ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following is a discussion and analysis of our financial condition and results of operations as of, and for, the periods presented. You should read the following discussion and analysis of our financial condition and results of operations together with our unaudited condensed consolidated financial statements and notes thereto included elsewhere in report and in conjunction with our audited consolidated financial statements and notes thereto for the year ended December 31, 2019, in our Annual Report on Form 10-K for the year ended December 31, 2019, filed with the Securities and Exchange Commission ("SEC") on February 28, 2020 (our "2019 Form 10-K"). This discussion and analysis contains forward-looking statements, including statement regarding industry outlook, our expectations for the future of our business, and our liquidity and capital resources as well as other non-historical statements. These statements are based on current expectations and are subject to numerous risks and uncertainties, including but not limited to the risks and uncertainties described in Part II, Item 1A, "Risk Factors" and "Cautionary Note Regarding Forward-Looking Statements." Our actual results may differ materially from those contained in or implied by these forward-looking statements. Any reference to a "Note" in this discussion relates to the accompanying notes to the unaudited condensed consolidated financial statements included elsewhere in this report unless otherwise indicated.

Overview

Ceridian is a global human capital management ("HCM") software company. We categorize our solutions into two categories: Cloud and Bureau solutions. Cloud revenue is generated from HCM solutions that are delivered via two cloud offerings: Dayforce, our flagship cloud HCM platform, and Powerpay, a cloud HR and payroll solution for the Canadian small business market. We also continue to support customers using our Bureau solutions, which we generally stopped actively selling to new customers following the acquisition of Dayforce in 2012. Revenue from our Cloud and Bureau solutions include an allocation of investment income generated from holding customer funds in trust before funds are remitted to taxing authorities, also referred to as float revenue or float. We invest in maintenance and necessary updates to support our Bureau customers and continue to migrate them to Dayforce.

Dayforce provides HR, payroll, benefits, workforce management, and talent management functionality. Our platform is used by organizations, regardless of industry or size, to optimize management of the entire employee lifecycle, including attracting, engaging, paying, deploying, and developing their people. Dayforce was built as a single application from the ground up that combines a modern, consumer-grade user experience with proprietary application architecture, including a single employee record and a rules engine spanning all areas of HCM. Dayforce provides continuous real-time calculations across all modules to enable, for example, payroll administrators access to data through the entire pay period, and managers access to real-time data to optimize work schedules. Our platform is designed to make work life better for our customers and their employees by improving HCM decision-making processes, streamlining workflows, revealing strategic organizational insights, and simplifying legislative compliance. The platform is designed to ease administrative work for both employees and managers, creating opportunities for companies to increase employee engagement. We are a founder-led organization, and our culture combines the agility and innovation of a start-up with a history of deep domain and operational expertise.

In 2020, we launched the Dayforce Wallet, which gives our customers' employees greater control over their financial well-being by providing them with instant access to their earnings. This on-demand pay feature allows employees more choice over when they get paid by making any day payday. Dayforce Wallet enables workers to access their already-earned wages anytime during the pay period, net of taxes, withholdings and other payroll deductions. Leveraging Dayforce's continuous pay calculations, Dayforce Wallet processes a same-day payroll each time a worker requests their pay. The solution is compliant with federal, state, and local remittances and requires no changes to payroll processing including the funding, timing, and close-out of pay.

We sell Dayforce through our direct sales force on a subscription per-employee, per-month ("PEPM") basis. Our subscriptions are typically structured with an initial fixed term of between three and five years, with evergreen renewal thereafter. Dayforce can serve customers of all sizes, ranging from 100 to over 100,000 employees. We have rapidly grown the Dayforce platform to 4,704 live Dayforce customers as of September 30, 2020. For the three and nine months ended September 30, 2020, we added 101 and 341 net new live Dayforce customers, respectively.

Our Business Model

Our business model focuses on supporting the rapid growth of Dayforce and maximizing the lifetime value of our Dayforce customer relationships. Due to our subscription model, where we recognize subscription revenues ratably over the term of the subscription period, and high customer retention rates, we have historically had a high level of visibility into our future revenues. The profitability of a customer depends, in large part, on how long they have been a customer. Because in our current business model, PEPM subscription fees are not charged until the customer goes live, and because we incur costs in advance of receiving PEPM revenue that are not offset by our implementation fees, we estimate that it takes approximately two years before we are able to recover our implementation, customer acquisition, and other direct costs on a new Dayforce customer contract.

Over the lifetime of the customer relationship, we have the opportunity to realize additional PEPM revenue, both as the customer grows or rolls out the Dayforce solution to additional employees, and also by selling additional functionality to existing customers that do not currently utilize our full platform. We also incur costs to manage the account, to retain customers, and to sell additional functionality. These costs, however, are significantly less than the costs initially incurred to acquire and to implement the customer.

COVID-19 Pandemic

In March 2020, the World Health Organization declared the outbreak of coronavirus (COVID-19) to be a pandemic. The global spread of the COVID-19 pandemic has created significant global volatility, uncertainty, and economic disruption. We have experienced and may continue to experience curtailed customer demand, primarily as a result of declining employment levels at our customers in certain sectors, such as retail and hospitality, as well as lower customer utilization of professional services and customer delays in implementation services, due to the effects of the COVID-19 pandemic. Additionally, the federal funds rate cuts by the U.S. Federal Reserve and the overnight rate target by the Bank of Canada have had and will continue to have negative effects on our float revenue. The broader implications of the pandemic on our results of operations and overall financial performance remain uncertain. Please refer to the Results of Operations section below for further discussion of the financial impacts of the COVID-19 pandemic during the three and nine months ended September 30, 2020. Please refer to Part II, Item 1A Risk Factors for further discussion of the potential impact of the pandemic on our business.

How We Assess Our Performance

In assessing our performance, we consider a variety of performance indicators in addition to revenue and net income. Set forth below is a description of our key performance measures.

Live Dayforce Customers

We use the number of customers live on Dayforce as an indicator of future revenue and the overall performance of the business and to assess the performance of our implementation services. We had 4,704 customers live on Dayforce as of September 30, 2020, compared to 4,169 customers live on Dayforce as of September 30, 2019.

Constant Currency Revenue

We present revenue on a constant currency basis to assess how our underlying business performed, excluding the effect of foreign currency rate fluctuations. We believe this non-GAAP financial measure is useful to management and investors. We have calculated revenue on a constant currency basis by applying the average foreign exchange rate in effect during the comparable prior period.

Adjusted EBITDA and Adjusted EBITDA margin

We believe that Adjusted EBITDA and Adjusted EBITDA margin, non-GAAP financial measures, are useful to management and investors as supplemental measures to evaluate our overall operating performance. Adjusted EBITDA and Adjusted EBITDA margin are components of our management incentive plan and are used by management to assess performance and to compare our operating performance to our competitors. We define Adjusted EBITDA as net income or loss before interest, taxes, depreciation, and amortization, as adjusted to exclude gain (loss) on assets and liabilities held in a foreign currency other than the functional currency of a company subsidiary, share-based compensation expense and related employer taxes, severance charges, restructuring consulting fees, and certain other non-recurring charges. Adjusted EBITDA margin is determined by calculating the percentage that Adjusted EBITDA is of total revenue. Management believes that Adjusted EBITDA and Adjusted EBITDA margin are helpful in highlighting management performance trends because Adjusted EBITDA and Adjusted EBITDA margin exclude the results of decisions that are outside the normal course of our business operations. Please refer to the “Results of Operations” section below for a discussion of Adjusted EBITDA and Adjusted EBITDA margin.

