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

FORM 10-Q

(Mark One)

OR 15(d) OF THE SECURIT	TIES EXCHANGE ACT OF 1934	
ommission file number: 1-	-7945	
deluve		
	ION	
	_	
	<u>41-0216800</u>	
ation)	(I.R.S. Employer Identification No.)	
<u>l</u>	<u>55126-2966</u>	
	(Zip Code)	
(651) 483-7111		
	ng area code)	
Trading symbol(s)	Name of each exchange on which registered	
DLX	NYSE	
	B or 15(d) of the Securities Exchange Act of 1934 during the preden subject to such filing requirements for the past 90 days. ✓ Yes	
e such reports), and (2) has bee ally every Interactive Data File re		s 🗆 No
e such reports), and (2) has bee ally every Interactive Data File re that the registrant was required er, an accelerated filer, a non-acc	en subject to such filing requirements for the past 90 days. ⊠ Ye required to be submitted pursuant to Rule 405 of Regulation S-T	s □ No (§232.40 wth
e such reports), and (2) has bee ally every Interactive Data File re that the registrant was required er, an accelerated filer, a non-acc er," "smaller reporting company,	en subject to such filing requirements for the past 90 days. Yes required to be submitted pursuant to Rule 405 of Regulation S-T d to submit and post such files). Yes □ No celerated filer, a smaller reporting company, or an emerging groups of the such files.	s □ No (§232.40 wth
e such reports), and (2) has bee ally every Interactive Data File re that the registrant was required er, an accelerated filer, a non-acc er," "smaller reporting company, Accele	en subject to such filing requirements for the past 90 days. Yes required to be submitted pursuant to Rule 405 of Regulation S-T d to submit and post such files). Yes □ No recelerated filer, a smaller reporting company, or an emerging grow, and "emerging growth company" in Rule 12b-2 of the Exchan	s □ No (§232.40 wth
e such reports), and (2) has bee ally every Interactive Data File re that the registrant was required er, an accelerated filer, a non-acc er," "smaller reporting company, Accele Smalle	en subject to such filing requirements for the past 90 days. Yes required to be submitted pursuant to Rule 405 of Regulation S-T d to submit and post such files). Yes No excelerated filer, a smaller reporting company, or an emerging grow," and "emerging growth company" in Rule 12b-2 of the Exchangerated Filer	s □ No (§232.40 wth
e such reports), and (2) has bee ally every Interactive Data File re that the registrant was required er, an accelerated filer, a non-acc er," "smaller reporting company, Accele Smalle Emerg	en subject to such filing requirements for the past 90 days. Yes required to be submitted pursuant to Rule 405 of Regulation S-T of to submit and post such files). Secelerated filer, a smaller reporting company, or an emerging grow," and "emerging growth company" in Rule 12b-2 of the Exchance rated Filer	s □ No (§232.40 wth ge Act.
e such reports), and (2) has bee ally every Interactive Data File re that the registrant was required er, an accelerated filer, a non-accer," "smaller reporting company, Accele Smalle Emerg	en subject to such filing requirements for the past 90 days. Yes required to be submitted pursuant to Rule 405 of Regulation S-T d to submit and post such files). Yes □ No recelerated filer, a smaller reporting company, or an emerging grow," and "emerging growth company" in Rule 12b-2 of the Exchance rated Filer □ □ respectively. Yes □ No recelerated filer, a smaller reporting company, or an emerging grow, and "emerging growth company" in Rule 12b-2 of the Exchance rated Filer □ □ respectively. Yes □ Yes □ Yes □ No requirements for the past 90 days. Yes □ Yes □ Yes □ Yes □ No recelerated filer. Yes □ No recelerated filer, a smaller reporting company □ □ report of the Exchance of th	s □No (§232.40 wth ge Act.
e such reports), and (2) has bee ally every Interactive Data File re that the registrant was required er, an accelerated filer, a non-accer," "smaller reporting company, Accele Smalle Emerg	en subject to such filing requirements for the past 90 days. Yes required to be submitted pursuant to Rule 405 of Regulation S-T d to submit and post such files). Yes □ No recelerated filer, a smaller reporting company, or an emerging grow," and "emerging growth company" in Rule 12b-2 of the Exchance rated Filer □ □ respectively. Yes □ No recelerated filer, a smaller reporting company, or an emerging grow, and "emerging growth company" in Rule 12b-2 of the Exchance rated Filer □ □ respectively. Yes □ Yes □ Yes □ No requirements for the past 90 days. Yes □ Yes □ Yes □ Yes □ No recelerated filer. Yes □ No recelerated filer, a smaller reporting company □ □ report of the Exchance of th	s □No (§232.40 wth ge Act.
	commission file number: 1 COLUXE. DELUXE CORPORAT ame of registrant as specified i ation) (651) 483-7111 ant's telephone number, including symbol(s)	Commission file number: 1-7945 CELUXE CORPORATION ame of registrant as specified in its charter) 41-0216800 (I.R.S. Employer Identification No.) 55126-2966 (Zip Code) (651) 483-7111 ant's telephone number, including area code) Trading symbol(s) Name of each exchange on which registered

PART I – FINANCIAL INFORMATION

Item 1. FINANCIAL STATEMENTS

DELUXE CORPORATION CONSOLIDATED BALANCE SHEETS (unaudited)

(in thousands, except share par value)	June 30, 2020	D	ecember 31, 2019
ASSETS			
Current assets:			
Cash and cash equivalents	\$ 371,951	\$	73,620
Trade accounts receivable, net of allowance for uncollectible accounts of \$6,726 and \$4,985, respectively	140,285		163,421
Inventories and supplies	47,525		39,921
Funds held for customers, including assets carried at fair value of \$23,201 and \$34,450, respectively	82,582		117,641
Revenue in excess of billings	25,014		32,790
Other current assets	48,893		44,818
Total current assets	716,250	-	472,211
Deferred income taxes	5,929		3,907
Long-term investments	44,405		44,995
Property, plant and equipment, net of accumulated depreciation of \$361,224 and \$377,180, respectively	77,857		96,467
Operating lease assets	45,048		44,372
Intangibles, net of accumulated amortization of \$578,915 and \$557,023, respectively	230,745		276,122
Goodwill	736,748		804,487
Other non-current assets	203,100		200,750
Total assets	\$ 2,060,082	\$	1,943,311
LIABILITIES AND SHAREHOLDERS' EQUITY			
Current liabilities:			
Accounts payable	\$ 103,639	\$	112,198
Funds held for customers	80,672		116,411
Accrued liabilities	174,210		179,338
Total current liabilities	358,521	-	407,947
Long-term debt	1,140,000		883,500
Operating lease liabilities	34,165		33,585
Deferred income taxes	3,243		14,898
Other non-current liabilities	38,815		32,520
Commitments and contingencies (Notes 12 and 15)			
Shareholders' equity:			
Common shares \$1 par value (authorized: 500,000 shares; outstanding: June 30, 2020 – 41,855; December 31, 2019 – 42,126)	41,855		42,126
Additional paid-in capital	4,950		4,086
Retained earnings	494,243		572,596
Accumulated other comprehensive loss	(55,779)		(47,947)
Non-controlling interest	69		
Total shareholders' equity	485,338		570,861
Total liabilities and shareholders' equity	\$ 2,060,082	\$	1,943,311

DELUXE CORPORATION CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS) (unaudited)

		r Ended e 30,		Six Months Ended June 30,					
(in thousands, except per share amounts)	2020		2019		2020		2019		
Product revenue	\$ 278,709	\$	347,061	\$	609,396	\$	697,580		
Service revenue	131,696		146,925		287,432		295,471		
Total revenue	410,405		493,986		896,828		993,051		
Cost of products	(102,861)		(133,798)		(224,450)		(265,061)		
Cost of services	(59,422)		(68,730)		(139,882)		(137,090)		
Total cost of revenue	(162,283)		(202,528)		(364,332)		(402,151)		
Gross profit	248,122	· ·	291,458		532,496		590,900		
Selling, general and administrative expense	(198,570)		(222,292)		(435,774)		(452,469)		
Restructuring and integration expense	(20,354)		(17,342)		(38,008)		(22,834)		
Asset impairment charges	(4,883)				(95,213)				
Operating income (loss)	24,315	· ·	51,824		(36,499)		115,597		
Interest expense	(6,171)		(9,239)		(13,171)		(18,540)		
Other income	1,808		2,168		6,281		3,934		
Income (loss) before income taxes	19,952	· ·	44,753		(43,389)		100,991		
Income tax provision	(5,074)		(12,171)		(1,864)		(27,219)		
Net income (loss)	14,878	· ·	32,582		(45,253)		73,772		
Net income attributable to non-controlling interest	(19)		<u> </u>		(19)				
Net income (loss) attributable to Deluxe	\$ 14,859	\$	32,582	\$	(45,272)	\$	73,772		
Total comprehensive income (loss)	\$ 19,053	\$	33,744	\$	(53,085)	\$	76,824		
Comprehensive income (loss) attributable to Deluxe	19,034		33,744		(53,104)		76,824		
Basic earnings (loss) per share	0.36		0.75		(1.08)		1.68		
Diluted earnings (loss) per share	0.35		0.75		(1.10)		1.68		

DELUXE CORPORATION CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY (unaudited)

(in thousands,)	Common shares	Common shares par value	Additional pa in capital	d-	Retained earnings		accumulated other omprehensive loss	Non-controlling interest	Total
Balance, March 31, 2020	41,691	\$ 41,691	\$ -	-	\$ 492,230	\$	(59,954)	\$ —	\$ 473,967
Net income	_	_	_	-	14,859		_	19	14,878
Cash dividends (\$0.30 per share)	_	_	_	-	(12,846)	_	_	(12,846)
Common shares issued	209	209	46	5	_		_	_	674
Common shares retired	(45)	(45	(1,08	7)	_		_	_	(1,132)
Employee share-based compensation	_	_	5,57	2	_		_	_	5,572
Other comprehensive income	_	_	_	-	_		4,175	_	4,175
Non-controlling interest, net	_	_	_	-	_		_	50	50
Balance, June 30, 2020	41,855	\$ 41,855	\$ 4,95)	\$ 494,243	\$	(55,779)	\$ 69	\$ 485,338

(in thousands,)	Common shares	Common shares par value	ditional paid- in capital	Retained earnings	ccumulated other mprehensive loss	N	on-controlling interest	Total
Balance, December 31, 2019	42,126	\$ 42,126	\$ 4,086	\$ 572,596	\$ (47,947)	\$	_	\$ 570,861
Net loss	_	_	_	(45,272)	_		19	(45,253)
Cash dividends (\$0.60 per share)	_	_	_	(25,707)	_		_	(25,707)
Common shares issued	290	290	2,267	_	_		_	2,557
Common shares repurchased	(499)	(499)	(9,767)	(3,734)	_		_	(14,000)
Other common shares retired	(62)	(62)	(1,866)	_	_		_	(1,928)
Employee share-based compensation	_	_	10,230	_	_		_	10,230
Adoption of Accounting Standards Update No. 2016-13 (Note 2)	_	_	_	(3,640)	_		_	(3,640)
Other comprehensive loss	_	_	_	_	(7,832)		_	(7,832)
Non-controlling interest, net	_	_	_	_	_		50	50
Balance, June 30, 2020	41,855	\$ 41,855	\$ 4,950	\$ 494,243	\$ (55,779)	\$	69	\$ 485,338

(in thousands,)	Common shares	Common shares par value	A	dditional paid- in capital	Retained earnings	-	Accumulated other omprehensive loss	Total
Balance, March 31, 2019	43,638	\$ 43,638	\$	_	\$ 908,614	\$	(54,689)	\$ 897,563
Net income	_	_		_	32,582		_	32,582
Cash dividends (\$0.30 per share)	_	_		_	(13,296)		_	(13,296)
Common shares issued	13	13		76	_		_	89
Common shares repurchased	(718)	(718)		(5,026)	(23,152)		_	(28,896)
Other common shares retired	(5)	(5)		(196)	_		_	(201)
Employee share-based compensation	_	_		5,146	_		_	5,146
Other comprehensive income	_	_		_	_		1,162	1,162
Balance, June 30, 2019	42,928	\$ 42,928	\$	_	\$ 904,748	\$	(53,527)	\$ 894,149

(in thousands,)	Common shares	Common shares par value		Additional paid- in capital			Retained earnings	Accumulated other comprehensive loss	Total
Balance, December 31, 2018	44,647	\$	44,647	\$	_	\$	927,345	\$ (56,579)	\$ 915,413
Net income	_		_		_		73,772	_	73,772
Cash dividends (\$0.60 per share)	_		_		_		(26,467)	_	(26,467)
Common shares issued	99		99		1,938		_	_	2,037
Common shares repurchased	(1,757)		(1,757)		(7,504)		(69,635)	_	(78,896)
Other common shares retired	(61)		(61)		(2,810)		_	_	(2,871)
Employee share-based compensation	_		_		8,376		_	_	8,376
Adoption of Accounting Standards Update No. 2016-02	_		_		_		(267)	_	(267)
Other comprehensive income	_		_		_		_	3,052	3,052
Balance, June 30, 2019	42,928	\$	42,928	\$		\$	904,748	\$ (53,527)	\$ 894,149

	Six Months E	Ended J	une 30,
(in thousands)	2020		2019
Cash flows from operating activities:			
Net (loss) income	\$ (45,253)	\$	73,772
Adjustments to reconcile net (loss) income to net cash provided by operating activities:			
Depreciation	10,053		8,448
Amortization of intangibles	45,040		56,488
Operating lease expense	10,038		8,782
Asset impairment charges	95,213		_
Amortization of prepaid product discounts	14,174		11,681
Deferred income taxes	(10,886)		2,718
Employee share-based compensation expense	9,095		9,224
Other non-cash items, net	14,383		7,323
Changes in assets and liabilities:			
Trade accounts receivable	20,054		18,881
Inventories and supplies	(8,719)		(836)
Other current assets	2,073		(11,975)
Non-current assets	(6,646)		(2,249)
Accounts payable	(16,023)		(12,621)
Prepaid product discount payments	(15,806)		(16,182)
Other accrued and non-current liabilities	(7,141)		(48,350)
Net cash provided by operating activities	109,649		105,104
Cash flows from investing activities:			
Purchases of capital assets	(27,085)		(32,344)
Purchases of customer funds marketable securities	(3,701)		(3,778)
Proceeds from customer funds marketable securities	3,701		3,778
Other	1,837		(456)
Net cash used by investing activities	(25,248)		(32,800)
Cash flows from financing activities:			<u> </u>
Proceeds from issuing long-term debt	309,000		154,000
Payments on long-term debt	(52,500)		(113,000)
Net change in customer funds obligations	(31,351)		(10,677)
Proceeds from issuing shares under employee plans	2,411		1,637
Employee taxes paid for shares withheld	(1,889)		(2,872)
Payments for common shares repurchased	(14,000)		(78,896)
Cash dividends paid to shareholders	(25,464)		(26,253)
Other	(597)		(1,440)
Net cash provided (used) by financing activities	185,610		(77,501)
Effect of exchange rate change on cash, cash equivalents, restricted cash and restricted cash equivalents	(6,490)		3,996
Net change in cash, cash equivalents, restricted cash and restricted cash equivalents	263,521		(1,201)
Cash, cash equivalents, restricted cash and restricted cash equivalents, beginning of year	174,811		145,259
Cash, cash equivalents, restricted cash and restricted cash equivalents, end of period (Note 3)	\$ 438,332	\$	144,058

NOTE 1: CONSOLIDATED FINANCIAL STATEMENTS

The consolidated balance sheet as of June 30, 2020, the consolidated statements of comprehensive income (loss) for the quarters and six months ended June 30, 2020 and 2019, the consolidated statements of shareholders' equity for the quarters and six months ended June 30, 2020 and 2019 and the consolidated statements of cash flows for the six months ended June 30, 2020 and 2019 are unaudited. The consolidated balance sheet as of December 31, 2019 was derived from audited consolidated financial statements, but does not include all disclosures required by U.S. generally accepted accounting principles (GAAP). 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, 2019 (the 2019 Form 10-K).

