder of any such business. If the introduction of any business at an annual meeting of shareholders does not comply with the procedures specified in this Section, or as otherwise required by applicable law, rule or regulation, the chair of the meeting shall declare that such business is not properly before the meeting and shall not be considered at the meeting.

(h) This Section does not apply to shareholder proposals made pursuant to Rule 14a-8 promulgated under the Exchange Act.

Section 2. Place of Meetings. The board of directors may determine that shareholders not physically present in person or by proxy at a shareholder meeting may, by means of remote communication, participate in a shareholder meeting held at a designated place. The board of directors also may determine that a meeting of the shareholders shall not be held at a physical place, but instead solely by means of remote communication. Participation by remote communication constitutes presence at the meeting.

Section 3. Quorum at Annual Meetings of Shareholders. The holders of a majority of shares outstanding and entitled to vote for the election of directors at an annual meeting of shareholders, represented either in person or by proxy, shall constitute a quorum for the transaction of business.

Section 4. Special Meetings of Shareholders. Special meetings of the shareholders of the corporation may be called and held as provided in the Minnesota Business Corporation Act (as amended from time to time, the “MBCA”). The business to be transacted at a special meeting is limited to the purposes stated in the notice of the meeting. If a special meeting of shareholders is called for the purpose of electing one or more directors, any shareholder proposing to nominate one or more candidates for election to the board of directors must furnish, not less than 90 days before the meeting (or, if later, within 10 days after the first public announcement of the date of the meeting), appropriate notice of any such nominations to the corporation’s secretary setting forth the information specified in Article II, Section 1(c) of these bylaws, and shall otherwise comply with applicable laws, rules and regulations.

Section 5. Adjourned Meetings. Regardless of whether a quorum shall be present at a meeting of the shareholders of the corporation, the meeting may be adjourned from time to time for up to 120 days after the date fixed for the original meeting without notice other than announcement at the time of adjournment of the date, time and place of the adjourned meeting.

Section 6. Voting. At each meeting of the shareholders of the corporation, every shareholder having the right to vote shall be entitled to vote either in person or by proxy. Unless otherwise provided by the MBCA or the articles of incorporation, each shareholder shall have one vote for each share having voting power registered in such shareholder’s name on the books of the corporation as of the record date. Jointly owned shares may be voted by any joint owner unless the corporation receives written notice from any one of them denying the authority of that person to vote such shares. Except as otherwise required by the MBCA, the articles of incorporation or these bylaws, all questions properly before a meeting of shareholders shall be decided by a vote of the number of the greater of (i) a majority of the shares entitled to vote on the question and represented at the meeting at the time of the vote, or (ii) a majority of the

minimum number of shares entitled to vote that would constitute a quorum for the transaction of business at the meeting.

Section 7. Record Date. The board of directors may fix a date, not less than 20 days nor more than 60 days preceding the date of any meeting of the shareholders of the corporation, as a record date for the determination of the shareholders entitled to notice of, and to vote at, such meeting, notwithstanding any transfer of shares on the books of the corporation after any record date so fixed. If the board of directors fails to fix a record date for determination of the shareholders entitled to notice of, and to vote at, any meeting of shareholders, the record date shall be the 30th day preceding the date of such meeting. Unless the board of directors sets another time on the record date for the determination of the shareholders of record, such determination shall be made as of the close of business on the record date.

Section 8. Notice. There shall be mailed to each shareholder, shown on the books of the corporation to be a holder of record of voting shares, at his or her address as shown on the books of the corporation, a notice setting out the date, time and place of each annual and special meeting. Notice to a shareholder is also effectively given if the notice is addressed to the shareholder or a group of shareholders in a manner permitted by the rules and regulations promulgated under the Exchange Act. Notice of each meeting of the shareholders of the corporation shall be mailed at least seven days and not more than 60 days prior thereto except as otherwise provided by the MBCA. Every notice of any special meeting of the shareholders of the corporation called pursuant to Article II, Section 3 hereof shall state the purpose or purposes for which the meeting has been called and shall otherwise conform to the requirements of the MBCA.

Section 9. Waiver of Notice. Notice of any annual or special meeting of the shareholders of the corporation may be waived by any shareholder either before, at or after such meeting orally or in a writing signed or consented to by authenticated electronic communication by such shareholder or a representative entitled to vote the shares of such shareholder. A shareholder, by attending any meeting of shareholders, shall be deemed to have waived notice of such meeting, except where the shareholder objects at the beginning of the meeting to the transaction of business because the meeting is not lawfully called or convened, or objects before a vote on an item of business because the item may not lawfully be considered at that meeting and does not participate in the consideration of the item at that meeting.