Results of Operations

Three Months Ended September 30, 2020 Compared With Three Months Ended September 30, 2019

	Three Months Ended September 30,		Increase/ (Decrease)		% of Revenue	
	2020	2019	Amount	%	2020	2019
	(Dollars in millions)					
Revenue:						
Recurring services						
Cloud	$ 141.3	$ 131.0	$ 10.3	7.9%	69.1%	64.8%
Bureau	26.8	36.4	(9.6)	(26.4)%	13.1%	18.0%
Total recurring services	168.1	167.4	0.7	0.4%	82.2%	82.7%
Professional services and other	36.3	34.9	1.4	4.0%	17.8%	17.3%
Total revenue	204.4	202.3	2.1	1.0%	100.0%	100.0%
Cost of revenue:						
Recurring services						
Cloud	41.8	39.0	2.8	7.2%	20.5%	19.3%
Bureau	12.5	10.4	2.1	20.2%	6.1%	5.1%
Total recurring services	54.3	49.4	4.9	9.9%	26.6%	24.4%
Professional services and other	40.2	37.6	2.6	6.9%	19.7%	18.6%
Product development and management	22.9	17.5	5.4	30.9%	11.2%	8.7%
Depreciation and amortization	10.3	9.0	1.3	14.4%	5.0%	4.4%
Total cost of revenue	127.7	113.5	14.2	12.5%	62.5%	56.1%
Gross profit	76.7	88.8	(12.1)	(13.6)%	37.5%	43.9%
Selling, general, and administrative	77.3	82.3	(5.0)	(6.1)%	37.8%	40.7%
Operating (loss) profit	(0.6)	6.5	(7.1)	(109.2)%	(0.3)%	3.2%
Interest expense, net	5.9	7.8	(1.9)	(24.4)%	2.9%	3.9%
Other (income) expense, net	(0.2)	1.6	(1.8)	(112.5)%	(0.1)%	0.8%
Loss before income taxes	(6.3)	(2.9)	(3.4)	(117.2)%	(3.1)%	(1.4)%
Income tax benefit	(5.5)	(65.6)	60.1	91.6%	(2.7)%	(32.4)%
Net (loss) income	$ (0.8)	$ 62.7	$ (63.5)	(101.3)%	(0.4)%	31.0%
Adjusted EBITDA (a)	$ 33.2	$ 46.4	$ (13.2)	(28.4)%	16.2%	22.9%
Adjusted EBITDA margin (a)	16.2%	22.9%	(6.7)%	(29.3)%		

(a) Please refer to the "Non-GAAP Measures" section for a discussion and reconciliation of Adjusted EBITDA and Adjusted EBITDA margin, non-GAAP financial measures.

Revenue. The following table sets forth certain information regarding our revenues for the three months ended September 30, 2020, compared with the three months ended September 30, 2019.

	Three Months Ended September 30, 2020	Three Months Ended September 30, 2019	Percentage change in revenue as reported 2020 vs. 2019	Impact of changes in foreign currency (a)	Percentage change in revenue on constant currency basis (a) 2020 vs. 2019
	(Dollars in millions)				
Revenue:					
Dayforce recurring services, excluding float	$ 115.1	$ 97.6	17.9%	(—)%	17.9%
Dayforce float	7.6	11.8	(35.6)%	(—)%	(35.6)%
Total Dayforce recurring services	122.7	109.4	12.2%	(—)%	12.2%
Powerpay recurring services, excluding float	16.7	18.6	(10.2)%	(0.5)%	(9.7)%
Powerpay float	1.9	3.0	(36.7)%	(—)%	(36.7)%
Total Powerpay recurring services	18.6	21.6	(13.9)%	(0.5)%	(13.4)%
Total Cloud recurring services	141.3	131.0	7.9%	(—)%	7.9%
Dayforce professional services and other	35.1	34.3	2.3%	(—)%	2.3%
Powerpay professional services and other	0.3	0.2	50.0%	(—)%	50.0%
Total Cloud professional services and other	35.4	34.5	2.6%	(—)%	2.6%
Total Cloud revenue	176.7	165.5	6.8%	(—)%	6.8%
Bureau recurring services, excluding float	25.7	32.9	(21.9)%	(—)%	(21.9)%
Bureau float	1.1	3.5	(68.6)%	(—)%	(68.6)%
Total Bureau recurring services	26.8	36.4	(26.4)%	(—)%	(26.4)%
Bureau professional services and other	0.9	0.4	125.0%	(—)%	125.0%
Total Bureau revenue	27.7	36.8	(24.7)%	(—)%	(24.7)%
Total revenue	$ 204.4	$ 202.3	1.0%	(0.1)%	1.1%
Dayforce	$ 157.8	$ 143.7	9.8%	(—)%	9.8%
Powerpay	18.9	21.8	(13.3)%	(0.5)%	(12.8)%
Total Cloud revenue	$ 176.7	$ 165.5	6.8%	(—)%	6.8%
Dayforce, excluding float	$ 150.2	$ 131.9	13.9%	(—)%	13.9%
Powerpay, excluding float	17.0	18.8	(9.6)%	(0.6)%	(9.0)%
Cloud revenue, excluding float	167.2	150.7	10.9%	(0.1)%	11.0%
Cloud float	9.5	14.8	(35.8)%	(—)%	(35.8)%
Total Cloud revenue	$ 176.7	$ 165.5	6.8%	(—)%	6.8%

(a) We have calculated revenue on a constant currency basis by applying the average foreign exchange rate in effect during the comparable prior period.

Total revenue increased $2.1 million, or 1.0%, to $204.4 million for the three months ended September 30, 2020, compared to $202.3 million for the three months ended September 30, 2019. This increase was primarily attributable to an increase in Cloud revenue of $11.2 million, or 6.8%, from $165.5 million for the three months ended September 30, 2019, to $176.7 million for the three months ended September 30, 2020. The increase in Cloud revenue was partially offset by a decline in Bureau revenue of $9.1 million, or 24.7%. The Cloud revenue increase was driven by an increase of $10.3 million, or 7.9%, in Cloud recurring services revenue, and $0.9 million, or 2.6%, in Cloud professional services and other revenue. The increase in Cloud recurring services revenue of $10.3 million was due to $10.5 million from new customers, add-ons, and revenue uplift from migrations of Bureau customers, net of customer losses and $5.1 million from the migration of Bureau customers, partially offset by a $5.3 million decline in float revenue related to Cloud recurring services revenue.

The COVID-19 pandemic has had an adverse impact on our revenue streams during the three months ended September 30, 2020, primarily in the form of lower employment levels at our customers, lower float revenue resulting from reductions in the U.S. Federal Reserve federal funds rate and the Bank of Canada overnight rate target, lower average float balances for our customer trust funds, lower demand for professional services, and customer delays in implementation services, among other effects. We estimate the impact of lower employment levels at our customers was an approximately $10 million decline to our revenue for the three months ended September 30, 2020, of which approximately $8 million was related to Dayforce and approximately $2 million was related to Powerpay. In addition, we estimate the impact to float revenue was approximately $6 million for the three months ended September 30, 2020. Of the approximately $6 million impact on float revenue, approximately $4 million was due to rate reductions during the first quarter of 2020, and approximately $2 million was due to lower average float balances for our customer trust funds.