The preparation of our consolidated financial statements requires us to make estimates, judgments and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses and the related disclosure of contingent assets and liabilities. We base our estimates on historical experience and on various other factors and assumptions that we believe are reasonable under the circumstances, including the estimated impact of extraordinary events such as the novel coronavirus (COVID-19) pandemic, the results of which form the basis for making judgments about the carrying values of our assets and liabilities. Actual results may differ significantly from our estimates and assumptions, including our estimates of the severity and duration of the COVID-19 pandemic. Further information can be found in Note 15.

Non-controlling interest – Effective April 1, 2020, we executed an agreement to form MedPay Exchange LLC (MPX), which delivers payments to healthcare providers from insurance companies and other payers. This entity is a variable interest entity (VIE), as defined in Accounting Standards Codification Topic 810, Consolidation. As we are the primary beneficiary of the VIE, we are required to consolidate MPX in our consolidated financial statements. Our partner's interest in MPX is reported as non-controlling interest in the consolidated balance sheet within equity, separate from our equity. Net income (loss) and comprehensive income (loss) are attributed to us and the non-controlling interest. The amounts attributable to the non-controlling interest were not significant for the quarter ended June 30, 2020.

Comparability – Amounts on the consolidated balance sheet as of December 31, 2019 and amounts within cash flows from operating activities and cash flows from investing activities on the consolidated statement of cash flows for the six months ended June 30, 2019 have been modified to conform to the current year presentation. On the consolidated balance sheet, assets held for sale are included within other non-current assets. In the previous year, this amount was presented separately. Within cash flows from operating activities, loss on sales of businesses and customer lists is included within other non-cash items, net. In the previous year, this amount was presented separately. Within cash flows from investing activities, payments for acquisitions, net of cash acquired, is included within the other caption. In the previous year, this amount was presented separately.

NOTE 2: NEW ACCOUNTING PRONOUNCEMENTS

Recently Adopted Accounting Standards

ASU No. 2016-13 – In June 2016, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) No. 2016-13, Measurement of Credit Losses on Financial Instruments. Subsequently, the FASB issued several amendments to this standard. These standards replace the incurred loss methodology previously utilized for valuing financial instruments with an expected loss methodology that is referred to as the current expected credit loss (CECL) methodology. The measurement of expected losses under the CECL methodology is applicable to financial instruments measured at amortized cost, including accounts and notes receivable. The standards also made targeted changes to the accounting for available-for-sale debt securities. We adopted the standards on January 1, 2020 using the modified retrospective method for financial instruments measured at amortized cost. Under this method, prior period amounts continue to be reported in accordance with previously applicable GAAP. We recorded a net decrease in retained earnings of \$3,640 as of January 1, 2020 for the cumulative effect of adopting the standards, which consisted primarily of an increase in the allowance for credit losses on loans and notes receivable, net of the related deferred income tax impact. We recorded no allowance for credit losses related to our available-for-sale debt securities. Further information regarding these investments can be found in Note 3.

An allowance for uncollectible accounts is a valuation account that is deducted from an asset's amortized cost basis to present the net amount expected to be collected. Amounts are charged off against the allowance when we believe the

uncollectibility of an account is confirmed. In calculating the allowances related to trade accounts receivable and revenue in excess of billings, we utilize a combination of aging schedules with reserve rates applied to both current and aged receivables and roll-rate reserves using historical loss rates and changes in current or projected conditions. In determining the allowance for uncollectible accounts related to loans and notes receivable from distributors, we utilize a loss-rate analysis based on historical loss information, current delinquency rates, the credit quality of the loan recipients and the portfolio mix to determine an appropriate credit risk measurement, adjusted to reflect current loan-specific risk characteristics and changes in environmental conditions affecting our small business distributors. Changes in conditions that may affect our distributors include, but are not limited to, general economic conditions, changes in the markets for their products and services and changes in governmental regulations. In completing our analysis, we utilize a reversion methodology for periods beyond the reasonable and supportable forecast period, as many of our loans and notes receivable have longer terms. Further information regarding current risks and uncertainties affecting our loans and notes receivable can be found in Note 15. Further information regarding our allowances for uncollectible accounts can be found in Note 3.

Our trade accounts receivable and unbilled receivables are not interest-bearing. Interest rates on our loans and notes receivable generally range from 6% to 8% and reflect market interest rates at the time the transactions were executed. Accrued interest included in loans and notes receivable is not significant.

ASU No. 2018-13 – In August 2018, the FASB issued ASU No. 2018-13, Disclosure Framework – Changes to the Disclosure Requirements for Fair Value Measurements. This standard removes, modifies and adds certain disclosures related to recurring and nonrecurring fair value measurements. During 2018, we adopted the provisions of the standard that remove and modify disclosure requirements. The additional disclosures were effective for us on January 1, 2020 and are required to be applied prospectively to fair value measurements completed on or after that date. Disclosures regarding our fair value measurements can be found in Note 7.

ASU No. 2018-15 – 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. This 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. We adopted this standard on January 1, 2020, applying it prospectively to eligible costs incurred on or after this date. Adoption of this standard did impact our results of operations and financial position, as we previously expensed these implementation costs as incurred. As of June 30, 2020, \$12,166 of cloud computing implementation costs were included within other non-current assets on the consolidated balance sheet. These costs primarily relate to our planned implementation of a new enterprise resource planning system.

Accounting Standards Not Yet Adopted

ASU No. 2019-12 – In December 2019, the FASB issued ASU No. 2019-12, Simplifying the Accounting for Income Taxes. This standard addresses several specific areas of accounting for income taxes. The guidance is effective for us on January 1, 2021. Portions of the standard are required to be adopted prospectively and certain aspects will be adopted using the 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.

NOTE 3: SUPPLEMENTAL BALANCE SHEET AND CASH FLOW INFORMATION

Trade accounts receivable – Changes in the allowance for uncollectible accounts included within trade accounts receivable for the six months ended June 30, 2020 and 2019 were as follows:

SIX WIGHTINS L	.iiueu su	nie 30,
2020		2019
\$ 4,985	\$	3,639
3,374		2,549
(1,633)		(1,669)
\$ 6,726	\$	4,519
\$	\$ 4,985 3,374 (1,633)	\$ 4,985 \$ 3,374 (1,633)

Six Months Ended June 30

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

(in thousands)	June 30, 2020	D	ecember 31, 2019
Raw materials	\$ 7,001	\$	6,977
Semi-finished goods	7,070		7,368
Finished goods	30,082		21,982
Supplies	3,372	-	3,594
Inventories and supplies	\$ 47,525	\$	39,921

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

		June 30, 2020											
(in thousands)		Cost	Gro	oss unrealized gains		s unrealized losses		Fair value					
Funds held for customers:(1)													
Domestic money market fund	\$	7,000	\$	_	\$	_	\$	7,000					
Canadian and provincial government securities		8,732		126		_		8,858					
Canadian guaranteed investment certificates		7,343						7,343					
Available-for-sale debt securities	\$	23,075	\$	126	\$		\$	23,201					

⁽¹⁾ Funds held for customers, as reported on the consolidated balance sheet as of June 30, 2020, also included cash of \$59,381.

	December 31, 2019									
(in thousands)	Cost	Gross unrealized gains		Gross unrealized losses			Fair value			
Funds held for customers: ⁽¹⁾							_			
Domestic money market fund	\$ 18,000	\$	_	\$	_	\$	18,000			
Canadian and provincial government securities	9,056		_		(304)		8,752			
Canadian guaranteed investment certificates	 7,698						7,698			
Available-for-sale debt securities	\$ 34,754	\$		\$	(304)	\$	34,450			

⁽¹⁾ Funds held for customers, as reported on the consolidated balance sheet as of December 31, 2019, also included cash of \$83,191.

Expected maturities of available-for-sale debt securities as of June 30, 2020 were as follows:

(in thousands)						
Due in one year or less	\$	16,318				
Due in two to five years		2,861				
Due in six to ten years		4,022				
Available-for-sale debt securities	\$	23,201				

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

Revenue in excess of billings – Upon adoption of ASU No. 2016-13 and related amendments on January 1, 2020 (Note 2), we recorded an allowance for uncollectible accounts related to revenue in excess of billings. This allowance was not significant upon adoption or as of June 30, 2020. Revenue in excess of billings, net of the allowance for uncollectible accounts, was comprised of the following:

(in thousands)	June 30, 2020	December 31, 2019
Conditional right to receive consideration	\$ 16,839	\$ 24,499
Unconditional right to receive consideration	8,175	 8,291
Revenue in excess of billings	\$ 25,014	\$ 32,790

Intangibles – Intangibles were comprised of the following:

				June 30, 2020		December 31, 2019						
(in thousands)	Gross carrying Accumulated Net carrying amount amortization amount				Gı	oss carrying amount		Accumulated amortization	Net carrying amount			
Amortizable intangibles:											_	
Internal-use software	\$	397,913	\$	(321,204)	\$ 76,709	\$	380,905	\$	(299,698)	\$	81,207	
Customer lists/relationships		310,282		(181,761)	128,521		348,055		(187,462)		160,593	
Software to be sold		36,900		(21,770)	15,130		36,900		(19,657)		17,243	
Technology-based intangibles		34,613		(25,313)	9,300		34,780		(22,122)		12,658	
Trade names		29,952		(28,867)	1,085		32,505		(28,084)		4,421	
Intangibles	\$	809,660	\$	(578,915)	\$ 230,745	\$	833,145	\$	(557,023)	\$	276,122	

During the first quarter of 2020, we recorded asset impairment charges related to certain intangible assets. Further information can be found in Note 7.

Amortization of intangibles was \$21,529 for the quarter ended June 30, 2020, \$28,314 for the quarter ended June 30, 2019, \$45,040 for the six months ended June 30, 2020 and \$56,488 for the six months ended June 30, 2019. Based on the intangibles in service as of June 30, 2020, estimated future amortization expense is as follows:

(in thousands)	Estimated amortization expense
Remainder of 2020	\$ 45,590
2021	70,492
2022	50,044
2023	30,139
2024	15,616

The following intangibles were acquired during the six months ended June 30, 2020:

(in thousands)	Amount	Weighted-average amortization period (in years)
Internal-use software	\$ 20,286	3
Customer lists/relationships	735	5
Acquired intangibles	\$ 21,021	4

Goodwill - Changes in goodwill by reportable segment and in total for the six months ended June 30, 2020 were as follows:

(in thousands)		Payments	Clo	ud Solutions	-	Promotional Solutions	Checks	Total
Balance, December 31, 2019:								
Goodwill, gross	\$	168,165	\$	432,984	\$	252,834	\$ 434,812	\$ 1,288,795
Accumulated impairment charges		_		(357,741)		(126,567)	_	(484,308)
Goodwill, net of accumulated impairment charges		168,165		75,243		126,267	434,812	804,487
Impairment charges (Note 7)		_		(4,317)		(63,356)	_	(67,673)
Currency translation adjustment		_		_		(66)	_	(66)
Balance, June 30, 2020	\$	168,165	\$	70,926	\$	62,845	\$ 434,812	\$ 736,748
Balance, June 30, 2020:								
Goodwill, gross	\$	168,165	\$	432,984	\$	252,768	\$ 434,812	\$ 1,288,729
Accumulated impairment charges		_		(362,058)		(189,923)	_	(551,981)
Goodwill, net of accumulated impairment charges	\$	168,165	\$	70,926	\$	62,845	\$ 434,812	\$ 736,748

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

(in thousands)	June 30, 2020	December 31, 2019
Postretirement benefit plan asset	\$ 59,457	\$ 56,743
Loans and notes receivable from Safeguard distributors, net of allowance for doubtful accounts ⁽¹⁾	55,255	66,872
Prepaid product discounts	43,541	51,145
Cloud computing arrangements	12,166	_
Deferred sales commissions ⁽²⁾	10,789	9,682
Other	21,892	 16,308
Other non-current assets	\$ 203,100	\$ 200,750

⁽¹⁾ Amount Includes the non-current portion of loans and note receivables. The current portion of these receivables is included in other current assets on the consolidated balance sheets and was \$3,879 as of June 30, 2020 and \$3,511 as of December 31, 2019.

Upon adoption of ASU No. 2016-13 and related amendments on January 1, 2020 (Note 2), we recorded an additional allowance for uncollectible accounts related to loans and notes receivable from Safeguard distributors. Changes in this allowance for the six months ended June 30, 2020 and 2019 were as follows:

	Six Months E	inded June 30,		
(in thousands)	2020		2019	
Balance, beginning of year	\$ 284	\$	284	
Adoption of ASU No. 2016-13 (Note 2)	4,749		_	
Bad debt expense	6,623		_	
Balance, end of period	\$ 11,656	\$	284	

⁽²⁾ Amortization of deferred sales commissions was \$1,817 for the six months ended June 30, 2020 and \$1,464 for the six months ended June 30, 2019.

Bad debt expense for the six months ended June 30, 2020, included loan-specific allowances primarily related to a distributor that was underperforming. In calculating this reserve, we utilized various valuation techniques to determine the value of the underlying collateral. Other past due receivables and those on non-accrual status were not significant as of June 30, 2020.

We categorize loans and notes receivable into risk categories based on information about the ability of borrowers to service their debt, including current financial information, historical payment experience, current economic trends and other factors. The highest quality receivables are assigned a 1-2 internal grade. Those that have a potential weakness requiring management's attention are assigned a 3-4 internal grade.

The following table presents loans and notes receivable from Safeguard distributors, including the current portion, by credit quality indicator and by year of origination, as of June 30, 2020. There were no write-offs or recoveries recorded during the six months ended June 30, 2020.

Loans and notes receivable from distributors amortized cost basis by origination year

(in thousands)	2020	2019	2018	2017	2016	Prior	Total
Risk rating:							
1-2 internal grade	\$ 1,386	\$ 3,876	\$ 24,310	\$ 22,779	\$ 220	\$ 4,386	\$ 56,957
3-4 internal grade	_	2,553	7,508	_	_	3,772	13,833
Loans and notes receivable	\$ 1,386	\$ 6,429	\$ 31,818	\$ 22,779	\$ 220	\$ 8,158	\$ 70,790

Changes in prepaid product discounts during the six months ended June 30, 2020 and 2019 were as follows:

Six Months Ended June 30,

(in thousands)	2020	2019		
Balance, beginning of year	\$ 51,145	\$	54,642	
Additions ⁽¹⁾	7,195		12,405	
Amortization	(14,174)		(11,681)	
Other	(625)		(447)	
Balance, end of period	\$ 43,541	\$	54,919	

⁽¹⁾ Prepaid product discounts are generally accrued upon contract execution. Cash payments for prepaid product discounts were \$15,806 for the six months ended June 30, 2020 and \$16,182 for the six months ended June 30, 2019.

Accrued liabilities - Accrued liabilities were comprised of the following:

(in thousands)	June 30, 2020	D	ecember 31, 2019
Deferred revenue ⁽¹⁾	\$ 43,271	\$	46,098
Employee cash bonuses	21,648		36,918
Wages	17,389		6,937
Operating lease liabilities	14,320		12,898
Prepaid product discounts due within one year	8,810		14,709
Other	68,772		61,778
Accrued liabilities	\$ 174,210	\$	179,338

^{(1) \$30,594} of the December 31, 2019 amount was recognized as revenue during the six months ended June 30, 2020.