Section 10. Conduct of Meeting. The chairman of the board of directors, or if there shall be none or in his or her absence, the vice-chairman of the board of directors, or if there be none or in his or her absence, the person designated by the board of directors, shall call to order and act as the chair of any meeting of the shareholders of the corporation. The secretary of the corporation shall serve as the secretary of the meeting or, if there shall be none or in his or her absence, the secretary of the meeting shall be such person as the chair of the meeting appoints. The chair of the meeting shall have the right and authority to prescribe such rules, regulations and procedures and to take or refrain from taking such actions as, in the judgment of the chair of the meeting, are appropriate for the conduct of the meeting. To the extent not prohibited by the MBCA, such rules, regulations and procedures may include, without limitation, establishment of (i) an agenda or order of business for the meeting, (ii) the method by which business may be proposed and procedures for determining whether business has been properly (or not properly) introduced before the meeting, (iii) procedures for casting and the form of ballots to be used by shareholders in attendance at the meeting and the procedures to be followed for counting shareholder votes, (iv) rules, regulations and procedures for maintaining order at the meeting and the safety of those present, (v) limitations on attendance at or participation in the meeting to shareholders of record of the corporation, their duly authorized proxies or such other persons as the chair of the meeting shall determine, (vi) restrictions on entry to the meeting after the time fixed for commencement thereof and (vii) limitations on the time allotted to questions or comments by participants. Any proposed business

properly before the meeting shall be deemed to be on the agenda. Unless and to the extent otherwise determined by the chair of the meeting, it shall not be necessary to follow Robert's Rules of Order or any other rules of parliamentary procedure at the meeting of shareholders. The chair of the meeting shall have the exclusive authority to adjourn the meeting.

ARTICLE III Directors

Section 1. Responsibilities and Term. The business and affairs of the corporation shall be managed by or under the direction of the board of directors. The number of directors shall be determined in accordance with the articles of incorporation. The term of each director shall continue until the next succeeding annual meeting of the shareholders of the corporation, and until his or her successor is elected and qualified.

Section 2. Quorum and Vacancies. A majority of the board of directors shall constitute a quorum for the transaction of business, provided, that if any vacancies exist by reason of death, resignation, or otherwise, a majority of the remaining directors shall constitute a quorum for the filling of such vacancies.

Section 3. Voting. Except where otherwise required by the MBCA, the articles of incorporation or these bylaws, the board of directors shall take action by affirmative vote of the greater of (i) a majority of the directors present at a duly held meeting at the time the action is taken or (ii) a majority of the minimum number of directors that would constitute a quorum for the transaction of business at the meeting of directors.

Section 4. Meetings of the Board of Directors. Meetings of the board of directors may be held from time to time within or without the state of Minnesota.

Section 5. Notice. Meetings of the board of directors shall be held on such dates and at such times and places as the board of directors may establish and may be called by the chairman or vice-chairman of the board of directors or the chief executive officer by giving at least twenty-four hours' notice of the meeting, if the meeting is to be held at the registered office of the corporation or by telephone conference or other remote communication conducted as permitted by the MBCA or at least five days' notice if the meeting is to be held elsewhere, or by any other director by giving at least five days' notice of the meeting. Notice of each meeting shall specify the date, time and place thereof and shall be given to each director by mail, telephone, electronic mail or other form of electronic communication, facsimile message or in person. Notice shall not be required if the date, time and place of a meeting of the board of directors has been set by resolution of the board of directors or otherwise announced at a previous meeting of the board of directors or if the meeting is an adjourned meeting of the board of directors if the date, time and place of the adjourned meeting was announced at the meeting at which adjournment is taken.

Section 6. Waiver of Notice. Notice of any meeting of the board of directors may be waived by any director either before, at, or after such meeting orally or in a writing signed or consented to by authenticated electronic communication by such director. A director, by attending any meeting of the board of directors, shall be deemed to have waived notice of such meeting, except where the director objects at the beginning of the meeting to the transaction of business because the meeting is not lawfully called or convened and does not participate thereafter in the meeting.