Cloud revenue was $176.7 million for the three months ended September 30, 2020, an increase of $11.2 million, or 6.8%, compared to the three months ended September 30, 2019. Dayforce revenue increased 9.8%, and Powerpay revenue declined 13.3% for the three months ended September 30, 2020, as compared to the three months ended September 30, 2019. Powerpay is designed primarily for small market Canadian customers, which typically have fewer than 20 employees, and these customers have been more adversely affected by the COVID-19 pandemic than larger Dayforce customers. Our new business sales to Dayforce and Powerpay customers comprised approximately 54% of our increase in Cloud revenue for the three months ended September 30, 2020, and approximately 46% consisted of customer migrations to Dayforce from our Bureau solutions. The percentage of new business sales compared to customer migrations was adversely affected by the impact of the COVID-19 pandemic on our revenues, as our new business sales to Dayforce and Powerpay customers comprised approximately 85% of our increase in Cloud revenue for the three months ended September 30, 2019, and approximately 15% consisted of customer migrations to Dayforce from our Bureau solutions.

The decrease of new business sales from the comparable period, which comprised approximately 85% of our increase in Cloud revenue, was due to the adverse effect of the COVID-19 pandemic on our revenues. As we migrate our Bureau customers to Dayforce, we typically experience a revenue increase from such customers, driven by increased product density on the Dayforce platform.

Bureau revenue declined $9.1 million, or 24.7%, for the three months ended September 30, 2020, which included approximately $7 million of Excelity revenue. Of the $9.1 million decline, approximately 56% was attributable to customer migrations to Dayforce. Excluding the impact of migrations to Dayforce, Bureau revenue declined by $4.0 million, or 10.9%, primarily attributable to a reduction of employment levels and float revenue due to the COVID-19 pandemic.

Excluding float revenue and on a constant currency basis, total revenue grew 5.4%, reflecting an 11.0% increase in Cloud revenue, partially offset by a 20.1% decline in Bureau revenue. Excluding float revenue and on a constant currency basis, Cloud revenue growth reflected a 13.5% increase in Cloud recurring services revenue and a 2.6% increase in Cloud professional services and other revenue. Excluding float revenue and on a constant currency basis, Dayforce revenue increased 13.9%, reflecting a 17.9% increase in Dayforce recurring service revenue and a 2.3% increase in Dayforce professional services and other revenue. Excluding float revenue and on a constant currency basis, Powerpay revenue declined 9.0%.

Float revenue included in recurring services revenue was $10.6 million and $18.3 million for the three months ended September 30, 2020, and 2019, respectively. Float revenue allocated to Cloud revenue was $9.5 million and $14.8 million, respectively, for the three months ended September 30, 2020, and 2019, respectively. The average float balance for our customer trust funds for the three months ended September 30, 2020, was $2,745.1 million, compared to $3,117.5 million for the three months ended September 30, 2019. On a constant currency basis, the average float balance for our customer trust funds for the three months ended September 30, 2020, declined 11.6% compared to the three months ended September 30, 2019. This decline was primarily attributable to lower payroll balances and associated tax payments as a result of the COVID-19 pandemic impact to employment levels at our customers. The average yield was 1.52% during the three months ended September 30, 2020, a decline of 81 basis points compared to the average yield during the three months ended September 30, 2019, primarily due to reductions in the U.S. Federal Reserve federal funds rate and the Bank of Canada overnight rate target. For the three months ended September 30, 2020 and 2019, approximately 39% of our average float balance consisted of Canadian customer trust funds. Based on current market conditions, portfolio composition and investment practices, a 100 basis point change in market investment rates would result in approximately $17 million of change in float revenue over the ensuing twelve month period. There are no incremental costs of revenue associated with changes in float revenue.

Cost of revenue. Total cost of revenue for the three months ended September 30, 2020, was $127.7 million, an increase of $14.2 million, or 12.5%, compared to the three months ended September 30, 2019. Recurring services cost of revenue for the three months ended September 30, 2020, increased $4.9 million, or 9.9%, compared with the three months ended September 30, 2019, primarily due to additional costs related to global expansion, including Excelity which is classified as a Bureau solution, and costs to support the growing Dayforce customer base. Professional services and other cost of revenue increased $2.6 million, or 6.9%, for the three months ended September 30, 2020, compared to the three months ended September 30, 2019, primarily due to additional costs incurred to take new customers live.

Product development and management expense increased $5.4 million for the three months ended September 30, 2020, compared to the three months ended September 30, 2019. Excluding the impact of share-based compensation and related employer taxes, and severance expense; product development and management expense would have increased by $2.7 million. This adjusted increase reflects additional personnel costs and Dayforce product development efforts that are not eligible for capitalization. For the three months ended September 30, 2020, and 2019, our investment in software development was $19.7 million and $17.4 million, respectively, consisting of $9.4 million and $8.7 million, of research and development expense, which is included within product development and management expense, and $10.3 million and $8.7 million in capitalized software development costs, respectively.

Depreciation and amortization expense associated with cost of revenue increased by $1.3 million for the three months ended September 30, 2020, compared to the three months ended September 30, 2019, as we continue to capitalize Dayforce related and other development costs and subsequently to amortize these costs.

Gross profit. The following table presents total gross margin and solution gross margins for the periods presented:

	Three Months Ended September 30,	
	2020	**2019**
Total gross margin	37.5%	43.9%
Gross margin by solution:		
Cloud recurring services	70.4%	70.2%
Bureau recurring services	53.4%	71.4%
Professional services and other	(10.7)%	(7.7)%

Total gross margin is defined as total gross profit as a percentage of total revenue, inclusive of product development and management costs, as well as depreciation and amortization associated with cost of revenue. Gross margin for each solution in the table above is defined as total revenue less cost of revenue for the applicable solution as a percentage of total revenue for that related solution, exclusive of any product development and management or depreciation and amortization cost allocations.

Total gross margin for the three months ended September 30, 2020, declined 6.4% compared to total gross margin for the three months ended September 30, 2019, and gross profit declined by $12.1 million, or 13.6%. The $12.1 million decline in gross profit was primarily attributable to the $7.7 million decline in float revenue for the three months ended September 30, 2020, compared to the three months ended September 30, 2019.

Cloud recurring services gross margin was 70.4% for the three months ended September 30, 2020, compared to 70.2% for the three months ended September 30, 2019. Excluding float revenue, Cloud recurring services gross margin was 68.3% for the three months ended September 30, 2020, compared to 66.4% for the three months ended September 30, 2019. The increase in Cloud recurring services gross margin, excluding float revenue, reflects an increase in the proportion of Dayforce customers live for more than two years, which increased from 68% as of September 30, 2019, to 74% as of September 30, 2020, and was also attributable to consistent configuration that has enabled us to continue to realize economies of scale in hosting and customer support. Bureau recurring services gross margin declined from 71.4% for the three months ended September 30, 2019, to 53.4% for the three months ended September 30, 2020, primarily due to lower Bureau recurring revenue, including lower high margin float revenue, as well as the acquisition of Excelity, which is classified as Bureau currently. Professional services and other gross margin was (10.7)% for the three months ended September 30, 2020, compared to (7.7)% for the three months ended September 30, 2019, reflecting additional costs incurred to take new customers live and lower utilization during the COVID-19 pandemic.