Supplemental cash flow information – The reconciliation of cash, cash equivalents, restricted cash and restricted cash equivalents to the consolidated balance sheets was as follows:

(in thousands)	June 30, 2020	June 30, 2019
Cash and cash equivalents	\$ 371,951	\$ 66,732
Restricted cash and restricted cash equivalents included in funds held for customers	66,381	 77,326
Total cash, cash equivalents, restricted cash and restricted cash equivalents	\$ 438,332	\$ 144,058

NOTE 4: EARNINGS (LOSS) PER SHARE

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

		Quarter Ended Si June 30,				Months Ended June 30,		
(in thousands, except per share amounts)	2020		2019		2020		2019	
Earnings (loss) per share – basic:								
Net income (loss)	\$ 14,878	\$	32,582	\$	(45,253)	\$	73,772	
Net income attributable to non-controlling interest	(19)		_		(19)		_	
Net income (loss) attributable to Deluxe	14,859		32,582		(45,272)		73,772	
Income allocated to participating securities	(13)		(60)		(32)		(170)	
Income (loss) attributable to Deluxe available to common shareholders	\$ 14,846	\$	32,522	\$	(45,304)	\$	73,602	
Weighted-average shares outstanding	41,797		43,400		41,946		43,697	
Earnings (loss) per share – basic	\$ 0.36	\$	0.75	\$	(1.08)	\$	1.68	
Earnings (loss) per share – diluted:								
Net income (loss)	\$ 14,878	\$	32,582	\$	(45,253)	\$	73,772	
Net income attributable to non-controlling interest	(19)		_		(19)		_	
Net income (loss) attributable to Deluxe	14,859		32,582		(45,272)		73,772	
Income allocated to participating securities	_		(10)		(32)		(76)	
Re-measurement of share-based awards classified as liabilities	(79)		(44)		(853)		(44)	
Income (loss) attributable to Deluxe available to common shareholders	\$ 14,780	\$	32,528	\$	(46,157)	\$	73,652	
Weighted-average shares outstanding	41,797		43,400		41,946		43,697	
Dilutive impact of potential common shares	151		154		40		127	
Weighted-average shares and potential common shares outstanding	41,948		43,554		41,986		43,824	
Earnings (loss) per share – diluted	\$ 0.35	\$	0.75	\$	(1.10)	\$	1.68	
Antidilutive options excluded from calculation	2,133		1,439		2,199		1,439	

NOTE 5: OTHER COMPREHENSIVE INCOME (LOSS)

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

Accumulated other comprehensive loss components	Amounts rec	class	sified from acc	Affected line item in consolidated statements of comprehensive income (loss)				
	Quarter Ended June 30,				Six Mont Jun	ths End e 30,	led	
(in thousands)	2020		2019		2020	:	2019	
Realized loss on interest rate swap	\$ (281)	\$	· –	\$	(188)	\$	_	Interest expense
Tax benefit	73		_		49		_	Income tax provision
Realized loss on interest rate swap, net of tax	(208)				(139)			Net income
Amortization of postretirement benefit plan items:			_					
Prior service credit	355		355		711		711	Other income
Net actuarial loss	(575)		(806)		(1,150)		(1,612)	Other income
Total amortization	(220)		(451)		(439)		(901)	Other income
Tax benefit	12		71		23		140	Income tax provision
Amortization of postretirement benefit plan items, net of tax	(208)		(380)		(416)		(761)	Net income
Total reclassifications, net of tax	\$ (416)	\$	(380)	\$	(555)	\$	(761)	

Accumulated other comprehensive loss – Changes in the components of accumulated other comprehensive loss during the six months ended June 30, 2020 were as follows:

(in thousands)	Postret	stretirement benefit plans		Net unrealized loss on available-for-sale debt securities ⁽¹⁾		Net unrealized loss on cash flow hedge ⁽²⁾		Currency translation adjustment		cumulated other nprehensive loss
Balance, December 31, 2019	\$	(28,406)	\$	(275)	\$	(1,097)	\$	(18,169)	\$	(47,947)
Other comprehensive income (loss) before reclassifications		_		308		(5,395)		(3,300)		(8,387)
Amounts reclassified from accumulated other comprehensive loss		416				139				555
Net current-period other comprehensive income (loss)		416		308		(5,256)		(3,300)		(7,832)
Balance, June 30, 2020	\$	(27,990)	\$	33	\$	(6,353)	\$	(21,469)	\$	(55,779)

 $^{^{\}mbox{\scriptsize (1)}}$ Other comprehensive income before reclassifications is net of income tax expense of \$107.

 $^{^{(2)}}$ Other comprehensive loss before reclassifications is net of an income tax benefit of \$1,897.

NOTE 6: DERIVATIVE FINANCIAL INSTRUMENTS

As part of our interest rate risk management strategy, in July 2019, we entered into an interest rate swap, which we designated as a cash flow hedge, to mitigate variability in interest payments on a portion of the amount drawn under our revolving credit facility (Note 11). The interest rate swap, which terminates in March 2023 when our revolving credit facility matures, effectively converts \$200,000 of variable rate debt to a fixed rate of 1.798%. Changes in the fair value of the interest rate swap are recorded in accumulated other comprehensive loss on the consolidated balance sheets and are subsequently reclassified to interest expense as interest payments are made on the variable-rate debt. The fair value of the interest rate swap was \$8,584 as of June 30, 2020 and \$1,480 as of December 31, 2019 and was included in other non-current liabilities on the consolidated balance sheets. The fair value of this derivative is calculated based on the prevailing LIBOR rate curve on the date of measurement. The cash flow hedge was fully effective as of June 30, 2020 and December 31, 2019 and its impact on consolidated net income (loss) and our consolidated statements of cash flows was not significant. We also do not expect the amount to be reclassified to interest expense over the next 12 months to be significant.

NOTE 7: FAIR VALUE MEASUREMENTS

Goodwill impairment analyses – We evaluate the carrying value of goodwill 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 goodwill and indefinite-lived intangibles is included under the caption "Note 1: Significant Accounting Policies" in the Notes to Consolidated Financial Statements appearing in the 2019 Form 10-K and explains our methodology for assessing impairment of these assets.

Effective January 1, 2020, we reorganized our reportable business segments to align with structural and management reporting changes in support of our growth strategy (Note 14). As a result, we reassessed our previously determined reporting units and concluded that a realignment of our reporting units was required. We analyzed goodwill for impairment immediately prior to this realignment by performing a qualitative analysis for all of our reporting units, with the exception of our Direct-to-Consumer reporting unit, which is part of our new Checks reportable business segment. 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 last quantitative analyses we completed. 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 of our Direct-to-Consumer reporting unit indicated that its fair value exceeded its carrying value by approximately \$35,000, or 26% above its carrying value.

In completing the realignment of our reporting units, we reallocated the carrying value of goodwill to our new reporting units based on their relative fair values. Immediately subsequent to the realignment, we completed a quantitative analysis for the reporting units that changed as a result of the realignment. This quantitative analysis, as of January 1, 2020, indicated that the estimated fair values of our reporting units exceeded their carrying values by approximate amounts between \$37,000 and \$954,000, or by amounts between 121% and 189% above the carrying values of their net assets.

On January 30, 2020, the World Health Organization (WHO) announced a global health emergency due to an outbreak of COVID-19 originating in Wuhan, China and the risks to the international community as the virus spread globally beyond its point of origin. In March 2020, the WHO classified the COVID-19 outbreak as a pandemic, based on the rapid increase in exposure globally. Following the pandemic designation, we observed a decline in the market valuation of our common shares and we determined that the global response to the outbreak negatively impacted our estimates of expected future cash flows. After our consideration of economic, market and industry conditions, cost factors, the overall financial performance of our reporting units and the last quantitative analyses we completed, we concluded that a triggering event had occurred for 2 of our reporting units. As such, we completed quantitative goodwill impairment analyses for our Promotional Solutions and Cloud Solutions Web Hosting reporting unit as of March 31, 2020. Our analyses indicated that the goodwill of our Promotional Solutions reporting unit was partially impaired and the goodwill of our Cloud Solutions Web Hosting reporting unit was fully impaired. As such, we recorded goodwill impairment charges of \$63,356 and \$4,317, respectively. The impairment charges were measured as the amount by which the reporting units' carrying values exceeded their estimated fair values, limited to the carrying amount of goodwill. After the impairment charges, \$62,785 of goodwill remained in the Promotional Solutions reporting unit as of the measurement date.

There were no triggering events during the second quarter of 2020 that required us to analyze goodwill for impairment.

Other nonrecurring asset impairment analyses – As a result of the impacts of the COVID-19 outbreak, we assessed for impairment certain long-lived assets of our Cloud Solutions Web Hosting reporting unit as of March 31, 2020. As a result of these assessments, we recorded asset impairment charges of \$17,678 related to certain customer list, software and trade name

intangible assets. With the exception of certain internal-use software assets, we determined that the assets were fully impaired. We utilized the discounted value of estimated future cash flows to estimate the fair value of the asset group. In our analysis, we assumed a revenue decline of 31% and a gross margin decline of 5.2 points in 2020, as well as a discount rate of 9%.

During the first quarter of 2020, we assessed for impairment the carrying value of an asset group related to a small business distributor that we previously purchased. Our assessment was the result of customer attrition during the quarter that impacted our projections of future cash flows. Based on our estimate of discounted future cash flows, we determined that the asset group was partially impaired as of February 29, 2020, and we recorded an asset impairment charge of \$2,752, reducing the carrying value of the related customer list intangible asset. In calculating the estimated fair value of the asset group, we assumed no revenue growth, a 1.9 point improvement in gross margin and a discount rate of 11%.

Also during the first six months of 2020, we recorded asset impairment charges of \$7,110 related to the rationalization of our real estate footprint, as well as internal-use software held for sale as of December 31, 2019 and a small business customer list. These assets were written down to their estimated fair values less costs to sell.

Asset impairment analyses completed during the six months ended June 30, 2020 were as follows:

(in thousands)		Fair value as of measurement date		Quoted prices in active markets for identical assets (Level 1)		Significant other observable inputs (Level 2)		Significant observable inputs (Level 3)	_	Impairment charge
Cloud Solutions Web Hosting assets:										
Customer lists	\$	_	\$	_	\$	_	\$	_	\$	8,397
Internal-use software		2,172		_		_		2,172		6,932
Other		_		_		_		_		2,349
Cloud Solutions Web Hosting assets										17,678
Small business distributor		7,622		_		_		7,622		2,752
Other assets		11,210		_		_		11,210		7,110
Goodwill										67,673
Total									\$	95,213

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, as well as investments in Canadian guaranteed investment certificates (GICs) with maturities of 1 year or less. 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 on the consolidated balance sheets. The cost of securities sold is determined using the average cost method. Realized gains and losses are included in revenue on the consolidated statements of comprehensive income (loss) and were not significant for the quarters or six months ended June 30, 2020 and 2019.

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

				Fai	susing		
			30, 2020	Quoted prices in active markets for	Significant other	Significant	
(in thousands)	Balance sheet location	Carrying value Fair value		identical assets (Level 1)	observable inputs (Level 2)	unobservable inputs (Level 3)	
Measured at fair value through comprehensive income (loss):							
Cash equivalents	Funds held for customers	\$ 7,000	\$ 7,000	\$ 7,000	\$ —	\$	
Available-for-sale debt securities	Funds held for customers	16,201	16,201	_	16,201	_	
Derivative liability (Note 6)	Other non-current liabilities	(8,584)	(8,584)	_	(8,584)	_	
Amortized cost:							
Cash	Cash and cash equivalents	371,951	371,951	371,951	_	_	
Cash	Funds held for customers	59,381	59,381	59,381	_	_	
Loans and notes receivable from Safeguard distributors	Other current and non- current assets	59,134	57,548	_	_	57,548	
Long-term debt	Long-term debt	1,140,000	1,140,000	_	1,140,000	_	

						Fair value measurements					s using		
(in thousands) Balance sheet loc		December 31, 2019 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)				
(in thousands) Measured at fair value through	Balance Sheet location	Carr	lyllig value		i ali value		(Level I)		(Level 2)		(Level 3)		
comprehensive income (loss):													
Cash equivalents	Funds held for customers	\$	18,000	\$	18,000	\$	18,000	\$	_	\$	_		
Available-for-sale debt securities	Funds held for customers		16,450		16,450		_		16,450		_		
Derivative liability (Note 6)	Other non-current liabilities		(1,480)		(1,480)		_		(1,480)		_		
Amortized cost:													
Cash	Cash and cash equivalents		73,620		73,620		73,620		_		_		
Cash	Funds held for customers		83,191		83,191		83,191		_		_		
Loans and notes receivable from Safeguard distributors	Other current and non- current assets		70,383		68,887		_		_		68,887		
Long-term debt	Long-term debt		883,500		883,500		_		883,500		_		

NOTE 8: RESTRUCTURING AND INTEGRATION EXPENSE

Restructuring and integration expense consists of costs related to the consolidation and migration of certain applications and processes, including our financial, sales and human resources management systems. It also includes costs related to the integration of acquired businesses into our systems and processes. These costs consist primarily of information technology consulting, project management services and internal labor, as well as other miscellaneous costs associated with our initiatives, such as training, travel and relocation. In addition, we recorded employee severance costs related to these initiatives, as well as our ongoing cost reduction initiatives, across functional areas. Our restructuring and integration activities have increased, as we are currently pursuing several initiatives designed to focus our business behind our growth strategies and to increase our efficiency. Restructuring and integration expense is not allocated to our reportable business segments.

Restructuring and integration expense is reflected on the consolidated statements of comprehensive income (loss) as follows:

	Quarter Ended June 30,					Six Months Ended June 30,			
(in thousands)		2020		2019		2020		2019	
Total cost of revenue	\$	28	\$	155	\$	857	\$	946	
Operating expenses		20,354		17,342		38,008		22,834	
Restructuring and integration expense	\$	20,382	\$	17,497	\$	38,865	\$	23,780	

Restructuring and integration expense for each period was comprised of the following:

	Quarte Jun	r Ende e 30,	d	Six Months Ended June 30,			
(in thousands)	2020		2019		2020		2019
External consulting fees	\$ 11,337	\$	10,101	\$	22,238	\$	12,247
Employee severance benefits	5,035		2,697		10,118		4,761
Internal labor	1,128		3,789		2,981		5,850
Other	2,882		910		3,528		922
Restructuring and integration expense	\$ 20,382	\$	17,497	\$	38,865	\$	23,780

Our restructuring and integration accruals represent expected cash payments required to satisfy the remaining severance obligations to those employees already terminated and those expected to be terminated under our various initiatives. These accruals are included in accrued liabilities on the consolidated balance sheets. The majority of the related employee reductions are expected to be completed in the third quarter of 2020, and we expect most of the related severance payments to be paid by the end of 2020, utilizing cash from operations.

Changes in our restructuring and integration accruals were as follows:

(in thousands)	benefits
Balance, December 31, 2019	\$ 3,459
Charges	10,630
Reversals	(512)
Payments	(7,625)
Balance, June 30, 2020	\$ 5,952

The charges and reversals presented in the rollforward of our restructuring and integration accruals do not include items charged directly to expense as incurred, as those items are not reflected in accrued liabilities on the consolidated balance sheets.