Section 7. Written Consent or Opposition. A director may give advance written consent or opposition to a proposal to be acted on at a meeting of the board of directors. If such director is not present at the meeting, such written consent or opposition to a proposal does not constitute presence for purposes of determining the existence of a quorum, but such written consent or opposition shall be counted as a vote in favor of or against the proposal and shall be entered in the minutes or other record of action at the meeting, if the proposal acted on at the meeting is substantially the same or has substantially the same effect as the proposal to which the director has consented or objected.

Section 8. Compensation. Directors who are not employees of the corporation shall receive such compensation as shall be set from time to time by the board of directors or a designated committee thereof. The board or designated committee shall also determine whether directors shall receive their expenses, if any, of attendance at meetings of the board of directors or any committee thereof and procedures for the reimbursement of such expenses. Nothing herein contained shall be construed to preclude any director from serving the corporation in any other capacity and receiving proper compensation therefor.

Section 9. Stock Ownership. Directors shall be shareholders of the corporation.

Section 10. Executive Committee. The board of directors may, by unanimous affirmative action of all of the directors, designate two or more of their number to constitute an executive committee, which, to the extent determined by unanimous affirmative action of all of the directors, shall have and exercise the authority of the board of directors in the management of the business of the corporation subject to such limitations and procedures as may be established by the board of directors in connection with any such action; provided, however, that the board of directors shall not delegate to such committee any power to amend the bylaws, declare dividends, fill vacancies on the board of directors or on the executive committee, or elect or remove officers of the corporation. Any such executive committee may meet at stated times or on notice given by any of their own number, however, it may act only during the interval between meetings of the board of directors. Vacancies in the membership of the executive committee shall be filled by the board of directors at a regular meeting or at a special meeting called for that purpose.

Section 11. Chairman of the Board of Directors. The chairman of the board of directors, if one is elected, shall preside at all meetings of the shareholders and directors and shall have such other duties as may be prescribed from time to time by the board of directors.

Section 12. Vice-Chairman of the Board of Directors. The vice-chairman of the board of directors, if one is elected, shall have such duties as may be prescribed from time to time by the board of directors. In the absence of the chairman of the board of directors, or if one is not elected, the vice-chairman of the board of directors shall preside at meetings of the shareholders and directors.

Section 13. Removal of Chairman or Vice-Chairman. The board of directors may at any time and for any reason, with or without cause, remove or replace the chairman or vice-chairman of the board of directors, whether or not such action results in a vacancy in the chairmanship or vice-chairmanship of the board of directors, provided that such action shall in no event terminate the directorship of such person unless such action is effective in accordance with the MBCA to remove such person as a director.

ARTICLE IV Officers

Section 1. Corporate Officers. The officers of the corporation shall consist of a chief executive officer and a chief financial officer elected by the board of directors and, if elected by the board of directors, a president, secretary, one or more assistant secretaries, a treasurer and one or more assistant treasurers. The board of directors may also elect and designate as an officer of the corporation one or more vice presidents and such other officers and agents as the board of directors may from time to time determine. Unless otherwise provided by the board of directors, the chief executive officer also may appoint officers other than the chief executive officer, the president, the chief financial officer or any other executive officer of the corporation. The chairman or vice-chairman of the board of directors, if elected, may be designated by the board of directors as an officer of the corporation. Any number of offices may be held by the same person.

Section 2. Chief Executive Officer. The chief executive officer of the corporation shall have general active management of the business and affairs of the corporation. In the absence of the chairman and the vice-chairman of the board of directors, or if none shall be elected, the chief executive officer shall preside at all meetings of the shareholders and directors. The chief executive officer shall see that all orders and resolutions of the board of directors are carried into effect. The chief executive officer may execute and deliver, in the name of the corporation, any deeds, mortgages, bonds, contracts or other instruments pertaining to the business of the corporation unless the authority to execute and deliver is required by the MBCA to be exercised by another person or is expressly delegated by the articles of incorporation, these bylaws or by the board of directors to some other officer or agent of the corporation. The chief executive officer shall have such other duties as may, from time to time, be prescribed by the board of directors. The powers and duties specified herein may be modified or limited at any time by the board of directors.