Selling, general, and administrative expense. Selling, general, and administrative expense was reduced by $5.0 million for the three months ended September 30, 2020, compared to the three months ended September 30, 2019. Excluding the impact of share-based compensation and related employer taxes, restructuring consulting fees, severance expense, and certain other non-recurring charges; selling, general, and administrative expenses would have increased by $4.1 million. This adjusted increase reflects an increase of $3.4 million in sales and marketing expense, primarily employee-related costs, and $0.7 million in general and administrative expense, primarily customer list amortization expense. Please refer to the "Non-GAAP Measures" section for additional information on the excluded items.

Interest expense, net. Interest expense, net was $5.9 million and $7.8 million for the three months ended September 30, 2020, and 2019, respectively, which was primarily due to a reduction in our term debt interest rate and a reduction in LIBOR rates generally, partially offset by increased debt outstanding under our revolving credit facility. A 100 basis point change in LIBOR rates would result in an approximately $10 million change in our interest expense, net over the ensuing twelve-month period.

Other (income) expense, net. For the three months ended September 30, 2020, and 2019, we realized other income, net of $0.2 million and incurred other expense, net of $1.6 million, respectively. Other income, net was comprised of foreign currency translation gain, partially offset by net periodic pension expense for the three months ended September 30, 2020. For the three months ended September 30, 2019, other expense, net was primarily comprised of net periodic pension expense.

Income tax benefit. For the three months ended September 30, 2020, and 2019, we recorded income tax benefit of $5.5 million and $65.6 million, respectively. The $60.1 million reduction in income tax benefit was primarily due to the $65.8 million tax benefit from the release of valuation allowance recognized during the three months ended September 30, 2019, that was not repeated during the three months ended September 31, 2020, and other increases of $0.6 million, partially offset by a $6.3 million reduction attributable to lower base erosion anti-abuse tax ("BEAT") in the U.S.

Net (loss) income. We realized net loss of $0.8 million for the three months ended September 30, 2020, compared to net income of $62.7 million for the three months ended September 30, 2019, which included a one-time $65.8 million tax benefit.

Adjusted EBITDA. Adjusted EBITDA declined by $13.2 million to $33.2 million, for the three months ended September 30, 2020, compared to the three months ended September 30, 2019, and Adjusted EBITDA margin was 16.2% for the three months ended September 30, 2020, compared with Adjusted EBITDA margin of 22.9% for the three months ended September 30, 2019. Please refer to the "Non-GAAP Measures" section for additional information on the excluded items.

Nine Months Ended September 30, 2020 Compared With Nine Months Ended September 30, 2019

	Nine Months Ended September 30,		Increase/ (Decrease)		% of Revenue	
	2020	2019	Amount	%	2020	2019
	(Dollars in millions)					
Revenue:						
Recurring services						
Cloud	$ 425.9	$ 378.7	$ 47.2	12.5%	68.7%	62.9%
Bureau	82.8	125.0	(42.2)	(33.8)%	13.4%	20.8%
Total recurring services	508.7	503.7	5.0	1.0%	82.1%	83.6%
Professional services and other	111.0	98.6	12.4	12.6%	17.9%	16.4%
Total revenue	619.7	602.3	17.4	2.9%	100.0%	100.0%
Cost of revenue:						
Recurring services						
Cloud	122.2	114.0	8.2	7.2%	19.7%	18.9%
Bureau	33.6	35.0	(1.4)	(4.0)%	5.4%	5.8%
Total recurring services	155.8	149.0	6.8	4.6%	25.1%	24.7%
Professional services and other	120.7	107.1	13.6	12.7%	19.5%	17.8%
Product development and management	57.5	49.1	8.4	17.1%	9.3%	8.2%
Depreciation and amortization	29.9	26.7	3.2	12.0%	4.8%	4.4%
Total cost of revenue	363.9	331.9	32.0	9.6%	58.7%	55.1%
Gross profit	255.8	270.4	(14.6)	(5.4)%	41.3%	44.9%
Selling, general, and administrative	226.1	217.8	8.3	3.8%	36.5%	36.2%
Operating profit	29.7	52.6	(22.9)	(43.5)%	4.8%	8.7%
Interest expense, net	19.4	25.2	(5.8)	(23.0)%	3.1%	4.2%
Other expense, net	2.7	4.7	(2.0)	(42.6)%	0.4%	0.8%
Income before income taxes	7.6	22.7	(15.1)	(66.5)%	1.2%	3.8%
Income tax benefit	(5.7)	(57.5)	51.8	(90.1)%	(0.9)%	(9.5)%
Net income	$ 13.3	$ 80.2	$ (66.9)	(83.4)%	2.1%	13.3%
Adjusted EBITDA (a)	$ 125.9	$ 140.2	$ (14.3)	(10.2)%	20.3%	23.3%
Adjusted EBITDA margin (a)	20.3%	23.3%	(3.0)%	(12.8)%		

(a) Please refer to the “Non-GAAP Measures” section for a discussion and reconciliation of Adjusted EBITDA, a non-GAAP financial measure.

Revenue. The following table sets forth certain information regarding our revenues for the nine months ended September 30, 2020, compared with the nine months ended September 30, 2019.

	Nine Months Ended September 30, 2020	Nine Months Ended September 30, 2019	Percentage change in revenue as reported 2020 vs. 2019	Impact of changes in foreign currency (a)	Percentage change in revenue on constant currency basis (a) 2020 vs. 2019
	(Dollars in millions)				
Revenue:					
Dayforce recurring services, excluding float	$ 339.3	$ 274.6	23.6%	(0.3)%	23.9%
Dayforce float	30.0	40.1	(25.2)%	(0.3)%	(24.9)%
Total Dayforce recurring services	369.3	314.7	17.3%	(0.4)%	17.7%
Powerpay recurring services, excluding float	50.1	54.9	(8.7)%	(0.9)%	(7.8)%
Powerpay float	6.5	9.1	(28.6)%	(1.1)%	(27.5)%
Total Powerpay recurring services	56.6	64.0	(11.6)%	(1.0)%	(10.6)%
Total Cloud recurring services	425.9	378.7	12.5%	(0.4)%	12.9%
Dayforce professional services and other	108.8	96.3	13.0%	(0.4)%	13.4%
Powerpay professional services and other	0.8	0.8	(—)%	(—)%	(—)%
Total Cloud professional services and other	109.6	97.1	12.9%	(0.4)%	13.3%
Total Cloud revenue	535.5	475.8	12.5%	(0.5)%	13.0%
Bureau recurring services, excluding float	77.6	111.3	(30.3)%	(0.3)%	(30.0)%
Bureau float	5.2	13.7	(62.0)%	(0.7)%	(61.3)%
Total Bureau recurring services	82.8	125.0	(33.8)%	(0.4)%	(33.4)%
Bureau professional services and other	1.4	1.5	(6.7)%	(—)%	(6.7)%
Total Bureau revenue	84.2	126.5	(33.4)%	(0.3)%	(33.1)%
Total revenue	$ 619.7	$ 602.3	2.9%	(0.4)%	3.3%
Dayforce	$ 478.1	$ 411.0	16.3%	(0.4)%	16.7%
Powerpay	57.4	64.8	(11.4)%	(0.9)%	(10.5)%
Total Cloud revenue	$ 535.5	$ 475.8	12.5%	(0.5)%	13.0%
Dayforce, excluding float	$ 448.1	$ 370.9	20.8%	(0.4)%	21.2%
Powerpay, excluding float	50.9	55.7	(8.6)%	(0.9)%	(7.7)%
Cloud revenue, excluding float	499.0	426.6	17.0%	(0.4)%	17.4%
Cloud float	36.5	49.2	(25.8)%	(0.4)%	(25.4)%
Total Cloud revenue	$ 535.5	$ 475.8	12.5%	(0.5)%	13.0%

(a) Please refer to “Non-GAAP Measures” section for additional information on our constant currency revenue, a non-GAAP financial measure.