NOTE 9: INCOME TAX PROVISION

The effective tax rate on pre-tax loss reconciles to the U.S. federal statutory tax rate as follows:

	Six Months Ended June 30, 2020	Year Ended December 31, 2019
Income tax at federal statutory rate	21.0%	21.0%
Goodwill impairment charges	(27.4%)	(29.3%)
Research and development tax credit	(7.1%)	0.6%
Change in valuation allowances	—	(4.5%)
Net tax impact of share-based compensation	(2.7%)	(1.1%)
Foreign tax rate differences	8.6%	1.3%
State income tax expense, net of federal income tax benefit	0.5%	4.9%
Other	2.8%	(0.6%)
Effective tax rate	(4.3%)	(7.7%)

NOTE 10: POSTRETIREMENT BENEFITS

We have historically provided certain health care benefits for a large number of retired U.S. employees. In addition to our retiree health care plan, we also have a U.S. supplemental executive retirement plan. Further information regarding our postretirement benefit plans can be found under the caption "Note 14: Postretirement Benefits" in the Notes to Consolidated Financial Statements appearing in the 2019 Form 10-K.

Postretirement benefit income is included in other income on the consolidated statements of comprehensive income (loss) and consisted of the following components:

	Quarte Jun	r Ende e 30,	d	Six Months Ended June 30,			
(in thousands)	2020		2019		2020		2019
Interest cost	\$ 478	\$	682	\$	956	\$	1,364
Expected return on plan assets	(1,905)		(1,740)		(3,809)		(3,479)
Amortization of prior service credit	(355)		(355)		(711)		(711)
Amortization of net actuarial losses	575		806		1,150		1,612
Net periodic benefit income	\$ (1,207)	\$	(607)	\$	(2,414)	\$	(1,214)

NOTE 11: DEBT

Debt outstanding consisted of amounts drawn on our revolving credit facility of \$1,140,000 as of June 30, 2020 and \$883,500 as of December 31, 2019. In March 2020, in conjunction with our response to the COVID-19 outbreak, we drew an additional \$238,000 on our credit facility given the uncertainty in how the commercial capital and credit markets would operate during the pandemic. As of June 30, 2020, we held cash and cash equivalents of \$371,951. During July 2020, we repaid \$100,000 of the amount drawn under the credit facility.

As of June 30, 2020, the total availability under our revolving credit facility was \$1,150,000. The facility includes an accordion feature allowing us, subject to lender consent, to increase the credit commitment to an aggregate amount not exceeding \$1,425,000. The credit facility matures in March 2023. Our quarterly commitment fee ranges from 0.175% to 0.35%, based on our leverage ratio. Amounts drawn under the credit facility had a weighted-average interest rate of 1.90% as of June 30, 2020 and 3.03% as of December 31, 2019. In July 2019, we executed an interest rate swap to convert \$200,000 of the amount drawn under the credit facility to fixed rate debt. Further information can be found in Note 6.

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. Additionally, the agreement contains customary representations and warranties including, as a condition to borrowing, that all such representations and warranties are true and correct in all material respects on the date of the borrowing, including representations as to no material adverse change in our business, assets, operations or financial condition.

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 1, there would be an annual limitation on the amount of dividends and share repurchases.

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

(in thousands)	Six Months Ended June 30, 2020	Year Ended December 31, 2019		
Daily average amount outstanding	\$ 1,034,198	\$ 925,715		
Weighted-average interest rate	2.29%	3.54%		

The following shows amounts available for borrowing under our revolving credit facility as of June 30, 2020. In July 2020, we repaid \$100,000 of the amount drawn on the facility. This amount remains available to us for borrowing.

(in thousands)	available
Revolving credit facility commitment	\$ 1,150,000
Amount drawn on revolving credit facility	(1,140,000)
Outstanding letters of credit ⁽¹⁾	(5,428)
Net available for borrowing as of June 30, 2020	\$ 4,572

⁽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.

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 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. These liabilities were not significant as of June 30, 2020 or December 31, 2019.

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 \$8,044 as of June 30, 2020 and \$7,576 as of December 31, 2019. These accruals are included in accrued liabilities and other non-current liabilities on 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 June 30, 2020 or December 31, 2019.

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, as well as related charges recorded in each period, were not material to our financial position, results of operations or liquidity during the periods presented, 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

In October 2018, our board of directors authorized the repurchase of up to \$500,000 of our common stock. This authorization has no expiration date. No shares were repurchased during the second quarter of 2020. During the first quarter of 2020, we repurchased 499 thousand shares for \$14,000. As of June 30, 2020, \$287,452 remained available for repurchase under the authorization.

NOTE 14: BUSINESS SEGMENT INFORMATION

For many years, we operated 3 reportable business segments: Small Business Services, Financial Services and Direct Checks. These segments were generally organized by customer type and reflected the way we managed the company. Effective January 1, 2020, we reorganized our reportable business segments to align with structural and management reporting changes in support of our growth strategy. We now operate 4 reportable segments, genrally organized by product type, as follows:

- Payments This segment includes our treasury management solutions, including remittance and lockbox processing, remote deposit capture, receivables management, payment processing and paperless treasury management, in addition to payroll and disbursement services, including Deluxe Payment Exchange and fraud and security services.
- Cloud Solutions This segment includes web hosting and design services, data-driven marketing solutions and hosted solutions, including digital engagement, logo design, financial institution profitability reporting, account switching tools and business incorporation services.
- Promotional Solutions This segment includes business forms, accessories, advertising specialties, promotional apparel, retail packaging and strategic sourcing services.
- Checks This segment includes printed personal and business checks.

The accounting policies of the segments are the same as those described in the Notes to Consolidated Financial Statements included in the 2019 Form 10-K. We allocate corporate costs for our shared services functions to our business segments when the costs are directly attributable to a segment. This includes certain sales and marketing, human resources, supply chain, real estate, finance, information technology and legal costs. Costs that are not directly attributable to a business segment are reported as Corporate operations and consist primarily of marketing, accounting, information technology, facilities, executive management and legal, tax and treasury costs that support the corporate function. Corporate operations also includes other income. All of our segments operate primarily in the U.S., with some operations in Canada. In addition, Cloud Solutions has operations in Australia and portions of Europe, as well as partners in Central and South America.

Under the new segment structure, our chief operating decision maker (i.e., our Chief Executive Officer) reviews earnings before interest, taxes, depreciation and amortization (EBITDA) on an adjusted basis for each segment when deciding how to allocate resources and to assess segment operating performance. Adjusted EBITDA for each segment excludes depreciation and amortization expense, interest expense, income tax expense and certain other amounts, which may include, from time to time: asset impairment charges; restructuring, integration and other costs; CEO transition costs; share-based compensation expense; acquisition transaction costs; certain legal-related expense; and gains or losses on sales of businesses and customer lists. Our Chief Executive Officer does not review segment asset information when making investment or operating decisions regarding our reportable business segments.

The following is our segment information for the quarters and six months ended June 30, 2020 and 2019. The segment information for 2019 has been revised to reflect our current segment structure.

	Quarter En	ded June 30,	Six Months I	Ended June 30,		
(in thousands)	2020	2019	2020	2019		
Payments:						
Revenue	\$ 72,171	\$ 64,104	\$ 149,211	\$ 129,254		
Adjusted EBITDA	15,583	17,972	33,606	34,838		
Cloud Solutions:						
Revenue	53,897	78,914	129,842	157,202		
Adjusted EBITDA	14,159	19,086	29,069	36,146		
Promotional Solutions:						
Revenue	117,946	155,545	260,739	311,374		
Adjusted EBITDA	13,854	22,288	25,051	45,878		
Checks:						
Revenue	166,391	195,423	357,036	395,221		
Adjusted EBITDA	82,724	99,871	173,438	202,105		
Total segment:						
Revenue	\$ 410,405	\$ 493,986	\$ 896,828	\$ 993,051		
Adjusted EBITDA	126,320	159,217	261,164	318,967		

The following table presents a reconciliation of total segment adjusted EBITDA to consolidated income (loss) before income taxes:

	Quarter End	led June	30,	Six Months E	Inded Jเ	ıne 30,
(in thousands)	2020		2019	2020		2019
Total segment adjusted EBITDA	\$ 126,320	\$	159,217	\$ 261,164	\$	318,967
Corporate operations	(42,502)		(41,732)	(94,011)		(87,774)
Depreciation and amortization	(26,663)		(32,517)	(55,093)		(64,936)
Interest expense	(6,171)		(9,239)	(13,171)		(18,540)
Pre-tax income attributable to non-controlling interest	26		_	26		_
Asset impairment charges	(4,883)		_	(95,213)		_
Restructuring, integration and other costs	(20,490)		(17,693)	(40,123)		(23,976)
CEO transition costs ⁽¹⁾	(190)		(1,906)	(10)		(7,394)
Share-based compensation expense	(5,477)		(5,369)	(9,095)		(8,660)
Acquisition transaction costs	_		(3)	(9)		(180)
Certain legal-related expenses	_		(6,005)	2,164		(6,417)
Loss on sales of customer lists	(18)		_	(18)		(99)
Income (loss) before income taxes	\$ 19,952	\$	44,753	\$ (43,389)	\$	100,991

⁽¹⁾ In 2019, includes adjustments to share-based compensation expense related to the modification of certain awards in conjunction with our CEO transition.

Total revenue

The following tables present revenue disaggregated by our product and service offerings. In conjunction with the realignment of our reportable segments on January 1, 2020, we refined the disaggregation of our revenue by product and service offering. As such, certain amounts reported in the prior year have been revised from previously reported amounts.

	 Quarter Ended June 30, 2020												
(in thousands)	Payments		Cloud Solutions		Promotional Solutions		Checks		Consolidated				
Checks	\$ _	\$	_	\$	_	\$	166,391	\$	166,391				
Forms and other products	_		_		75,431		_		75,431				
Marketing and promotional solutions	_		_		42,515		_		42,515				
Treasury management solutions	54,793		_		_		_		54,793				
Data-driven marketing solutions	_		19,422		_		_		19,422				
Web and hosted solutions	_		34,475		_		_		34,475				
Other payments solutions	17,378		_		_		_		17,378				

53,897

72,171

117,946

166,391

410,405

	Quarter Ended June 30, 2019											
(in thousands)	Payments		Cloud Solutions	Promotional Solutions				Consolidated				
Checks	\$ _	\$	_	\$	_	\$	195,423	\$	195,423			
Forms and other products	_		_		84,663		_		84,663			
Marketing and promotional solutions	_		_		70,882		_		70,882			
Treasury management solutions	45,475		_		_		_		45,475			
Data-driven marketing solutions	_		38,796		_		_		38,796			
Web and hosted solutions	_		40,118		_		_		40,118			
Other payments solutions	 18,629		_		_		_		18,629			
Total revenue	\$ 64,104	\$	78,914	\$	155,545	\$	195,423	\$	493,986			

	Six Months Ended June 30, 2020													
(in thousands)	Payments		Cloud Solutions	Pro	motional Solutions		Checks		Consolidated					
Checks	\$ _	\$	_	\$	_	\$	357,036	\$	357,036					
Forms and other products	_		_		157,243		_		157,243					
Marketing and promotional solutions	_		_		103,496		_		103,496					
Treasury management solutions	111,660		_		_		_		111,660					
Data-driven marketing solutions	_		58,419		_		_		58,419					
Web and hosted solutions	_		71,423		_		_		71,423					
Other payments solutions	37,551		_		_		_		37,551					
Total revenue	\$ 149,211	\$	129,842	\$	260,739	\$	357,036	\$	896,828					

Six Months Ended June 30, 2019

(in thousands)	Payments		Cloud Solutions	Solutions	Checks	Consolidated
Checks	\$ _	\$	_	\$ _	\$ 395,221	\$ 395,221
Forms and other products	_		_	171,369	_	171,369
Marketing and promotional solutions	_		_	140,005	_	140,005
Treasury management solutions	90,946		_	_	_	90,946
Data-driven marketing solutions	_		75,580	_	_	75,580
Web and hosted solutions	_		81,622	_	_	81,622
Other payments solutions	38,308		_	_	_	38,308
Total revenue	\$ 129,254	\$	157,202	\$ 311,374	\$ 395,221	\$ 993,051

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

Quarter Ended June 30, 2020

(in thousands)	Payments		Cloud Solutions		motional Solutions	Checks	Consolidated		
United States	\$	64,230	\$ 46,091	\$	113,757	\$ 161,801	\$	385,879	
Foreign, primarily Canada and Australia		7,941	7,806		4,189	4,590		24,526	
Total revenue	\$	72,171	\$ 53,897	\$	117,946	\$ 166,391	\$	410,405	

Quarter Ended June 30, 2019

(in thousands)	nds) Payments		Cloud Solutions	Promotional Solutions			Checks	Consolidated		
United States	\$	56,098	\$ 70,178	\$	148,290	\$	189,818	\$ 464,384		
Foreign, primarily Canada and Australia		8,006	8,736		7,255		5,605	29,602		
Total revenue	\$	64,104	\$ 78,914	\$	155,545	\$	195,423	\$ 493,986		

Six Months Ended June 30, 2020

				Promotional		
(in thousands)		Payments	Cloud Solutions	Solutions	Checks	Consolidated
United States	\$	132,588	\$ 114,161	\$ 250,570	\$ 346,096	\$ 843,415
Foreign, primarily Canada and Australia		16,623	 15,681	 10,169	10,940	 53,413
Total revenue	\$	149,211	\$ 129,842	\$ 260,739	\$ 357,036	\$ 896,828

Six Months Ended June 30, 2019

(in thousands)	Payments	Cloud Solutions	Promotional Solutions						
United States	\$ 113,042	\$ 139,629	\$ 297,713	\$	383,905	\$	934,289		
Foreign, primarily Canada and Australia	 16,212	17,573	 13,661		11,316		58,762		
Total revenue	\$ 129,254	\$ 157,202	\$ 311,374	\$	395,221	\$	993,051		

NOTE 15: RISKS AND UNCERTAINTIES

The impact on our business of the COVID-19 outbreak continues to evolve. As such, we are uncertain of the impact on our future financial condition, liquidity and results of operations. This uncertainty affected several of the assumptions made and estimates used in the preparation of these consolidated financial statements. As discussed in Note 7, the COVID-19 outbreak resulted in a goodwill impairment triggering event during the first quarter of 2020, as the adverse economic effects of the outbreak materially decreased demand for the products and services we provide to our customers, particularly through our Promotional Solutions and Cloud Solutions segments. The extent to which the outbreak will continue to impact our business depends on future developments, including the severity and duration of the outbreak, business and workforce disruptions and the ultimate number of businesses that fail. Our evaluation of asset impairment required us to make assumptions about these future events over the life of the assets being evaluated. This required significant judgment and actual results may differ significantly from our estimates. As a result of the continuing effects of COVID-19, we may be required to record additional goodwill or other asset impairment charges in the future.

We held loans and notes receivable from our Safeguard distributors of \$59,134 as of June 30, 2020. These distributors sell their products and services primarily to small businesses, which have been significantly impacted by the COVID-19 outbreak. As of June 30, 2020, our allowance for expected credit losses on these receivables was \$11,656, although the majority of this amount was not driven by impacts of the pandemic. We utilized all available information in determining this allowance, as well as allowances related to our trade accounts receivable and unbilled receivables. If our assumptions prove to be incorrect, we may be required to record additional bad debt expense in the future. Additionally, uncertainty surrounding the impact of the COVID-19 outbreak could affect estimates we made regarding inventory obsolescence and workers' compensation liabilities and thus, could result in additional expense in the future.