Section 3. President. The president, if one is elected, shall have such power and duties regarding the management and daily conduct of the business of the corporation as shall be determined by the board of directors, and, unless otherwise provided by the board of directors, such power and duties of the chief executive officer as may be delegated to the president by the chief executive officer. Unless otherwise provided by the board of directors, in the absence of the chairman and vice-chairman of the board of directors and the chief executive officer, or if none shall be elected, the president shall preside at all meetings of the shareholders and directors. In the absence of the chief executive officer, the president shall succeed to the chief executive officer's powers and duties unless otherwise directed by the chief executive officer or the board of directors.

Section 4. Chief Financial Officer. The chief financial officer shall (i) keep accurate financial records for the corporation; (ii) deposit all moneys, drafts and checks in the name of, and to the credit of, the corporation in such banks and depositories as the board of directors shall, from time to time, designate or otherwise authorize; (iii) have the power to endorse, for deposit, all notes, checks and drafts received by the corporation; (iv) disburse the funds of the corporation, making or causing to be made proper vouchers therefor; (v) render to the chief executive officer and the board of directors, whenever requested, an account of all of his or her transactions as chief financial officer and of the financial condition of the corporation, and (vi) perform such other duties as may, from time to time, be prescribed by the board of directors or by the chief executive officer. The powers and duties specified herein may be modified or limited at any time by the board of directors.

Section 5. Vice Presidents. Each vice president shall have such powers and duties as may be prescribed by the board of directors and, unless otherwise provided by the board of directors, such power

and duties of the chief executive officer or president as may be delegated from time to time to each vice president by the chief executive officer or president, as the case may be.

Section 6. Secretary. The secretary shall attend all meetings of the shareholders, the board of directors and any committees of the board of directors. The secretary shall act as clerk thereof and shall record all proceedings of such meetings in the minute book of the corporation and, whenever necessary, certify all proceedings of the board of directors and the shareholders. The secretary shall give proper notices of meetings of shareholders and directors. The secretary shall, with the chairman of the board of directors, president or any vice president, sign or cause to be signed by facsimile signature all certificates for shares of the corporation and shall have such other powers and shall perform such other duties as may be prescribed from time to time by the board of directors, the chief executive officer or the president.

Section 7. Treasurer. The treasurer, if one shall be elected by the board of directors or the chief executive officer, shall have such powers and duties as may be prescribed by the board of directors and, unless otherwise provided by the board of directors, such power and duties of the chief financial officer as may be delegated from time to time to the treasurer by the chief financial officer.

Section 8. Assistant Secretary and Assistant Treasurer. Any assistant secretary or assistant treasurer, who may from time to time be elected by the board of directors or the chief executive officer, may perform the duties of the secretary or of the treasurer, as the case may be, under the supervision and subject to the control of the secretary or of the treasurer, respectively. Unless otherwise provided by the board of directors, the chief executive officer or the secretary, in the event of the absence of the secretary, an assistant secretary shall have the powers and perform the duties of the office of secretary. Unless otherwise provided by the board of directors, the chief executive officer or the treasurer, in the event of the absence of the treasurer, an assistant treasurer shall have the powers and perform the duties of the office of treasurer. Each assistant secretary and each assistant treasurer shall also have such powers and duties of the secretary or the treasurer as the secretary or the treasurer respectively may delegate to such assistant and shall also have such other powers and perform such other duties as may be prescribed from time to time by the board of directors, the chief executive officer or the president.

Section 9. Vacancy. If there shall occur a vacancy in the office of chief executive officer or chief financial officer, such vacancy shall be filled by the board of directors as expeditiously as practicable. If there shall occur a vacancy in any other office of the corporation by reason of death, resignation, or otherwise, such vacancy may, but need not, be filled by the board of directors or by the chief executive officer (except with respect to any executive officer of the corporation or as otherwise provided by the board of directors).

Section 10. Removal, Replacement and Reassignment. The board of directors may at any time and for any reason, with or without cause, (i) remove, replace or reassign the incumbent chief executive officer or chief financial officer, provided that if such action results in a vacancy in such office, the board of directors shall act to fill that vacancy as provided in Article IV, Section 9 hereof; (ii) remove, replace or reassign the incumbent in any other office of the corporation whether or not such action results in a vacancy in any such office; and (iii) reduce, add to, reassign or otherwise change the powers and duties specifically conferred upon any officer of the corporation by these bylaws or by any action of the board of directors, or any officer acting by authority conferred by these bylaws or action of the board of directors or otherwise. Any officer of the corporation to whom such authority shall have been delegated by the board of directors and, unless otherwise provided by the board of directors, the chief executive officer, may at any time and for any reason, with or without cause, remove, replace or reassign the incumbent in any office of the corporation other than the chief executive officer, the president, the chief financial officer and any other executive officer of the corporation.