Total revenue increased $17.4 million, or 2.9%, to $619.7 million for the nine months ended September 30, 2020, compared to $602.3 million for the nine months ended September 30, 2019. This increase was primarily attributable to an increase in Cloud revenue of $59.7 million, or 12.5%, from $475.8 million for the nine months ended September 30, 2019, to $535.5 million for the nine months ended September 30, 2020. The Cloud revenue increase was driven by an increase of $47.2 million, or 12.5%, in Cloud recurring services revenue, and $12.5 million, or 12.9%, in Cloud professional services and other revenue. The increase in Cloud recurring services revenue of $47.2 million was due to $43.2 million from new customers, add-ons, and revenue uplift from migrations of Bureau customers, net of customer losses and $16.7 million from the migration of Bureau customers, partially offset by a decline of $12.7 million from float revenue related to Cloud recurring services revenue.

The COVID-19 pandemic has had an adverse impact on our revenue streams during the nine months ended September 30, 2020, primarily in the form of lower employment levels at our customers, lower float revenue resulting from reductions in the U.S. Federal Reserve federal funds rate and the Bank of Canada overnight rate target, lower average float balances for our customer trust funds, lower demand for professional services, and customer delays in implementation services, among other effects. We estimate the impact of lower employment levels at our customers was an approximately $18 million decline to our revenue for the nine months ended September 30, 2020, of which approximately $13 million was related to Dayforce and approximately $5 million was related to Powerpay. In addition, we estimate the impact to float revenue was approximately $14 million for the nine months ended September 30, 2020. Of the approximately $14 million impact on float revenue, approximately $9 million was due to rate reductions during the first quarter of 2020, and approximately $5 million was due to lower average float balances for our customer trust funds.

Cloud revenue was $535.5 million for the nine months ended September 30, 2020, an increase of $59.7 million, or 12.5%, compared to the nine months ended September 30, 2019. Dayforce revenue increased 16.3%, and Powerpay revenue declined 11.4% for the nine months ended September 30, 2020, as compared to the nine months ended September 30, 2019. On a constant currency basis, Dayforce revenue increased 16.7%, and Powerpay revenue declined 10.5% for the nine months ended September 30, 2020, compared to the nine months ended September 30, 2019. Powerpay is designed primarily for small market Canadian customers, which typically have fewer than 20 employees, and these customers have been more adversely affected by the COVID-19 pandemic than larger Dayforce customers. Our new business sales to Dayforce and Powerpay customers comprised approximately 72% of our increase in Cloud revenue for the nine months ended September 30, 2020, and approximately 28% consisted primarily of customer migrations to Dayforce from our Bureau solutions. As we migrate our Bureau customers to Dayforce, we typically experience a revenue increase from such customers driven by increased product density on the Dayforce platform.

Bureau revenue declined $42.3 million, or 33.4% for the nine months ended September 30, 2020. Of the $42.3 million decline, approximately 40% was attributable to customer migrations to Dayforce. Excluding the impact of migrations to Dayforce, Bureau revenue declined by $25.6 million, or 20.2%.

Excluding float revenue and on a constant currency basis, total revenue grew 7.6%, reflecting a 17.4% increase in Cloud revenue, partially offset by a 29.7% decline in Bureau revenue. Excluding float revenue and on a constant currency basis, Cloud revenue growth reflected a 18.6% increase in Cloud recurring services revenue and a 13.3% increase in Cloud professional services and other revenue. Excluding float revenue and on a constant currency basis, Dayforce revenue increased 21.2%, reflecting a 23.9% increase in Dayforce recurring service revenue and a 13.4% increase in Dayforce professional services and other revenue. Excluding float revenue and on a constant currency basis, Powerpay revenue declined 7.7%.

Float revenue included in recurring services revenue was $41.7 million and $62.9 million for the nine months ended September 30, 2020, and 2019, respectively. Float revenue allocated to Cloud revenue was $36.5 million and $49.2 million for the nine months ended September 30, 2020, and 2019, respectively. The average float balance for our customer trust funds for the nine months ended September 30, 2020, was $3,269.7 million, compared to $3,524.9 million for the nine months ended September 30, 2019. On a constant currency basis, the average float balance for our customer trust funds declined 6.8% for the nine months ended September 30, 2020, compared to the nine months ended September 30, 2019. The average yield was 1.70% during the nine months ended September 30, 2020, a decline of 69 basis points compared to the average yield in the nine months ended September 30, 2019. For the nine months ended September 30, 2020, approximately 34% of our average float balance consisted of Canadian customer trust funds, compared to approximately 36% for the nine months ended September 30, 2019. Based on current market conditions, portfolio composition and investment practices, a 100 basis point change in market investment rates would result in approximately $17 million of change in float revenue over the ensuing twelve month period.

Cost of revenue. Total cost of revenue for the nine months ended September 30, 2020, was $363.9 million, an increase of $32.0 million, or 9.6%, compared to the nine months ended September 30, 2019. Recurring services cost of revenue increased $6.8 million, or 4.6% for the nine months ended September 30, 2020, compared to the nine months ended September 30, 2019, primarily due to additional costs related to global expansion, including Excelity, which is classified as a Bureau solution, and costs to support the growing Dayforce customer base. The increase in cost of revenue for professional services and other of $13.6 million, or 12.7% for the nine months ended September 30, 2020, compared to the nine months ended September 30, 2019, was primarily due to additional costs incurred to implement new customers.

Product development and management expense increased $8.4 million for the nine months ended September 30, 2020, compared to the nine months ended September 30, 2019. Excluding the impact of share-based compensation and related employer taxes, and severance expense; product development and management expense would have increased by $4.3 million. This adjusted increase reflects additional personnel costs and Dayforce product development efforts, including costs to build out the Dayforce Wallet and our international offerings that are not eligible for capitalization. For the nine months ended September 30, 2020, and 2019, our investment in software development was $53.9 million and $48.1 million, respectively, consisting of $25.1 million and $24.6 million, of research and development expense, which is included within product development and management expense, and $28.8 million and $23.5 million in capitalized software development, respectively.

Depreciation and amortization expense associated with cost of revenue increased by $3.2 million for the nine months ended September 30, 2020, compared to the nine months ended September 30, 2019, as we continue to capitalize Dayforce related and other development costs and subsequently amortize those costs.