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 upcoming year;
- Consolidated Results of Operations; Restructuring, Integration and Other 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 most 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. Part I, Item 1A of our Annual Report on Form 10-K for the year ended December 31, 2019 (the 2019 Form 10-K) outlines known material risks and important information to consider when evaluating our forward-looking statements and is incorporated into this Item 2 of this report on Form 10-Q as if fully stated herein. Updates to the risk factors discussed in the 2019 Form 10-K are included in Part II, Item 1A of this report on Form 10-Q. 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. 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, investor presentations and in oral statements made by our representatives, they indicate forward-looking statements within the meaning of the Reform Act.

This MD&A includes financial information prepared in accordance with accounting principles generally accepted in the U.S. (GAAP). In addition, we discuss free cash flow, adjusted diluted earnings per share (EPS) and consolidated adjusted earnings before interest, taxes, depreciation and amortization (EBITDA), which are non-GAAP financial measures. We believe that these non-GAAP financial measures, when reviewed in conjunction with GAAP financial measures, can provide useful information to assist investors in analyzing our current period operating performance and in assessing our future period operating performance. For this reason, our internal management reporting also investors and shareholders to review our financial statements and publicly-filed reports in their entirety and not to rely on any single financial measure. Our non-GAAP financial measures may not be comparable to similarly titled measures used by

other companies and therefore, may not result in useful comparisons. The reconciliation of our non-GAAP financial measures to the most directly comparable GAAP financial measures can be found in Consolidated Results of Operations.

EXECUTIVE OVERVIEW

Realignment – For many years, we operated 3 reportable business segments: Small Business Services, Financial Services and Direct Checks. These segments were generally organized by customer type and reflected the way we managed the company. Effective January 1, 2020, we reorganized our reportable business segments to align with structural and management reporting changes in support of our growth strategy. We now operate 4 reportable segments: Payments, Cloud Solutions, Promotional Solutions and Checks. These segments are generally organized by product type and reflect the way we currently 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.

COVID-19 impact on 2020 results – The COVID-19 pandemic began to impact our operations late in the first quarter of 2020. During the second quarter of 2020, total revenue declined 16.9%, as compared to the second quarter of 2019. While revenue benefited from sales-driven growth during the quarter, it was not sufficient to overcome the impact of COVID-19. The pandemic primarily impacted revenue volumes in our Promotional Solutions, Checks and Cloud Solutions segments. Within Promotional Solutions, many of our business customers have been significantly impacted by the response to the outbreak. Demand for promotional products declined sharply, as our customers stopped virtually all promotional activities when they were forced to close or limit their operations, and as travel declined and events were canceled. In Checks, we saw a decline in business check usage in line with the slow down in the economy resulting from government-mandated shutdowns. Personal check volumes also slowed, but at a lesser rate. The impact in Cloud Solutions was primarily related to a decline in data-driven marketing solutions, as clients suspended their marketing campaigns. Partially offsetting the volume declines was new revenue of \$26.0 million during the second quarter of 2020 from sales of personal protective equipment (PPE) in our Promotional Solutions segment.

Our results for the second quarter of 2020 were better than we anticipated. The impact of COVID-19 on our revenue was most severe in April and began to improve through the remainder of the second quarter. Adjusted EBITDA margin for the second quarter of 2020 was 20.4%, consistent with the low-end of our annual expectations prior to the pandemic, and 330 basis points higher than the first quarter of 2020. As for our liquidity, we drew an additional \$238.0 million on our \$1.15 billion revolving credit facility in March 2020, we suspended share repurchases for the second quarter of 2020, and we plan to repurchase less stock in 2020 than in previous years. We also took steps to reduce discretionary spending and other expenditures in line with revenue declines. These steps included temporary salary reductions for all salaried employees, including our leadership team and board of directors, project delays, furloughs, and other actions. We also delayed U.S. federal income and payroll tax payments under the Coronavirus Aid, Relief and Economic Security (CARES) Act. As a result of these actions and our stronger than expected second quarter performance, free cash flow for the first half of 2020 was \$82.6 million, compared to \$72.8 million for the first half of 2019, and cash on hand grew \$61.8 million from March 31, 2020. This allowed us to end the temporary salary reduction, effective July 1, 2020, and to repay \$100.0 million of the amount drawn on our revolving credit facility during July 2020. Our financial priority is to maintain our financial strength, while simultaneously continuing our business transformation. While we reduced certain expenditures during the first half of 2020, we have made the decision to selectively resume certain capital projects and to continue important systems implementation work, including our enterprise resource planning and sales technology implementations. Also, in July 2020, our board of directors approved our regular quarterly dividend of \$0.30 per share, payable in September 2020.

We continue to monitor the impact of COVID-19 on all aspects of our business, including our operations, suppliers, customers, industry and workforce. We are keeping 2 primary goals in mind: protecting employees, customers and their respective families and continuing to serve the customers who rely on us. The situation surrounding COVID-19 remains fluid, and the potential for additional negative impacts on our results of operations, financial condition and liquidity increases the longer the virus impacts activity levels in the U.S. and the other countries in which we operate. During the first quarter of 2020, we successfully activated our business continuity plan to ensure uninterrupted operations and services. We have not experienced any significant interruptions in our supply chain to-date, and we currently do not expect significant future interruptions. Many of our facilities remain open and employees who have the ability to work from home continue to do so. During the second quarter, we continued to evaluate opportunities to consolidate our real estate footprint. Based on the success of our work-from-home model, we accelerated the closure of 20 of our facilities, some of which were closed during the second quarter of 2020, with most of the remainder expected to be closed by the end of the year.

2020 results vs. 2019 – Numerous factors drove the change in net loss for the first half of 2020, as compared to the first half of 2019. Factors that increased net loss included:

- asset impairment charges of \$95.2 million in the first half of 2020;
- the loss of revenue resulting from the impact of the COVID-19 outbreak;

- various investments of approximately \$25.0 million to advance our One Deluxe strategy, including costs related to onboarding new treasury management clients
 announced in the fourth guarter of 2019 and various information technology and sales investments;
- a \$16.1 million increase in restructuring, integration and other costs in support of our strategy and to increase our efficiency;
- · mix changes resulting from the continuing secular decline in checks and forms and the loss of web hosting revenue in the third quarter of 2019;
- bad debt expense of \$6.6 million related to notes receivable from our Safeguard distributors;
- incremental costs of approximately \$6.0 million resulting from our response to COVID-19, including a Hero Pay premium provided to employees working on-site
 during the second quarter of 2020, costs related to enabling employees to work from home and additional facility cleaning costs; and
- the change in our effective income tax rate, including the non-deductible portion of goodwill impairment charges.

Partially offsetting these increases in net loss were the following factors:

- actions taken to reduce costs in line with reduced revenues and the continuing evaluation of our cost structure, including savings of approximately \$15.0 million from
 the temporary salary reduction, suspension of the 401(k) plan employer matching contribution and furloughs;
- · a decrease in acquisition amortization of \$9.4 million, driven in part by asset impairment charges;
- · a decrease in legal-related costs of \$8.6 million;
- · non-recurring CEO transition costs of \$7.4 million in 2019; and
- revenue growth, including increased treasury management revenue, increases in certain data-driven marketing campaigns in the first quarter of 2020 prior to the COVID-19 outbreak, and new revenue from sales of PPE during the second quarter of 2020.

Diluted loss per share of \$1.10 for the first half of 2020, as compared to diluted EPS of \$1.68 for the first half of 2019, reflects the increase in net loss as described in the preceding paragraphs, partially offset by lower average shares outstanding in 2020. Adjusted diluted EPS for the first half of 2020 was \$2.24, compared to \$3.18 for the first half of 2019, and excludes the impact of non-cash items or items that we believe are not indicative of ongoing operations. A reconciliation of diluted earnings (loss) per share to adjusted diluted EPS can be found in *Consolidated Results of Operations*.

Asset impairment charges – Net loss for the first half of 2020 was driven primarily by the impact of pre-tax asset impairment charges of \$95.2 million, or \$1.42 per share. The impairment charges related primarily to the goodwill of our Promotional Solutions and Cloud Solutions Web Hosting reporting units, as well as amortizable intangibles of our Cloud Solutions Web Hosting reporting unit. Further information regarding these impairment 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.

"One Deluxe" Strategy

A detailed discussion of our strategy can be found in Part I, Item 1 of the 2019 Form 10-K. In support of our strategy, we are investing significant resources to build out our technology platforms. This includes sales technology that enables a single view of our customers, thereby providing for deeper cross-sell opportunities. We implemented a human capital management system in January 2020, and we are also investing in our financial tools, including an enterprise resource planning system and a financial planning and analysis system. Strategically, we believe these enhancements will allow us to better assess and manage our business at the total company level and will make it easier for us to quickly integrate any future acquisitions. While we reduced certain expenditures in the near-term during the COVID-19 outbreak, we plan to continue investing in these initiatives.

Effective January 1, 2020, we began managing the company based on our product and service offerings, focusing on our 4 new business segments: Payments, Cloud Solutions, Promotional Solutions and Checks. We expect to reinvest free cash flow into the 2 areas we view as our primary platforms for growth: Payments and Cloud Solutions. Realignments such as this take time, considerable senior management effort, material "buy-in" from employees and significant investment. We continue to make progress on our transformation and many of our investments are beginning to deliver positive results. During the first 2 months of 2020, prior to the COVID-19 outbreak, we were on track to deliver consolidated sales-driven revenue growth. Even during the pandemic, treasury management revenue grew over 22% for the first half of 2020, as compared to the first half of 2019. Despite the pandemic, we continue to execute sales contracts and drive successful tele-sales efforts. We were able to quickly enter the

PPE market and generated revenue of approximately \$26.0 million in our Promotional Solutions segment during the second quarter of 2020. In Cloud Solutions, we entered into a partnership to provide our small business customers with advisory and tax preparation services, as well as assistance with online applications for government funds through CARES Act programs. While still early in our transformation, we are finding that our new One Deluxe structure is able to quickly respond to our customers' needs and drive profitable revenue growth.

Outlook for 2020

Due to the significant uncertainties surrounding the current business environment, we are not providing detailed financial guidance at this time. We currently anticipate a slight improvement in revenue in the second half of the year, as compared to the second quarter decline of 16.9%, unless there are worsening economic impacts. We anticipate that our Payments segment will generate year-over-year revenue growth, driven by new client wins and some increase in demand for its services as more customers look for digital payment and receivables management solutions during and we expect, after the COVID-19 pandemic. We anticipate modest margin compression for the Payments segment, due to significant onboarding costs for new clients and delays in some customer initiatives until 2021 as a result of the pandemic. In Cloud Solutions, we anticipate continued revenue declines, with modest recovery later in the year as our customers prepare to launch their marketing campaigns in 2021. Our Promotional Solutions segment is experiencing the largest revenue decline of all of our segments. It will continue to be negatively impacted during the economic downturn, the extent of which will depend on the post COVID-19 impact on both small businesses and our enterprise customers, including the number of businesses that close and when our customers resume purchasing promotional products at previous levels. Within our Checks segment, we currently expect that check volume and the associated revenue will partially track with the recovery in the macro economy in the second half of 2020 and ultimately return to traditional secular decline trends in 2021.

In response to the pandemic, we took actions to manage expenses in line with revenue declines, including temporary salary reductions for all salaried employees, including our leadership team and board of directors, project delays, furloughs and other actions. Based on our second quarter results, we ended the temporary salary reduction, effective July 1. Furloughs continue in certain facilities that lack product demand to remain open. In late June, we exited approximately 250 employees as we look to our post-COVID-19 operating model and to match our expected future volumes, along with efficiencies gained. Also during the second quarter of 2020, we announced the closing of 20 facilities, some of which were closed during the second quarter of 2020, with most of the remainder expected to be closed by the end of the year. These facilities contain primarily sales and administrative functions and most of the impacted employees will convert to a work-from-home model. We anticipate annual savings of approximately \$6.0 million from these facility closures, once they are complete.

We held cash and cash equivalents of \$372.0 million as of June 30, 2020. In July 2020, we repaid \$100.0 million of the amount drawn on our revolving credit facility. This amount remains available to us for borrowing, with \$1.04 billion drawn on the facility after this repayment. Our credit facility includes an accordion feature allowing us, subject to lender consent, to expand the facility to \$1.425 billion. We anticipate that we will continue to pay our regular quarterly dividend. However, dividends are approved by our board of directors each quarter and thus, are subject to change. We anticipate that net cash generated by operations, along with the cash and cash equivalents on hand and availability on our credit facility, will be sufficient to support our operations and to meet our financial commitments for the next 12 months. We were in compliance with our debt covenants as of June 30, 2020, and we anticipate that we will remain in compliance with our debt covenants throughout the next 12 months.

CONSOLIDATED RESULTS OF OPERATIONS

Consolidated Revenue

	(Quarte	r Ended June 30),	Six Months Ended June 30,							
(in thousands)	2020		2019	Change	2020		2019	Change				
Total revenue	\$ 410.405	\$	493.986	(16.9%)	\$ 896.828	\$	993.051	(9.7%)				

The decreases in total revenue for the second quarter and first half of 2020, as compared to the same periods in 2019, were driven primarily by volume declines resulting from the impact of the COVID-19 outbreak, primarily in our Promotional Solutions, Checks and Cloud Solutions segments. In addition, revenue continued to be impacted by the secular decline in order volume for checks and forms. Cloud Solutions web hosting revenue also declined due to our decision in the third quarter of 2019 to exit certain customer contracts, the loss of certain large customers in the third quarter of 2019 as they elected to in-source some of the services we provide, and previous underinvestment in this business. These decreases in revenue were partially offset by \$26.0 million of new revenue from sales of PPE in our Promotional Solutions segment during the second quarter of 2020 and an increase in treasury management revenue within our Payments segment of 20.5% for the second quarter of 2020 and 22.8% for the first half of 2020, related primarily to lockbox processing outsourcing wins in the fourth quarter of 2019. In addition, for the first half of 2020, revenue benefited from new data-driven marketing campaigns and growth in pay-for-performance marketing campaigns in our Cloud Solutions segment, prior to the impact of the COVID-19 outbreak.

Service revenue represented 32.0% of total revenue for the first half of 2020 and 29.8% for the first half of 2019. We do not manage our business based on product versus service revenue. Instead, we analyze our revenue based on the product and service offerings shown under the caption: "Note 14: Business Segment Information" in the Condensed Notes to Unaudited Consolidated Financial Statements appearing in Item 1 of this report. Our revenue mix by business segment was as follows:

		r Ended e 30,	Six Months Ended June 30,		
	2020	2019	2020	2019	
Payments	17.6%	13.0%	16.6%	13.0%	
Cloud Solutions	13.1%	16.0%	14.5%	15.8%	
Promotional Solutions	28.7%	31.5%	29.1%	31.4%	
Checks	40.6%	39.5%	39.8%	39.8%	
Total revenue	100.0%	100.0%	100.0%	100.0%	

Consolidated Cost of Revenue

	(Quarte	r Ended June 30,		Six Months Ended June 30,					
(in thousands)	2020		2019	Change	2020		2019	Change		
Total cost of revenue	\$ 162,283	\$	202,528	(19.9%)	\$ 364,332	\$	402,151	(9.4%)		
Total cost of revenue as a percentage of										
total revenue	39.5%		41.0%	(1.5) pts.	40.6%		40.5%	0.1 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 decreases in total cost of revenue for the second quarter and first half of 2020, as compared to the same periods in 2019, were primarily attributable to the decrease in revenue volume resulting from the COVID-19 impact. In addition, cost of revenue decreased as a result of the continued secular decline in checks and forms and changes in client mix in the Cloud Solutions segment. Benefits from cost reductions and efficiencies in our fulfillment area, unrelated to the COVID-19 outbreak, reduced cost of revenue approximately \$2.0 million for the second quarter of 2020 and \$4.0 million for the first half of 2020, while actions taken to reduce costs in response to COVID-19 reduced cost of revenue approximately \$3.0 million in each period. Partially offsetting these decreases in cost of revenue were costs related to the \$26.0 million of new revenue from PPE sales in the second quarter of 2020, costs related to new treasury management clients announced in the fourth quarter of 2019 and incremental costs resulting from COVID-19 of approximately \$4.0 million in each period. Total cost of revenue as a percentage of total revenue decreased for the second quarter of 2020, as compared to the second quarter of 2019, due, in large part, to the change in revenue mix driven by the loss of lower margin revenue resulting from COVID-19. For the first half of 2020, the positive impact of the change in mix driven by COVID-19 was offset by costs related to the new treasury management clients.