ARTICLE V
Indemnification of Directors and Officers

Section 1. Indemnification. The corporation shall indemnify all officers and directors of the corporation for such expenses and liabilities, in such manner, under such circumstances and to the fullest extent permitted by the MBCA. Unless otherwise approved by the board of directors, the corporation shall not indemnify any officer or director of the corporation who is not otherwise entitled to indemnification pursuant to the prior sentence of this Section.

ARTICLE VI
Capital Stock

Section 1. Stock Certificates. The shares of the corporation may be either certificated shares or uncertificated shares or a combination thereof. Each holder of duly issued certificated shares of the corporation shall be entitled to a certificate for such shares, to be in such form as shall be prescribed by law and adopted by the board of directors. Certificates for such shares shall be numbered in the order in which they shall be issued and shall be signed, in the name of the corporation, by the chief executive officer, the president, the secretary or any assistant secretary, if there be one, or such officers as the board of directors may designate. If a certificate is signed by a transfer agent or registrar, the signature of any such officer of the corporation may be a facsimile signature. If a person signs or has a facsimile signature placed upon a certificate while an officer, transfer agent or registrar of the corporation, the certificate may be issued by the corporation even if the person has ceased to serve in that capacity before the certificate is issued, with the same effect as if the person had that capacity at the date of its issue. Every certificate surrendered to the corporation or its transfer agent for exchange or transfer shall be canceled, and no new certificate or certificates shall be issued in exchange for any existing certificate until such existing certificate shall have been so canceled, except in cases provided for in Article VI, Section 3.

Section 2. Transfer of Shares. The transfer of shares on the stock transfer books of the corporation may be authorized only by the shareholder of record thereof, or by such shareholder's legal representative, who shall furnish proper evidence of authority to transfer, or by such shareholder's duly authorized attorney-in-fact, and, in the case of certificated shares, upon surrender of the certificate or the certificates for such shares to the corporation or its transfer agent duly endorsed. The corporation may treat as the exclusive owner of shares of the corporation for all purposes, the person or persons in whose name shares are registered on the books of the corporation.

Section 3. Lost or Destroyed Certificates. Any shareholder claiming a certificate for shares to be lost, stolen or destroyed shall make an affidavit of that fact in such form as the board of directors shall require and shall give the corporation a bond of indemnity in form, in an amount, and with one or more sureties satisfactory to the board of directors, to indemnify the corporation against any claim which may be made against it on account of the reissue of such certificate, whereupon a new certificate may be issued in the same tenor and for the same number of shares as the one alleged to have been lost, stolen or destroyed.

ARTICLE VII
Amendment of Bylaws

Section 1. Amendments. Except as otherwise provided by the MBCA, these bylaws may be amended in whole or in part by a vote of a two-thirds majority of all of the directors. Such authority of the board of directors is subject to the power of the shareholders, exercisable in the manner provided in the MBCA, to adopt, amend, or repeal bylaws adopted, amended, or repealed by the board of directors.

CEO CERTIFICATION OF PERIODIC REPORT UNDER SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Lee Schram, Chief Executive Officer of Deluxe Corporation, certify that:

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

Date: October 26, 2018

/s/ Lee Schram

Lee Schram
Chief Executive Officer

CFO CERTIFICATION OF PERIODIC REPORT UNDER SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Keith A. Bush, Chief Financial Officer of Deluxe Corporation, certify that:

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

Date: October 26, 2018

/s/ Keith A. Bush

Keith A. Bush

Senior Vice President, Chief Financial Officer

CEO AND CFO CERTIFICATION OF PERIODIC REPORT

We, Lee Schram, Chief Executive Officer of Deluxe Corporation (the “Company”), and Keith A. Bush, Chief Financial Officer of the Company, certify, pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, 18 U.S.C. Section 1350, that:

- (1) the Quarterly Report on Form 10-Q of the Company for the quarter ended September 30, 2018 (the “Report”) fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m or 78o(d)); and
- (2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: October 26, 2018

/s/ Lee Schram

Lee Schram

Chief Executive Officer

/s/ Keith A. Bush

Keith A. Bush

Senior Vice President, Chief Financial Officer