Gross profit. The table below presents total gross margin and solution gross margins for the periods presented:

	Nine Months Ended September 30, 2020	Nine Months Ended September 30, 2019
Total gross margin	41.3%	44.9%
Gross margin by solution:		
Cloud recurring services	71.3%	69.9%
Bureau recurring services	59.4%	72.0%
Professional services and other	(8.7)%	(8.6)%

Total gross margin for the nine months ended September 30, 2020, declined 3.6% compared to total gross margin for the nine months ended September 30, 2019, and gross profit declined $14.6 million.

Cloud recurring services gross margin was 71.3% for the nine months ended September 30, 2020, compared to 69.9% for the nine months ended September 30, 2019. Excluding float revenue, Cloud recurring service gross margin was 68.6% for the nine months ended September 30, 2020, compared to 65.4% for the nine months ended September 30, 2019. The increase in Cloud recurring services gross margin reflects an increase in the proportion of Dayforce customers live for more than two years, which increased from 68% as of September 30, 2019, to 74% as of September 30, 2020, and was also attributable to consistent configuration that has enabled us to realize economies of scale in customer support and hosting costs. Bureau recurring services gross margin declined from 72.0% for the nine months ended September 30, 2019, to 59.4% for the nine months ended September 30, 2020, primarily due to lower Bureau recurring revenue, including high margin float revenue. Professional services and other gross margin was (8.7)% for the nine months ended September 30, 2020, compared to (8.6)% for the nine months ended September 30, 2019.

Selling, general, and administrative expense. Selling, general, and administrative expense increased by $8.3 million for the nine months ended September 30, 2020, compared to the nine months ended September 30, 2019. Excluding the impact of share-based compensation and related employer taxes, restructuring consulting fees, severance expense, and certain other non-recurring charges; selling, general, and administrative expenses would have increased by $2.8 million. This adjusted increase of $2.8 million reflects an increase of $8.7 million in sales and marketing, primarily personnel costs, partially offset by a $5.9 million reduction in general and administrative expense, primarily customer list amortization expense. Please refer to the “Non-GAAP Measures” section for additional information on the excluded items.

Interest expense. Interest expense was $19.4 million for the nine months ended September 30, 2020, compared to $25.2 million for the nine months ended September 30, 2019, which was primarily due to a reduction in our term debt interest rate and a reduction in LIBOR rates generally, partially offset by increased debt outstanding under our revolving credit facility. A 100 basis point change in LIBOR rates would result in an approximately $10 million change in our interest expense over the ensuing twelve-month period.

Other expense, net. For the nine months ended September 30, 2020 and 2019, other expense, net of $2.7 million and $4.7 million, respectively, was comprised of net periodic pension expense and foreign currency translation loss.

Income tax benefit. For the nine months ended September 30, 2020, and 2019, we recorded income tax benefit of $5.7 million and $57.5 million, respectively. The $51.8 million reduction in tax benefit was primarily due to the $65.8 million tax benefit from the release of the valuation allowance recognized during the nine months ended September 30, 2019, that was not repeated during the nine months ended September 30, 2020, partially offset by a $12.3 million reduction attributable to lower base erosion anti-abuse tax (“BEAT”) in the U.S., and a $1.8 million reduction attributable to unremitted foreign earnings.

Net income. Net income was $13.3 million for the nine months ended September 30, 2020, compared to $80.2 million for the nine months ended September 30, 2019, which included a one-time $65.8 million tax benefit.

Adjusted EBITDA. Adjusted EBITDA declined by $14.3 million to $125.9 million, for the nine months ended September 30, 2020, compared to the nine months ended September 30, 2019, and Adjusted EBITDA margin was 20.3% for the nine months ended September 30, 2020, compared with 23.3% for the nine months ended September 30, 2019. Please refer to the “Non-GAAP Measures” section for additional information on the excluded items.

Liquidity and Capital Resources

Our primary sources of liquidity are our existing cash and equivalents, cash provided by operating activities, borrowings under our credit facilities, and proceeds from equity offerings. As of September 30, 2020, we had cash and equivalents of $554.6 million. On April 2, 2020, in light of the current uncertainty in the global capital markets resulting from the COVID-19 pandemic, Ceridian elected to borrow $295.0 million under the 2018 Revolving Credit Facility as a precautionary measure to increase our cash position and to preserve financial flexibility. Our total debt balance was $970.8 million as of September 30, 2020.

On February 19, 2020, Ceridian completed the first amendment to the 2018 Senior Secured Credit Facility, in which the 2018 Term Debt interest rate was reduced from LIBOR plus 3.00% to LIBOR plus 2.50%. Further, the interest rate trigger under the applicable rating by Moody’s Investor Service was removed by the first amendment. The 50 basis point rate reduction will result in savings of approximately $3.4 million over the ensuing twelve-month period. Please refer to Note 7, “Debt,” to our condensed consolidated financial statements for further information on our debt.

Our primary liquidity needs are related to funding of general business requirements, including the payment of interest and principal on our debt, capital expenditures, pension contributions, and product development.

Our customer trust funds are held and invested with the primary objectives being to protect the principal balance and to ensure adequate liquidity to meet cash flow requirements. In accordance with these objectives, we maintain approximately 47% of customer trust funds in liquidity portfolios with maturities ranging from one to 120 days, consisting of high-quality bank deposits, money market mutual funds, commercial paper, or collateralized short-term investments; and we maintain approximately 53% of customer trust funds in fixed income portfolios with maturities ranging from 120 days to 10 years, consisting of U.S. Treasury and agency securities, Canada government and provincial securities, as well as highly rated asset-backed, mortgage-backed, municipal, corporate, and bank securities. To maintain sufficient liquidity in the trust to meet payment obligations, we also have financing arrangements and may pledge fixed income securities for short-term financing. The assets held in trust are intended for the specific purpose of satisfying client fund obligations and therefore are not freely available for our general business use.

We believe that our cash flow from operations, available cash and equivalents, and remaining availability under our revolving credit facility will be sufficient to meet our liquidity needs for the foreseeable future. We anticipate that to the extent that we require additional liquidity, it will be funded through the issuance of equity, the incurrence of additional indebtedness, or a combination thereof. We cannot assure you that we will be able to obtain this additional liquidity on reasonable terms, or at all. Additionally, our liquidity and our ability to meet our obligations and to fund our capital requirements are also dependent on our future financial performance, which is subject to general economic, financial, and other factors that are beyond our control. Accordingly, we cannot assure you that our business will generate sufficient cash flow from operations or that future borrowings will be available from additional indebtedness or otherwise to meet our liquidity needs. Although we have no specific current plans to do so, if we decide to pursue one or more significant acquisitions, we may incur additional debt or sell additional equity to finance such acquisitions, which would result in additional expenses or dilution.

Statements of Cash Flows

Changes in cash flows due to purchases of customer trust fund marketable securities and proceeds from the sale or maturity of customer trust fund marketable securities, as well as the carrying value of customer trust fund accounts as of period end dates can vary significantly due to several factors, including the specific day of the week the period ends, which impacts the timing of funds collected from customers and payments made to satisfy customer obligations to employees, taxing authorities, and others. The customer trust funds are fully segregated from our operating cash accounts and are evaluated and tracked separately by management. Therefore, we have provided the table below excluding the cash flows and restricted cash and equivalents held within our customer trust funds to provide supplemental information regarding the cash flows related to our core business.