Consolidated Selling, General & Administrative (SG&A) Expense

	C	Quarte	r Ended June 30,		Six Months Ended June 30,					
(in thousands)	2020		2019	Change	2020		2019	Change		
SG&A expense	\$ 198,570	\$	222,292	(10.7%)	\$ 435,774	\$	452,469	(3.7%)		
SG&A expense as a percentage of total										
revenue	48.4%		45.0%	3.4 pts.	48.6%		45.6%	3.0 pts.		

The decreases in SG&A expense for the second quarter and first half of 2020, as compared to the same periods in 2019, were driven by lower commissions in both periods on the lower order volume resulting from COVID-19, as well as the benefit of approximately \$12.0 million in both periods from organizational actions taken in response to COVID-19, including the temporary salary reduction and the suspension of the 401(k) plan employer matching contribution. Also lowering SG&A expense were various cost reductions, unrelated to COVID-19. These decreases in SG&A expense were partially offset by investments of approximately \$10.0 million for the second quarter of 2020 and \$25.0 million for the first half of 2020, in support of our One Deluxe strategy. These costs related to onboarding our new treasury management clients announced in the fourth quarter of 2019 and various consulting and sales force expenses related to activities such as transforming our brand and our website and expanding our sales capabilities, as well as ongoing new costs related to software-as-a-service solutions we are employing throughout the company. In addition, we incurred commission expense related to new revenue from the sales of PPE during the second quarter of 2020. During the first half of 2020, we also recorded bad debt expense of \$6.6 million in our Promotional

Solutions segment related to notes receivable from our Safeguard distributors, primarily one distributor that was underperforming prior to the COVID-19 outbreak.

In addition to the above factors, SG&A expense was also impacted by changes in the following items:

		Qι	ıarter Ended	June 30	0,		Six Months Ended June 30,					
(in thousands)	2020		2019			Change		2020		2019		Change
Acquisition amortization (SG&A portion)	\$ 10	,674	\$ 15	,949	\$	(5,275)	\$	21,339	\$	32,051	\$	(10,712)
Legal-related costs		_	6	,005		(6,005)		(2,164)		6,417		(8,581)
CEO transition costs		190	1	,906		(1,716)		10		7,394		(7,384)

Restructuring and Integration Expense

	(Quarte	r Ended June	30,		Six	Mon	ths Ended Jun	e 30,	
(in thousands)	2020		2019		Change	2020		2019		Change
Restructuring and integration expense	\$ 20.354	\$	17.342	\$	3.012	\$ 38.008	\$	22.834	\$	15.174

Restructuring and integration expense increased for the second quarter and first half of 2020, as compared to the same periods in 2019, as we are currently pursuing several initiatives designed to focus our business behind our growth strategy and to increase our efficiency. Further information can be found under *Restructuring*, *Integration and Other Costs*.

Asset Impairment Charges

	(Quarte	r Ended J	une 30,		Six	k Mon	ths Ende	d June 3	30,
(in thousands)	2020		2019		Change	2020		2019		Change
Asset impairment charges	\$ 4.883	\$		— \$	4,883	\$ 95.213	\$		_ 9	95.213

During the second quarter of 2020, we recorded pre-tax asset impairment charges of \$4.9 million, resulting from the rationalization of our real estate footprint. During the first quarter of 2020, we recorded pre-tax asset impairment charges of \$90.3 million related primarily to the goodwill of our Promotional Solutions and Cloud Solutions Web Hosting reporting units, as well as amortizable intangibles of our Cloud Solutions Web Hosting reporting unit. 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.

Interest Expense

	C	(uarter	Ended June 30,	Six	Six Months Ended June 30,				
(in thousands)	2020		2019	Change		2020	2019		Change
Interest expense	\$ 6,171	\$	9,239	(33.2%)	\$	13,171	\$	18,540	(29.0%)
Weighted-average debt outstanding	1,140,000		934,187	22.0%		1,034,198		935,378	10.6%
Weighted-average interest rate	1.9%		3.8%	(1.9) pts.		2.3%		3.8%	(1.5) pts.

The decreases in interest expense for the second quarter and first half of 2020, as compared to the same periods in 2019, were primarily driven by our lower weighted-average interest rate in 2020.

Income Tax Provision

	(Quarter	Ended June 30,		Six	Six Months Ended June 30,				
(in thousands)	2020		2019	Change	2020		2019	Change		
Income tax provision	\$ 5,074	\$	12,171	(58.3%)	\$ 1,864	\$	27,219	(93.2%)		
Effective income tax rate	25.4%		27.2%	(1.8) pts.	(4.3%)		27.0%	(31.3) pts.		

The decrease in our effective tax rate for the second quarter of 2020, as compared to the second quarter of 2019, was due primarily to lower expense related to the tax impacts of share-based compensation.

Although our effective income tax rate decreased for the first half of 2020, as compared to the first half of 2019, this had a negative impact on our income tax provision due to the pre-tax loss resulting from the asset impairment charges recorded during 2020. The non-deductible portion of goodwill impairment charges resulted in an 27.4 point decrease in our tax rate and the tax

impact of share-based compensation resulted in a 4.5 point decrease, as compared to the first half of 2019. Further information regarding our effective income tax rate for the first half of 2020, as compared to our 2019 annual effective income tax rate, 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.

Diluted Earnings (Loss) Per Share

	Quarter Ended June 30,					Six Months Ended June 30,					
	2020		2019	Change		2020		2019	Change		
Diluted earnings (loss) per share	\$ 0.35	\$	0.75	(53.3%)	\$	(1.10)	\$	1.68	(165.5%)		
Adjusted diluted EPS ⁽¹⁾	1.15		1.64	(29.9%)		2.24		3.18	(29.6%)		

(1) See the following Reconciliation of Non-GAAP Financial Measures section, which illustrates how we calculate adjusted diluted EPS.

The decrease in diluted EPS for the second quarter of 2020, as compared to the second quarter of 2019, was driven primarily by the impact of the COVID-19 outbreak, the continuing secular decline in checks and forms, the loss of web hosting revenue in the third quarter of 2019 and various investments in our One Deluxe strategy. In addition, we recorded asset impairment charges of \$4.9 million during the second quarter of 2020. These decreases in diluted EPS were partially offset by savings of approximately \$15.0 million from actions taken in response to COVID-19, a \$6.0 million decrease in legal-related costs, various cost reductions unrelated to COVID-19, primarily in our sales, marketing and fufilment organizations, and a \$5.2 million decrease in acquisition amortization, driven by asset impairment charges. Also, interest expense decreased \$3.1 million due to lower interest rates and average shares outstanding was lower in the second quarter of 2020.

The change in diluted loss per share for the first half of 2020, as compared to the first half of 2019, was driven by the factors outlined in *Executive Overview – 2020* results vs. 2019. In addition, average shares outstanding was lower in the first half of 2020.

Adjusted EBITDA

	(Quarte	r Ended June 30,	ı	Six Months Ended June 30,					
(in thousands)	2020		2019	Change		2020		2019	Change	
Adjusted EBITDA ⁽¹⁾	\$ 83,818	\$	117,485	(28.7%)	\$	167,153	\$	231,193	(27.7%)	
Adjusted EBITDA margin	20.4%		23.8%	(3.4) pts.		18.6%		23.3%	(4.7) pts.	

(1) See the following Reconciliation of Non-GAAP Financial Measures section, which illustrates how we calculate adjusted EBITDA.

Adjusted EBITDA decreased for the second quarter and first half of 2020, as compared to the same periods in 2019, driven primarily by the impact of the COVID-19 outbreak. In addition, adjusted EBITDA was negatively impacted by mix changes resulting from the contraction of legacy products and services, primarily checks and forms, and the loss of web hosting revenue in the third quarter of 2019. During both periods, we also continued to advance our transformation in line with our One Deluxe strategy by investing in various consulting and sales force expenses related to activities such as transforming our brand and our website and expanding our sales capabilities, as well as ongoing new costs related to software-as-a-service solutions we are employing throughout the company. We also incurred expenses related to onboarding new treasury management clients announced in the fourth quarter of 2019. Additionally, during the first half of 2020, we recorded bad debt expense of \$6.6 million related to notes receivable from our Safeguard distributors, and we incurred incremental costs resulting from COVID-19 of approximately \$6.0 million in each period. These decreases in adjusted EBITDA were partially offset by actions taken to reduce costs in line with the reduced revenue, including savings of approximately \$15.0 million from the temporary salary reduction, suspension of the 401(k) plan employer matching contribution and furloughs. In addition, we realized the benefit of various cost reductions unrelated to COVID-19, primarily in our sales. marketing and fulfillment organizations.

Reconciliation of Non-GAAP Financial Measures

Free cash flow — We believe that free cash flow is an important indicator of cash available for debt service and for shareholders, after making capital investments to maintain or expand our asset base. Free cash flow is limited and not all of our free cash flow is available for discretionary spending, as we may have mandatory debt payments and other cash requirements that must be deducted from our cash available for future use. We believe that the measure of free cash flow provides an additional metric to compare cash generated by operations on a consistent basis and to provide insight into the cash flow available to fund items such as share repurchases, dividends, mandatory and discretionary debt reduction and acquisitions or other strategic investments.

Net cash provided by operating activities reconciles to free cash flow as follows:

Six	Months	Ended	June	30

(in thousands)	2020	2019		
Net cash provided by operating activities	\$ 109,649	\$	105,104	
Purchases of capital assets	(27,085)		(32,344)	
Free cash flow	\$ 82,564	\$	72,760	

Adjusted diluted EPS – By excluding the impact of non-cash items or items that we believe are not indicative of ongoing operations, we believe that adjusted diluted EPS provides useful comparable information to assist in analyzing our current period operating performance and in assessing our future operating performance. As such, adjusted diluted EPS is one of the key financial performance metrics we use to assess the operating results and performance of the business and to identify strategies to improve performance. It is reasonable to expect that one or more of the excluded items will occur in future periods, but the amounts recognized may vary significantly.

Diluted earnings (loss) per share reconciles to adjusted diluted EPS as follows:

	Quarter Er	nded June 30,	Six Months Ended June 30,			
(in thousands)	2020	2019	2020	2019		
Net income (loss)	\$ 14,878	\$ 32,582	\$ (45,253)	\$ 73,772		
Net income attributable to non-controlling interest	(19)	_	(19)	_		
Net income (loss) attributable to Deluxe	14,859	32,582	(45,272)	73,772		
Asset impairment charges	4,883	_	95,213	_		
Acquisition amortization	13,689	18,852	28,413	37,857		
Restructuring, integration and other costs	20,490	17,693	40,123	23,976		
CEO transition costs ⁽¹⁾	190	1,906	10	7,394		
Share-based compensation	5,477	5,369	9,095	8,660		
Acquisition transaction costs	_	3	9	180		
Certain legal-related expense	_	6,005	(2,164)	6,417		
Loss on sales of customer lists	18	_	18	99		
Adjustments, pre-tax	44,747	49,828	170,717	84,583		
Income tax provision impact of pre-tax adjustments(2)	(11,168)	(10,958)	(30,344)	(18,843)		
Adjustments, net of tax	33,579	38,870	140,373	65,740		
Adjusted net income attributable to Deluxe	48,438	71,452	95,101	139,512		
Income allocated to participating securities	_	(23)	(77)	(130)		
Re-measurement of share-based awards classified as liabilities	(76)	(44)	(863)	(44)		
Adjusted income attributable to Deluxe available to common shareholders	\$ 48,362	\$ 71,385	\$ 94,161	\$ 139,338		
GAAP diluted earnings (loss) per share	\$ 0.35	\$ 0.75	\$ (1.10)	\$ 1.68		
Adjustments, net of tax	0.80	0.89	3.34	1.50		
Adjusted diluted EPS ⁽³⁾	\$ 1.15	\$ 1.64	\$ 2.24	\$ 3.18		

⁽¹⁾ In 2019, includes adjustments to share-based compensation expense related to the modification of certain awards in conjunction with our CEO transition.

Adjusted EBITDA – We believe that adjusted EBITDA is useful in evaluating our operating performance, as the calculation eliminates the effect of interest expense, income taxes, the accounting effects of capital investments (i.e., depreciation and

⁽²⁾ The tax effect of the pre-tax adjustments considers the tax treatment and related tax rate(s) that apply to each adjustment in the applicable tax jurisdiction(s). Generally, this results in a tax impact that approximates the U.S. effective tax rate for each adjustment. However, the tax impact of certain adjustments, such as asset impairment charges, share-based compensation expense and CEO transition costs, depends on whether the amounts are deductible in the respective tax jurisdictions and the applicable effective tax rate(s) in those jurisdictions.

⁽⁹⁾ The total of weighted-average shares and potential common shares outstanding used in the calculation of adjusted diluted EPS for the first half of 2020 was 132 thousand shares higher than that used in the GAAP diluted loss per share calculation. Because of the net loss for the first half of 2020, the GAAP calculation excluded a higher number of share-based compensation awards because their effect would have been antidilutive.

amortization) and certain items, as presented below, that may vary for companies for reasons unrelated to overall operating performance. In addition, management utilizes adjusted EBITDA to assess the operating results and performance of the business, to perform analytical comparisons and to identify strategies to improve performance. We also believe that an increasing adjusted EBITDA depicts an increase in the value of the company. We do not consider adjusted EBITDA to be a measure of cash flow, as it does not consider certain cash requirements such as interest, income taxes, debt service payments or capital investments.

Net income (loss) reconciles to adjusted EBITDA as follows:

	Quarter Er	nded June 30,	Six Months Ended June 30,			
(in thousands)	2020	2019	2020	2019		
Net income (loss)	\$ 14,878	\$ 32,582	\$ (45,253)	\$ 73,772		
Pre-tax income attributable to non-controlling interest	(26)	_	(26)	_		
Depreciation and amortization expense	26,663	32,517	55,093	64,936		
Interest expense	6,171	9,239	13,171	18,540		
Income tax provision	5,074	12,171	1,864	27,219		
Asset impairment charges	4,883	_	95,213	_		
Restructuring, integration and other costs	20,490	17,693	40,123	23,976		
CEO transition costs ⁽¹⁾	190	1,906	10	7,394		
Share-based compensation expense	5,477	5,369	9,095	8,660		
Acquisition transaction costs	_	3	9	180		
Certain legal-related expense	_	6,005	(2,164)	6,417		
Loss on sales of customer lists	18	_	18	99		
Adjusted EBITDA	\$ 83,818	\$ 117,485	\$ 167,153	\$ 231,193		

⁽¹⁾ In 2019, includes adjustments to share-based compensation expense related to the modification of certain awards in conjunction with our CEO transition.

RESTRUCTURING, INTEGRATION AND OTHER COSTS

Restructuring and integration expense consists of costs related to the consolidation and migration of certain applications and processes, including our financial, sales and human resources management systems. It also includes costs related to the integration of acquired businesses into our systems and processes. These costs primarily consist of information technology consulting, project management services and internal labor, as well as other miscellaneous costs associated with our initiatives, such as training, travel and relocation. In addition, we recorded employee severance costs related to these initiatives, as well as our ongoing cost reduction initiatives, across functional areas. Our restructuring and integration activities increased in 2020, as we are currently pursuing several initiatives designed to focus our business behind our growth strategy and to increase our efficiency. Further information regarding restructuring and integration expense can be found under the caption "Note 8: Restructuring and Integration Expense" in the Condensed Notes to Unaudited Consolidated Financial Statements appearing in Item 1 of this report. In addition to restructuring and integration expense, we also recognized certain business transformation costs related to optimizing our business processes in line with our growth strategies. While we reduced certain expenditures during the first half of 2020 in response to the COVID-19 outbreak, in July 2020, we made the decision to selectively resume certain capital projects and to continue important systems implementation work.

The majority of the employee reductions included in our restructuring and integration accruals are expected to be completed in the third quarter of 2020, and we expect most of the related severance payments to be paid by the end of 2020. As a result of our employee reductions, we expect to realize cost savings of approximately \$17.0 million in SG&A expense and \$3.0 million in total cost of revenue in 2020, in comparison to our 2019 results of operations. This represents a portion of the total net cost reductions we expect to realize in 2020.

SEGMENT RESULTS

For many years, we operated 3 reportable business segments: Small Business Services, Financial Services and Direct Checks. These segments were generally organized by customer type and reflected the way we managed the company. Effective January 1, 2020, we reorganized our reportable business segments to align with structural and management reporting changes in support of our growth strategy. We now operate 4 reportable segments: Payments, Cloud Solutions, Promotional Solutions

and Checks. These segments are generally organized by product type and reflect the way we currently manage the company. The financial information presented below for our reportable business segments is consistent with that presented under the caption "Note 14: Business Segment Information" in the Condensed Notes to Unaudited Consolidated Financial Statements appearing in Item 1 of this report, where information regarding our product and service offerings can also be found.

Payments

Results for our Payments segment were as follows:

	Quarter Ended June 30,					Six Months Ended June 30,				
(in thousands)	2020		2019	Change	2020		2019		Change	
Total revenue	\$ 72,171	\$	64,104	12.6%	\$	149,211	\$	129,254	15.4%	
Adjusted EBITDA	15,583		17,972	(13.3%)		33,606		34,838	(3.5%)	
Adjusted EBITDA margin	21.6%		28.0%	(6.4) pts.		22.5%		27.0%	(4.5) pts.	

The increases in total revenue for the second quarter and first half of 2020, as compared to the same periods in 2019, were driven by an increase in treasury management revenue of 20.5% for the second quarter of 2020 and 22.8% for the first half of 2020, primarily related to lockbox processing outsourcing wins in the fourth quarter of 2019. Partially offsetting these increases was a decrease in payroll services revenue driven by the impact of COVID-19.

The decreases in adjusted EBITDA for the second quarter and first half of 2020, as compared to the same periods in 2019, were driven by increased costs in support of our One Deluxe strategy, including costs related to onboarding our new treasury management clients and investments in our client operations area. Partially offsetting these decreases was the revenue generated by the lockbox processing outsourcing wins in the fourth quarter of 2019. The impact of COVID-19 on this segment was minimal, as our Hero Pay premium and the lost revenue were offset by actions taken to reduce costs in response to the pandemic. Adjusted EBITDA margin decreased for both periods as a result of the investments in our One Deluxe strategy.

Cloud Solutions

Results for our Cloud Solutions segment were as follows:

	Quarter Ended June 30,					Six Months Ended June 30,				
(in thousands)		2020		2019	Change	2020		2019	Change	
Total revenue	\$	53,897	\$	78,914	(31.7%)	\$ 129,842	\$	157,202	(17.4%)	
Adjusted EBITDA		14,159		19,086	(25.8%)	29,069		36,146	(19.6%)	
Adjusted EBITDA margin		26.3%		24.2%	2.1 pts.	22.4%		23.0%	(0.6) pts.	

The decreases in total revenue for the second quarter and first half of 2020, as compared to the same periods in 2019, were driven by the impact of the COVID-19 outbreak, primarily in data-driven marketing solutions as clients suspended their marketing campaigns, with some impact on web hosting revenue. In addition, web hosting revenue declined due to our decision in the third quarter of 2019 to exit certain customer contracts, the loss of certain large customers in the third quarter of 2019 as they elected to in-source some of the services we provide, and previous underinvestment in this business. For the first half of 2020, data-driven marketing revenue increased approximately \$7.0 million in the first quarter of 2020, prior to the COVID-19 outbreak, driven by new campaigns and growth in pay-for-performance marketing campaigns.

The decreases in Adjusted EBITDA for the second quarter and first half of 2020, as compared to the same periods in 2019, were primarily due to the impact of COVID-19, increased information technology costs in support of our One Deluxe strategy and the loss of web hosting and data-driven marketing revenue related to the events that occurred in the third quarter of 2019. Partially offsetting these declines in adjusted EBITDA were various cost reductions unrelated to COVID-19, primarily sales and marketing costs, and the benefit of actions taken in response to COVID-19. For the first half of 2020, adjusted EBITDA also benefited from the increase in data-driven marketing revenue in the first quarter, prior to the COVID-19 outbreak. Adjusted EBITDA margin increased for the second quarter of 2020, as compared to the second quarter of 2019, as the cost reductions outpaced the revenue decline and revenue mix was favorable. Adjusted EBITDA margin for the first half of 2020, as compared to the first half of 2019, declined slightly due to the mix of data-driven marketing campaigns in the first quarter of 2020.

Promotional Solutions

Results for our Promotional Solutions segment were as follows:

	Quarter Ended June 30,					Six Months Ended June 30,				
(in thousands)	2020		2019	Change	2020		2019		Change	
Total revenue	\$ 117,946	\$	155,545	(24.2%)	\$	260,739	\$	311,374	(16.3%)	
Adjusted EBITDA	13,854		22,288	(37.8%)		25,051		45,878	(45.4%)	
Adjusted EBITDA margin	11.7%		14.3%	(2.6) pts.		9.6%		14.7%	(5.1) pts.	

The decreases in total revenue for the second quarter and first half of 2020, as compared to the same periods in 2019, were driven primarily by the impact of the COVID-19 outbreak as our small business and enterprise customers struggle in the current economic environment and demand for promotional products declined sharply, as our customers stopped virtually all promotional activities in response to the outbreak. Partially offsetting the volume decline was \$26.0 million of new revenue from sales of PPE in the second quarter of 2020. The continuing secular decline in business forms and some accessories also negatively impacted revenue in each period.

The decreases in Adjusted EBITDA for the second quarter and first half of 2020, as compared to the same periods in 2019, were primarily driven by the impact of COVID-19, investments in support of our One Deluxe strategy, primarily information technology and sales force expenses, and the continuing secular decline in forms and some accessories. In addition, we recorded bad debt expense of \$6.6 million in the first half of 2020, related to notes receivable from our Safeguard distributors, primarily one that was underperforming prior to the COVID-19 outbreak. These decreases in adjusted EBITDA were partially offset by various cost reductions unrelated to COVID-19, primarily sales, marketing and fulfillment costs, the benefit of actions taken in response to COVID-19 and the sales of PPE in the second quarter of 2020,

Chacks

Results for our Checks segment were as follows:

	Quarter Ended June 30,					Six Months Ended June 30,				
(in thousands)	2020		2019	Change		2020		2019	Change	
Total revenue	\$ 166,391	\$	195,423	(14.9%)	\$	357,036	\$	395,221	(9.7%)	
Adjusted EBITDA	82,724		99,871	(17.2%)		173,438		202,105	(14.2%)	
Adjusted EBITDA margin	49.7%		51.1%	(1.4) pts.		48.6%		51.1%	(2.5) pts.	

The decreases in total revenue for the second quarter and first half of 2020, as compared to the same periods in 2019, were driven primarily by the impact of the COVID-19 outbreak, which resulted in a decline in business check usage in line with the slow down in the economy resulting from government-mandated shutdowns. Personal check volumes also slowed, but at a lesser rate. The continuing secular decline in checks also contributed to the decrease.

The decreases in Adjusted EBITDA for the second quarter and first half of 2020, as compared to the same periods in 2019, were driven by the impact of COVID-19 and the secular decline in checks, as well as investments in support of our One Deluxe strategy, primarily information technology and sales force expenses. Partially offsetting these decreases in adjusted EBITDA were various cost reductions unrelated to COVID-19, primarily sales, marketing and fulfillment costs, and the benefit of actions taken in response to COVID-19

CASH FLOWS AND LIQUIDITY

As of June 30, 2020, we held cash and cash equivalents of \$372.0 million, as well as restricted cash and restricted cash equivalents included in funds held for customers of \$66.4 million. The following table shows our cash flow activity for the six months ended June 30, 2020 and 2019, and should be read in conjunction with the consolidated statements of cash flows appearing in Item 1 of this report.

Civ	Months	Endod	luna	30

(in thousands)	2020	2019	Change
Net cash provided by operating activities	\$ 109,649	\$ 105,104	\$ 4,545
Net cash used by investing activities	(25,248)	(32,800)	7,552
Net cash (used) provided by financing activities	185,610	(77,501)	263,111
Effect of exchange rate change on cash, cash equivalents, restricted cash and restricted cash			
equivalents	(6,490)	3,996	(10,486)
Net change in cash, cash equivalents, restricted cash and restricted cash equivalents	\$ 263,521	\$ (1,201)	\$ 264,722

To maintain liquidity as we were impacted by COVID-19, we took steps to reduce discretionary spending and other expenditures in line with revenue declines. These steps included temporary salary reductions for all salaried employees, including our leadership team and board of directors, project delays, furloughs and other actions. We also delayed U.S. federal income and payroll tax payments under the CARES Act. As a result of these actions and our strong second quarter performance, free cash flow for the first half of 2020 was \$82.6 million, as compared to \$72.8 million for the first half of 2019, and cash on hand grew \$61.8 million from March 31, 2020. This allowed us to end the temporary salary reduction, effective July 1, 2020, and to repay \$100.0 million of the amount drawn on our revolving credit facility during July 2020.

Net cash provided by operating activities increased \$4.5 million for the first half of 2020, as compared to the first half of 2019, despite the pressure on our cash flow resulting from the revenue decline caused by COVID-19 and the continuing secular decline in checks and forms. Also, during the first half of 2020, we continued investments in support of our One Deluxe strategy, including restructuring and integration expenses. These decreases in operating cash flow were more than offset by delays in U.S. federal income and payroll tax payments allowed under the CARES Act, which resulted in a \$32.7 million reduction in income tax payments and a \$5.0 million reduction in payroll tax payments, as compared to 2019. Additionally, operating cash flow benefited from the actions we took in response to COVID-19, such as the temporary salary reduction and other actions.

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

Six Months Ended June 30,

(in thousands)	2020	2019	Change
Performance-based compensation payments ⁽¹⁾	\$ 20,777	\$ 23,363	\$ (2,586)
Prepaid product discount payments	15,806	16,182	(376)
Interest payments	12,263	17,916	(5,653)
Severance payments	7,625	3,655	3,970
Income tax payments	5,530	38,204	(32,674)

 $[\]ensuremath{^{(1)}}$ Amounts reflect compensation based on total company performance.

Net cash used by investing activities for the first half of 2020 was \$7.6 million lower than the first half of 2019, driven primarily by a reduction in capital purchases of \$5.3 million, partly due to project delays in response to COVID-19.

Net cash provided by financing activities for the first half of 2020 was \$263.1 million higher than the first half of 2019, due primarily to a net increase in borrowings on long-term debt of \$215.5 million and a decrease in common share repurchases of \$64.9 million. In March 2020, in response to the COVID-19 outbreak, we drew an additional \$238.0 million on our \$1.15 billion revolving credit facility. We suspended our share repurchase program for the second quarter of 2020, and we plan to repurchase less stock in 2020 than in previous years. These increases in cash provided by financing activities were partially offset by a net change in customer funds obligations of \$20.7 million.

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

Siv	Months	Ended.	luna 30

(in thousands)	2020	2019	Change	
Net change in debt	\$ 256,500	\$ 41,000	\$	215,500
Net change in customer funds obligations	(31,351)	(10,677)		(20,674)
Purchases of capital assets	(27,085)	(32,344)		5,259
Cash dividends paid to shareholders	(25,464)	(26,253)		789
Payments for common shares repurchased	(14,000)	(78,896)		64,896

As of June 30, 2020, our foreign subsidiaries held cash and cash equivalents of \$80.8 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 U.S. at one time, we estimate we would incur a foreign withholding tax liability of approximately \$4.0 million.

After the repayment of \$100.0 million on our revolving credit facility in July 2020, \$104.6 million was available for borrowing. Our credit facility includes an accordion feature allowing us, subject to lender consent, to expand the facility to \$1.425 billion. We anticipate that net cash generated by operations, along with the cash and cash equivalents on hand and availability on our credit facility, will be sufficient to support our operations and to meet our financial commitments for the next 12 months. We anticipate that we will continue to pay our regular quarterly dividend. However, dividends are approved by our board of directors each quarter and thus, are subject to change.

CAPITAL RESOURCES

Our total debt was \$1,140.0 million as of June 30, 2020, an increase of \$256.5 million from December 31, 2019, as we drew an additional \$238.0 million on our line of credit in response to the COVID-19 outbreak. 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. In response to COVID-19, we took several steps to preserve our financial condition and liquidity. As a result of these actions and our stronger than expected second quarter performance, cash on hand grew \$61.8 million from March 31, 2020, and in July 2020, we repaid \$100.0 million of the amount drawn on our revolving credit facility. Further information regarding the actions taken in response to COVID-19 can be found in *Cash Flows and Liquidity*.

Our capital structure for each period was as follows:

		June	30, 2020		Decemb			
(in thousands)		Amount	Weighted- average interest rate	Amount		Weighted- average interest rate		Change
Fixed interest rate ⁽¹⁾	\$	200,000	3.3%	\$	200,000	3.2%	\$	
Floating interest rate		940,000	1.6%		683,500	3.0%		256,500
Total debt		1,140,000	1.9%		883,500	3.0%		256,500
Shareholders' equity		485,338			570,861			(85,523)
Total capital	\$	1,625,338		\$	1,454,361		\$	170,977

⁽¹⁾ The fixed interest rate amount represents the amount drawn under our revolving credit facility that is subject to an interest rate swap agreement. The related interest rate includes the fixed rate under the swap of 1.798% plus the credit facility spread due on all amounts outstanding under the credit facility agreement.

In October 2018, our board of directors authorized the repurchase of up to \$500.0 million of our common stock. This authorization has no expiration date. No shares were repurchased during the second quarter of 2020. During the first quarter of 2020, we repurchased 0.5 million shares for \$14.0 million. As of June 30, 2020, \$287.5 million remained available for repurchase under the authorization. In March 2020, we suspended our share repurchase program for the second quarter of 2020, in response to COVID-19, and we plan to repurchase less stock in 2020 than in previous years. Information regarding changes in shareholders' equity can be found in the consolidated statements of shareholders' equity appearing in Item 1 of this report.