	Nine Months Ended September 30,	
	2020	2019
	(Dollars in millions)	
Net cash provided by operating activities, excluding customer trust funds	$ 36.1	$ 43.4
Net cash used in investing activities, excluding customer trust funds	(114.8)	(67.8)
Net cash provided by financing activities, excluding customer trust funds	357.3	71.6
Effect of exchange rate changes on cash and equivalents	(5.3)	5.9
Net increase in cash and equivalents	273.3	53.1
Cash and equivalents at beginning of period	281.3	217.8
Cash and equivalents at end of period	554.6	270.9
Net customer trust funds restricted cash provided by (used in) operating activities	11.2	(18.8)
Net customer trust funds restricted cash provided by (used in) investing activities	291.1	(57.0)
Net customer trust funds restricted cash used in financing activities	(601.4)	(54.5)
Effect of exchange rate changes on restricted cash and equivalents	(2.6)	1.3
Net decrease in restricted cash and equivalents	(301.7)	(129.0)
Restricted cash and equivalents included in customer trust funds at beginning of period	1,377.3	888.5
Restricted cash and equivalents included in customer trust funds at end of period	1,075.6	759.5
Net decrease in cash, restricted cash, and equivalents	(28.4)	(75.9)
Cash, restricted cash, and equivalents at beginning of period	1,658.6	1,106.3
Cash, restricted cash, and equivalents at end of period	$ 1,630.2	$ 1,030.4

Operating Activities

Net cash provided by operating activities, excluding customer trust fund activity, was $36.1 million during the nine months ended September 30, 2020, primarily attributable to net income of $13.3 million and the net impact of adjustments for certain non-cash items of $87.2 million, including $46.3 million of non-cash share-based compensation expense and $36.9 million of depreciation and amortization. These items were partially offset by net working capital reductions of $64.4 million, which included a $20.1 million net change in other assets and liabilities primarily due to deferred commissions and contract assets, a $12.0 million reduction in accounts payable and other current assets due to timing of payments, an $8.7 million reduction of accrued taxes, primarily due to cash tax payments partially offset by additional provision accruals, and an $8.0 million increase in prepaid expenses and other current assets, primarily due to payments for annual maintenance contracts. Included within net cash flows provided by operating activities for the nine months ended September 30, 2020, was $20.5 million in cash interest payments on our long-term debt and $1.9 million in cash tax payments, net of refunds.

Net cash provided by operating activities, excluding customer trust fund activity was $43.4 million during the nine months ended September 30, 2019, primarily attributable to net income of $80.2 million and the net impact of adjustments for certain non-cash items of $6.0, including $75.9 million of deferred income tax benefit, offset by $43.9 million of depreciation and amortization and $26.0 million of non-cash share-based compensation expense, partially offset by net working capital reductions of $37.3 million, which included reductions of $18.5 million in liabilities for employee compensation and benefits, primarily due to payments of accrued incentive compensation and pension contributions; $10.4 million for accrued taxes, primarily due to cash tax payments partially offset by additional provision accruals; and increases in assets of $10.1 million for prepaid expenses and other current assets, primarily due to payments for annual maintenance contracts. Included within net cash flows provided by operating activities for the nine months ended September 30, 2019, was $28.9 million in cash tax payments, $28.9 million in cash interest payments on our long-term debt, and $18.0 million in pension contributions.

Investing Activities

During the nine months ended September 30, 2020, net cash used in investing activities, excluding customer trust fund activity, was $114.8 million, related to acquisition costs, net of cash acquired of $70.6 million and capital expenditures of $44.2 million. Our capital expenditures included $30.6 million for software and technology and $13.6 million for property and equipment.

During the nine months ended September 30, 2019, net cash used in investing activities, excluding customer trust fund activity, was $67.8 million, related to capital expenditures of $38.4 million and acquisition costs, net of cash acquired of $29.4 million. Our capital expenditures included $27.6 million for software and technology and $10.8 million for property and equipment.

Financing Activities

Net cash provided by financing activities, excluding the change in customer trust fund obligations, was $357.3 million during the nine months ended September 30, 2020. This cash inflow is primarily attributable to proceeds from a draw on the 2018 Revolving Credit Facility of $295.0 million and proceeds from the issuance of common stock upon exercise of stock options of $70.2 million, partially offset by payments on our long-term debt obligations of $7.9 million. The payments on our long-term debt obligations included $5.1 million in principal payments towards our 2018 Term Loan and $2.8 million in payments towards our financing lease obligations.

Net cash provided by financing activities, excluding the change in customer trust fund obligations, was $71.6 million during the nine months ended September 30, 2019. This cash inflow is primarily attributable to proceeds from the issuance of common stock upon exercise of stock options of $76.7 million, partially offset by principal payments on our long-term debt obligations of $5.1 million.

Backlog

Backlog is equivalent to our remaining performance obligations, which represents contracted revenue for recurring services and fixed price professional services, primarily implementation services, that has not yet been recognized, including deferred revenue and unbilled amounts that will be recognized as revenue in future periods. Please refer to Note 10, “Revenue,” to our condensed consolidated financial statements for further discussion of our remaining performance obligations.

Off-Balance Sheet Arrangements

As of September 30, 2020, we did not have any “off-balance sheet arrangements” (as such term is defined in Item 303 of Regulation S-K).

Critical Accounting Policies and Estimates

During the nine months ended September 30, 2020, there were no significant changes to our critical accounting policies and estimates as described in the consolidated financial statements contained in our 2019 Form 10-K.

Non-GAAP Measures

Adjusted EBITDA and Adjusted EBITDA Margin

We believe that Adjusted EBITDA and Adjusted EBITDA margin, non-GAAP financial measures, are useful to management and investors as supplemental measures to evaluate our overall operating performance. Adjusted EBITDA and Adjusted EBITDA margin are components of our management incentive plan and are used by management to assess performance and to compare our operating performance to our competitors. We define Adjusted EBITDA as net income before interest, taxes, depreciation, and amortization, as adjusted to exclude gain (loss) on assets and liabilities held in a foreign currency other than the functional currency of a company subsidiary, share-based compensation expense and related employer taxes, severance charges, restructuring consulting fees, and certain other non-recurring charges. Adjusted EBITDA margin is determined by calculating the percentage Adjusted EBITDA is of total revenue. Management believes that Adjusted EBITDA and Adjusted EBITDA margin are helpful in highlighting management performance trends because Adjusted EBITDA and Adjusted EBITDA margin exclude the results of decisions that are outside the control of operating management.

Our presentation of Adjusted EBITDA and Adjusted EBITDA margin are intended as supplemental measures of our performance that are not required by, or presented in accordance with, GAAP. Adjusted EBITDA and Adjusted EBITDA margin should not be considered as alternatives to net income, earnings per share, or any other performance measures derived in accordance with GAAP, or as measures of operating cash flows or liquidity. Our presentation of Adjusted EBITDA and Adjusted EBITDA margin should not be construed to imply that our future results will be unaffected by these items. Adjusted EBITDA and Adjusted EBITDA margin are included in this discussion because they are key metrics used by management to assess our operating performance.