As of June 30, 2020, the total availability under our revolving credit facility was \$1.15 billion. The facility includes an accordion feature allowing us, subject to lender consent, to increase the credit commitment to an aggregate amount not exceeding \$1.425 billion. The credit facility matures in March 2023. Our quarterly commitment fee ranges from 0.175% to 0.35%, based on our leverage ratio.

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. Additionally, the agreement contains customary representations and warranties including, as a condition to borrowing, that all such representations and warranties are true and correct in all material respects on the date of the borrowing, including representations as to no material adverse change in our business, assets, operations or financial condition. We were in compliance with all debt covenants as of June 30, 2020, and we anticipate that we will remain in compliance with our debt covenants throughout the next 12 months.

The following shows amounts available for borrowing under our revolving credit facility as of June 30, 2020. In July 2020, we repaid \$100.0 million of the amount drawn on our revolving credit facility. This abount remains available to us for borrowing.

(in thousands)	Total available
Revolving credit facility commitment	\$ 1,150,000
Amount drawn on revolving credit facility	(1,140,000)
Outstanding letters of credit ⁽¹⁾	(5,428)
Net available for borrowing as of June 30, 2020	\$ 4,572

⁽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 and Cash Flow Information" 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 that are recorded upon contract execution and are generally amortized on the straight-line basis as reductions of revenue over the related contract term. Changes in prepaid product discounts during the six months ended June 30, 2020 and 2019 can be found under the caption "Note 3: Supplemental Balance Sheet and Cash Flow Information" in the Condensed Notes to Unaudited Consolidated Financial Statements appearing in Item 1 of this report. Cash payments for prepaid product discounts were \$15.8 million for the first half of 2020 and \$16.2 million for the first half of 2019.

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 on the consolidated balance sheets. These accruals were \$8.8 million as of June 30, 2020 and \$14.7 million as of December 31, 2019. Accruals for prepaid product discount payments included in other non-current liabilities on the consolidated balance sheets were \$0.4 million as of June 30, 2020 and \$3.7 million as of December 31, 2019.

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 indemnifications 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 fees 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. These liabilities were not significant as of June 30, 2020 or December 31, 2019. Further information regarding our 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 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 half of 2020 or during 2019.

A table of our contractual obligations was provided in the MD&A section of the 2019 Form 10-K. With the exception of the \$256.5 million increase in the amount drawn under our revolving credit facility, as discussed in *Capital Resources*, there were no significant changes in these obligations during the first half of 2020.

CRITICAL ACCOUNTING POLICIES

A description of our critical accounting policies was provided in the MD&A section of the 2019 Form 10-K. There were no changes in these policies during the first half of 2020.

Goodwill impairment analyses – Our policy on impairment of goodwill and indefinite-lived intangibles, which is included under the caption "Note 1: Significant Accounting Policies" in the Notes to Consolidated Financial Statements appearing in the 2019 Form 10-K, explains our methodology for assessing impairment of these assets.

Effective January 1, 2020, we reorganized our reportable business segments to align with structural and management reporting changes in support of our growth strategy. As a result, we reassessed our previously determined reporting units and concluded that a realignment of our reporting units was required. We analyzed goodwill for impairment immediately prior to this realignment by performing a qualitative analysis for all of our reporting units, with the exception of our Direct-to-Consumer reporting unit, which is part of our new Checks reportable business segment. 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 last quantitative analyses we completed. 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 of our Direct-to-Consumer reporting unit indicated that its fair value exceeded its carrying value by approximately \$35.0 million, or 26% above its carrying value.

In completing the realignment of our reporting units, we reallocated the carrying value of goodwill to our new reporting units based on their relative fair values. Immediately subsequent to the realignment, we completed a quantitative analysis for the reporting units that changed as a result of the realignment. This quantitative analysis, as of January 1, 2020, indicated that the estimated fair values of our reporting units exceeded their carrying values by approximate amounts between \$37.0 million and \$954.0 million, or by amounts between 121% and 189% above the carrying values of their net assets.

On January 30, 2020, the World Health Organization (WHO) announced a global health emergency due to an outbreak of COVID-19 originating in Wuhan, China and the risks to the international community as the virus spread globally beyond its point of origin. In March 2020, the WHO classified the COVID-19 outbreak as a pandemic, based on the rapid increase in exposure globally. Following the pandemic designation, we observed a decline in the market valuation of our common shares and we determined that the global response to the outbreak negatively impacted our estimates of expected future cash flows. After our consideration of economic, market and industry conditions, cost factors, the overall financial performance of our reporting units and the last quantitative analyses we completed, we concluded that a triggering event had occurred for 2 of our reporting units. As such, we completed quantitative goodwill impairment analyses for our Promotional Solutions and Cloud Solutions Web Hosting reporting units as of March 31, 2020. Our analyses indicated that the goodwill of our Promotional Solutions reporting unit

was partially impaired and the goodwill of our Cloud Solutions Web Hosting reporting unit was fully impaired. As such, we recorded goodwill impairment charges of \$63.4 million and \$4.3 million, respectively. The impairment charges were measured as the amount by which the reporting units' carrying values exceeded their estimated fair values, limited to the carrying amount of goodwill. After the impairment charges, \$62.8 million of goodwill remained in the Promotional Solutions reporting unit as of the measurement date.

Our impairment analyses were based on assumptions made using the best information available at the time, including the performance of our reporting units subsequent to the WHO declaration of a pandemic and available economic forecasts. These assumptions anticipated a sharp decline in gross domestic product and a material decline in the number of small businesses. We have not yet experienced the full impact of the pandemic or its resulting impact on our small business customers. The sweeping nature of the pandemic makes it extremely difficult to predict how our business and operations will be affected in the longer term. To the extent our assumptions differ from actual events, we may be required to record additional asset impairment charges.

Our impairment assessments are sensitive to changes in forecasted revenues and expenses, as well as our selected discount rate. For the Promotional Solutions reporting unit, holding all other assumptions constant, if we assumed revenue in each year was 10% higher than we estimated, our goodwill impairment charge would have been approximately \$18.0 million less, and if we assumed revenue in each year was 10% lower than we estimated, our goodwill impairment charge would have been approximately \$18.0 million more. If we assumed our expenses, as a percentage of revenue, were 100 basis points lower in each year, our goodwill impairment charge would have been approximately \$39.0 million less, and if we assumed our expenses, as a percentage of revenue, were 100 basis points higher in each year, our goodwill impairment charge would have been approximately \$39.0 million more. If we assumed our selected discount rate of 12% was 100 basis points lower, our goodwill impairment charge would have been approximately \$21.0 million less, and if we assumed the discount rate was 100 basis points higher, our goodwill impairment charge would have been approximately \$17.0 million more.

In the case of the Cloud Solutions Web Hosting reporting unit, holding all other assumptions constant, if we assumed revenue in each year was 10% higher than we estimated, our impairment charges, including the impairment of amortizable intangibles, would have been approximately \$1.0 million less. If we assumed our expenses, as a percentage of revenue, were 100 basis points lower in each year, our impairment charges, including the impairment of amortizable intangibles, would have been approximately \$9.0 million less, and if we assumed our selected discount rate of 9% was 100 basis points lower, our impairment charges, including the impairment of amortizable intangibles, would have been approximately \$1.0 million less.

Risks and uncertainties – The full impact of the COVID-19 outbreak continues to evolve. As such, we are uncertain of the full impact the pandemic will have on our financial condition, liquidity and results of operations. This uncertainty affected several of the assumptions made and estimates used in the preparation of our 2020 consolidated financial statements. Further information can be found under the caption "Note 15: Risks and Uncertainties" in the Condensed Notes to Unaudited Consolidated Financial Statements appearing in Item 1 of this report.

New accounting pronouncements – Information regarding the accounting pronouncements adopted during the first half of 2020 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 June 30, 2020, our total debt was comprised of \$1.14 billion drawn under our revolving credit facility at a weighted-average interest rate of 1.9%. The interest rate on the majority of the amount drawn under our revolving credit facility is variable and reflects current market rates. As such, the related carrying amount reported on the consolidated balance sheets approximates fair value. Amounts drawn on our revolving credit facility mature in March 2023.

As part of our interest rate risk management strategy, in July 2019, we entered into an interest rate swap, which we designated as a cash flow hedge, to mitigate variability in interest payments on a portion of the amount drawn under our revolving credit facility. The interest rate swap, which terminates in March 2023 when our revolving credit facility matures, effectively converts \$200.0 million of variable rate debt to a fixed rate of 1.798%. Changes in the fair value of the interest rate swap are recorded in accumulated other comprehensive loss on the consolidated balance sheets and are subsequently reclassified to interest expense as interest payments are made on the variable-rate debt. The fair value of the interest rate swap was \$8.6 million as of June 30, 2020 and \$1.5 million as of December 31, 2019 and was included in other non-current liabilities on the consolidated balance sheets.

Based on the daily average amount of outstanding debt, a one percentage point change in our weighted-average interest rates would have resulted in a \$5.2 million change in interest expense for the first half of 2020.

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, June 30, 2020 (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 June 30, 2020 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II - OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

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 2019 Form 10-K. There have been no significant changes to these risk factors since we filed the 2019 Form 10-K, except for the item discussed here.

The impact of COVID-19 has adversely affected, and is expected to continue to adversely affect, our business, financial condition and results of operations.

The COVID-19 pandemic began to impact our operations late in the first quarter of 2020. The sweeping nature of the pandemic makes it extremely difficult to predict how our business and operations will be affected in the longer term. Consistent with various state and federal orders, we were able to designate portions of our business as "essential." As such, many of our facilities remained open during government-mandated shut-downs. We successfully activated our business continuity plan to ensure uninterrupted operations and services, while keeping our facilities safe for our employees, customers and communities. Under this plan, employees who have the ability to work from home continue to do so, which poses additional cybersecurity and data security risk. Certain of our facilities remain closed and we may close additional facilities, as necessary, to protect the health of our employees, as a result of disruptions in the operation of our supply chain or in response to a prolonged decrease in demand for our products and services.

Because the current economic environment is significantly impacting small businesses, we are closely monitoring the breadth and depth of small business closures and bankruptcies, changes in the level of small business optimism, lending to

small and mid-sized businesses and the general functioning of the credit markets, adoption of government stimulus and other economic programs, consumer unemployment levels and changes in consumer spending patterns. We cannot predict the pace at which these factors will improve or the impact a prolonged downturn in the economy will have on our business, financial condition and results of operations. Although we anticipate that our data-driven marketing revenue will improve late in the year as our customers resume their marketing campaigns and that the decline in our checks volume will return to more normal levels in 2021, we can provide no assurance that these assumptions are accurate.

We also incurred, and may continue to incur, additional costs as we respond to the pandemic, including, but not limited to, costs incurred to implement operational changes allowing social distancing, costs related to employees who are not working during the pandemic, a Hero Pay premium provided to employees working on-site, overtime pay as required and costs associated with additional cleaning and disinfecting of our facilities.

All of these circumstance negatively impact our liquidity. In response, in March 2020, we drew an additional \$238.0 million on our \$1.15 billion revolving credit facility, we suspended our share repurchase program for the second quarter of 2020 and we took additional steps to reduce discretionary spending and other expenditures in line with revenue declines. These steps included temporary salary reductions for all salaried employees, including our leadership team and board of directors, project delays, furloughs and other actions. We also delayed U.S. federal income and payroll tax payments under the Coronavirus Aid, Relief and Economic Security (CARES) Act. We continue to monitor the situation closely, including impacts on our operations, suppliers, customers, industry and workforce, and if conditions deteriorate, we may implement further measures to provide additional financial flexibility and to improve our cash position and liquidity.

If demand for our products and services further deteriorates or does not return to normal levels in the longer term, we may be required to pursue additional sources of financing to meet our financial obligations. Our credit facility includes an accordion feature allowing us, subject to lender consent, to expand the facility to \$1.425 billion, and we believe we could also currently access the capital markets. However, such financing is not guaranteed and is largely dependent on market conditions and other factors that exist at the time we seek to access such financing. Further actions may be required to improve our cash position, including but not limited to, implementing further employee furloughs and/or workforce reductions, or foregoing additional capital expenditures and other discretionary expenses. Dividends are approved by our board of directors each quarter and thus, are subject to change.

The situation surrounding COVID-19 remains fluid and the potential for a material impact on our results of operations, financial condition and liquidity increases the longer the virus impacts activity levels in the U.S. and the other countries in which we operate. For this reason, we cannot reasonably estimate with any degree of certainty the future impact COVID-19 may have on our results of operations, financial position or liquidity. The extent to which the COVID-19 pandemic impacts our business depends on future developments, many of which are beyond our control, such as, the severity and duration of the outbreak, business and workforce disruptions and the effectiveness of actions taken to contain and treat the disease. We may not have yet experienced the full impact of the pandemic or its resulting impact on our customers. Our revenue may not immediately recover with an improvement in macro-economic conditions and may require new business formations and/or the expansion of sales to our existing customers.

In completing asset impairment analyses during the first quarter of 2020, we were required to make assumptions using the best information available at the time, including the performance of our reporting units subsequent to the declaration of a pandemic and available economic forecasts. These assumptions anticipated a sharp decline in gross domestic product and a material decline in the number of small businesses. To the extent our assumptions differ from actual events, we may be required to record additional asset impairment charges.

Other cascading effects of the COVID-19 pandemic that are not currently foreseeable could materially increase our costs, negatively impact our revenue and adversely impact our results of operations and liquidity, possibly to a significant degree. We cannot predict the severity or duration of any such impacts. The COVID-19 pandemic could have the effect of heightening many of the other risks described in Item 1A of the 2019 10-K, including, without limitation, those related to the success of our strategy, our ability to attract and retain customers, competition, the rate of decline for checks and business forms, our ability to reduce costs, risks of cybersecurity breaches, interruptions to our website operations or information technology systems, the ability of third-party providers to perform and potential litigation. Risks related to the preparation of our consolidated financial statements are addressed under the caption: "Note 15: Risks and Uncertainties" in the Condensed Notes to Unaudited Consolidated Financial Statements appearing in Item 1 of this report.

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

In October 2018, our board of directors authorized the repurchase of up to \$500.0 million of our common stock. This authorization has no expiration date. No shares were repurchased during the second quarter of 2020 and \$287.5 million remained available for repurchase as of June 30, 2020.

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 second quarter of 2020, we withheld 44,884 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

None.

ITEM 6. EXHIBITS

Exhibit Number	Description
31.1	CEO Certification of Periodic Report pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2	CFO Certification of Periodic Report pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.1	CEO and CFO Certification of Periodic Report pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (furnished)
101.INS	XBRL Instance Document – the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	XBRL Taxonomy Extension Label Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document
104	Cover page interactive data file (formatted as Inline XBRL and contained in Exhibit 101)

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)

/s/ Barry C. McCarthy

Barry C. McCarthy President and Chief Executive Officer (Principal Executive Officer)

/s/ Keith A. Bush

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

/s/ Ronald Van Houwelingen

Ronald Van Houwelingen Vice President, Corporate Controller (Principal Accounting Officer)

Date: July 31, 2020

Date: July 31, 2020

Date: July 31, 2020

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

- I, Barry C. McCarthy, President and 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: July 31, 2020 /s/ Barry C. McCarthy

Barry C. McCarthy

President and 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: July 31, 2020 /s/ Keith A. Bush

Keith A. Bush

Senior Vice President, Chief Financial Officer

CEO AND CFO CERTIFICATION OF PERIODIC REPORT

We, Barry C. McCarthy, President and 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 June 30, 2020 (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: July 31, 2020

/s/ Barry C. McCarthy

Barry C. McCarthy

President and Chief Executive Officer

/s/ Keith A. Bush

Keith A. Bush

Senior Vice President, Chief Financial Officer