Adjusted EBITDA and Adjusted EBITDA margin are not defined under GAAP, are not measures of net income or any other performance measures derived in accordance with GAAP, and are subject to important limitations. Our use of the terms Adjusted EBITDA and Adjusted EBITDA margin may not be comparable to similarly titled measures of other companies in our industry and are not measures of performance calculated in accordance with GAAP.

Adjusted EBITDA and Adjusted EBITDA margin have important limitations as analytical tools, and you should not consider them in isolation or as substitutes for analysis of our results as reported under GAAP. Some of these limitations are that Adjusted EBITDA and Adjusted EBITDA margin do not reflect the following:

- our cash expenditures or future requirements for capital expenditures or contractual commitments;
- changes in, or cash requirements for, our working capital needs;
- any charges for the assets being depreciated and amortized that may need to be replaced in the future;
- the impact of share-based compensation and related employer taxes upon our results of operations;
- the significant interest expense or the cash requirements necessary to service interest or principal payments on our debt;
- our income tax expense or the cash requirements to pay our income taxes; and
- certain other non-recurring charges.

In evaluating Adjusted EBITDA and Adjusted EBITDA margin, you should be aware that in the future we may incur expenses similar to those eliminated in this presentation.

The following table reconciles net income to Adjusted EBITDA for the periods presented:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
	(Dollars in millions)			
Net (loss) income	$ (0.8)	$ 62.7	$ 13.3	$ 80.2
Interest expense, net	5.9	7.8	19.4	25.2
Income tax benefit	(5.5)	(65.6)	(5.7)	(57.5)
Depreciation and amortization	13.0	14.9	36.9	43.9
EBITDA (a)	12.6	19.8	63.9	91.8
Intercompany foreign exchange (gain) loss	(1.2)	0.3	0.1	0.8
Share-based compensation (b)	19.3	11.4	48.5	27.0
Severance charges (c)	2.2	0.8	6.9	4.4
Restructuring consulting fees (d)	0.3	1.5	6.9	3.6
Other non-recurring charges (e)	—	12.6	(0.4)	12.6
Adjusted EBITDA	$ 33.2	$ 46.4	$ 125.9	$ 140.2
Adjusted EBITDA margin	16.2%	22.9%	20.3%	23.3%

(a) We define EBITDA as net income or loss before interest, taxes, and depreciation and amortization.
(b) Represents share-based compensation expense and related employer taxes.
(c) Represents costs for severance compensation paid to employees whose positions have been eliminated or who have been terminated not for cause.
(d) Represents consulting fees and expenses incurred during the periods presented in connection with any acquisition, investment, disposition, recapitalization, equity offering, issuance or repayment of debt, issuance of equity interests, or refinancing.
(e) Represents (recovery) loss on unrecovered duplicate payments associated with an isolated service incident. Please refer to Note 14, “Commitments and Contingencies,” for further discussion.

The following tables present a reconciliation of our reported results to our non-GAAP Adjusted EBITDA basis for all periods presented:

	Three Months Ended September 30, 2020				
	As reported	Share-based compensation	Severance charges	Other operating expenses (a)	Adjusted
			(Dollars in millions)		
Cost of revenue:					
Recurring services	$ 54.3	$ 1.8	$ 0.8	$ —	$ 51.7
Professional services and other	40.2	1.0	—	—	39.2
Product development and management	22.9	2.9	0.8	—	19.2
Depreciation and amortization	10.3	—	—	—	10.3
Total cost of revenue	127.7	5.7	1.6	—	120.4
Sales and marketing	39.5	2.0	0.4	—	37.1
General and administrative	37.8	11.6	0.2	0.3	25.7
Operating (loss) profit	(0.6)	19.3	2.2	0.3	21.2
Other expense, net	(0.2)	—	—	(1.2)	1.0
Depreciation and amortization	13.0	—	—	—	13.0
EBITDA	$ 12.6	$ 19.3	$ 2.2	$ (0.9)	$ 33.2

(a) Other operating expenses includes intercompany foreign exchange gain and restructuring consulting fees.

	Three Months Ended September 30, 2019				
	As reported	Share-based compensation	Severance charges	Other operating expenses (a)	Adjusted
			(Dollars in millions)		
Cost of revenue:					
Recurring services	$ 49.4	$ 0.9	$ 0.3	$ —	$ 48.2
Professional services and other	37.6	0.5	—	—	37.1
Product development and management	17.5	1.0	—	—	16.5
Depreciation and amortization	9.0	—	—	—	9.0
Total cost of revenue	113.5	2.4	0.3	—	110.8
Sales and marketing	35.5	1.3	0.5	—	33.7
General and administrative	46.8	7.7	—	14.1	25.0
Operating profit	6.5	11.4	0.8	14.1	32.8
Other expense, net	1.6	—	—	0.3	1.3
Depreciation and amortization	14.9	—	—	—	14.9
EBITDA	$ 19.8	$ 11.4	$ 0.8	$ 14.4	$ 46.4

(a) Other operating expenses includes intercompany foreign exchange loss, restructuring consulting fees, and other non-recurring charges.

	Nine Months Ended September 30, 2020				
	As reported	Share-based compensation	Severance charges	Other operating expenses (a)	Adjusted
	(Dollars in millions)				
Cost of revenue:					
Recurring services	$ 155.8	$ 4.5	$ 1.6	$ —	$ 149.7
Professional services and other	120.7	2.5	0.9	—	117.3
Product development and management	57.5	5.2	1.2	—	51.1
Depreciation and amortization	29.9	—	—	—	29.9
Total cost of revenue	363.9	12.2	3.7	—	348.0
Sales and marketing	116.2	6.0	1.4	—	108.8
General and administrative	109.9	30.3	1.8	6.5	71.3
Operating profit	29.7	48.5	6.9	6.5	91.6
Other expense, net	2.7	—	—	0.1	2.6
Depreciation and amortization	36.9	—	—	—	36.9
EBITDA	$ 63.9	$ 48.5	$ 6.9	$ 6.6	$ 125.9

(a) Other operating expenses includes intercompany foreign exchange loss, restructuring consulting fees, and other non-recurring charges.

	Nine Months Ended September 30, 2019				
	As reported	Share-based compensation	Severance charges	Other operating expenses (a)	Adjusted
	(Dollars in millions)				
Cost of revenue:					
Recurring services	$ 149.0	$ 2.1	$ 1.1	$ —	$ 145.8
Professional services and other	107.1	1.2	0.4	—	105.5
Product development and management	49.1	2.2	0.1	—	46.8
Depreciation and amortization	26.7	—	—	—	26.7
Total cost of revenue	331.9	5.5	1.6	—	324.8
Sales and marketing	105.6	3.6	1.9	—	100.1
General and administrative	112.2	17.9	0.9	16.2	77.2
Operating profit	52.6	27.0	4.4	16.2	100.2
Other expense, net	4.7	—	—	0.8	3.9
Depreciation and amortization	43.9	—	—	—	43.9
EBITDA	$ 91.8	$ 27.0	$ 4.4	$ 17.0	$ 140.2

(a) Other operating expenses includes intercompany foreign exchange loss, restructuring consulting fees, and other non-recurring charges.