

CERIDIAN

2020 Annual Report



Dear Fellow Ceridian Stockholders,

We hope this finds you safe and well. It was another very strong year for Ceridian, and we are exceptionally proud of how our entire Ceridian team has responded to the dramatic change in the business realities faced by all.

We continued to deliver against our five strategic growth levers: growing in our existing markets; expanding within the Enterprise segment; accelerating our global expansion; extending the Dayforce platform; and innovating in adjacent markets, such as Dayforce Wallet. Our growth agenda is about delivering quantifiable value to our customers and creating customers for life.

In 2020, we received tremendous validation of our leadership in the global HCM market. Ceridian was named a Leader in the Gartner 2020 Magic Quadrant for Cloud HCM Suites for 1,000+ Employee Enterprises. Further, Ceridian received the highest scores for the North American compliance suites, payroll admin, and the workforce management use cases in the Gartner Critical Capabilities for Cloud HCM Suites for 1,000+ Employee Enterprises.

For years, organizations have been thinking and talking about digitization. COVID-19 has made this an imperative overnight. Organizations, globally, are looking for a deeper level of innovation and value from an HCM system as they turn their focus to accelerating their digital transformation initiatives.

We are uniquely positioned to help customers navigate this new borderless, more fluid world of work, and that is driving increased demand for Dayforce. We ended 2020 with 4,906 customers live on the Dayforce platform, a net increase of 543 year-over-year.

That strong demand for Dayforce helped us exceed our financial and operational targets, while we continue to invest strategically for future growth.

Some key metrics that we are particularly pleased with for 2020 include:

- Dayforce recurring services revenue increased by \$71.2 million or 16.6%. Excluding float revenue and on a constant currency basis, Dayforce recurring services revenue increased by 22.7%.
- Dayforce revenue increased by \$79.1 million or 13.9%. Excluding float revenue and on a constant currency basis, Dayforce revenue increased by 18.1%.
- Cloud recurring services gross margin increased 160 basis points to 71.2%, compared to 69.6% in 2019. Excluding float revenue, Cloud recurring services gross margin expanded 330 basis points.

These excellent results and strong momentum in the business enabled us to deliver significant stockholder value in 2020. Ceridian shares on the New York Stock Exchange and Toronto Stock Exchange provided total returns from the beginning of the year of 57.0 percent and 54.2 percent respectively, versus 18.4 percent for the S&P 500 and 5.6 percent for the S&P/TSX Composite Index, over the same time period.

Ceridian is one of the fastest growing HCM cloud companies, and we have a strong balance sheet. Our outperformance has given us the flexibility to be opportunistic with acquisitions, like Singapore-based Excelity in 2020 and most recently with our announcement to acquire the Australia-based Ascender. It has also allowed us to make strategic investments in product and technology innovation as well as sales and marketing. It has helped us attract senior executive talent with global experience in finance, product and technology, and human resources. And it is helping to attract global and regional systems integrators as new partners. Together, these investments are key to expanding further in the enterprise segment, scaling the business globally, and sustaining accelerated profitable growth.

Today, we have tremendous underlying momentum in the business, and we have an attractive opportunity before us: to gain share and drive scale coming out of the crisis. And that is exactly what we will strive to do.

On behalf of the Board of Directors of Ceridian, I want to thank our employees for delivering against our growth agenda in a trying year for all of us. I also want to thank you, our fellow stockholders, for your confidence in us and for your investment in Ceridian.

A handwritten signature in black ink, appearing to read "Dave Ossip". The signature is fluid and cursive, with a large initial "D" and "O".

David D. Ossip
Chair and Chief Executive Officer

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

FORM 10-K

(Mark One)

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended December 31, 2020

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
FOR THE TRANSITION PERIOD FROM TO

Commission File Number 001-38467



Ceridian HCM Holding Inc.

(Exact name of Registrant as specified in its Charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

46-3231686
(I.R.S. Employer
Identification No.)

3311 East Old Shakopee Road
Minneapolis, Minnesota 55425
(952) 853-8100

(Address, Including Zip Code, and Telephone Number, Including Area Code, of Registrant's Principal Executive Offices)

Securities registered pursuant to Section 12(b) of the Act:

<u>Title of each class</u>	<u>Trading Symbol(s)</u>	<u>Name of each exchange on which registered</u>
Common Stock, \$.01 par value	CDAY	New York Stock Exchange

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the Registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. YES NO

Indicate by check mark if the Registrant is not required to file reports pursuant to Section 13 or 15(d) of the Act. YES NO

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

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). YES NO

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

Large accelerated filer	<input checked="" type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	Small reporting company	<input type="checkbox"/>
		Emerging growth company	<input type="checkbox"/>

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

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report.

Indicate by check mark whether the Registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). YES NO

The aggregate market value of the voting and non-voting common equity held by non-affiliates of the Registrant, based on the \$79.27 closing price of the shares of common stock on the New York Stock Exchange on June 30, 2020, was \$9,582.5 million.

The number of shares of Registrant's Common Stock outstanding as of February 23, 2021 was 148,801,679.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Registrant's Definitive Proxy Statement relating to the 2021 Annual Meeting of Stockholders, scheduled to be held on April 27, 2021, are incorporated by reference into Part III of this Form 10-K.

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Unless the context requires otherwise, references in this Annual Report on Form 10-K for the fiscal year ended December 31, 2020 of Ceridian HCM Holding Inc. and subsidiaries (“Form 10-K”) to “our company,” the “Company,” “we,” “us,” “our,” and “Ceridian” refer to Ceridian HCM Holding Inc. and its direct and indirect subsidiaries on a consolidated basis.

We and our subsidiaries own or have the rights to various trademarks, trade names and service marks, including the following: Ceridian®, Dayforce®, Makes Work Life Better™, Powerpay® and various logos used in association with these terms. Solely for convenience, the trademarks, trade names and service marks and copyrights referred to herein are listed without the ©, ®, and ™, symbols, but such references are not intended to indicate, in any way, that Ceridian, or the applicable owner, will not assert, to the fullest extent under applicable law, Ceridian’s or their, as applicable, rights to these trademarks, trade names, and service marks. Other trademarks, service marks, or trade names appearing in this Form 10-K are the property of their respective owners.

FORWARD-LOOKING STATEMENTS

This Form 10-K contains, or incorporates by reference, not only historical information, but also forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (“Securities Act”), and Section 21E of the Securities Exchange Act of 1934, as amended (“Exchange Act”) and that are subject to the safe harbor created by those sections. All statements other than statements of historical fact or relating to present facts or current conditions included in this Form 10-K are forward-looking statements. Forward-looking statements give our current expectations and projections relating to our financial condition, results of operations, plans, objectives, future performance and business. You can identify forward-looking statements by the fact that they do not relate strictly to historical or current facts. These statements may include words such as “anticipate,” “estimate,” “expect,” “project,” “seek,” “plan,” “intend,” “believe,” “will,” “may,” “could,” “continue,” “likely,” “should,” and other words and terms of similar meaning in connection with any discussion of the timing or nature of future operating or financial performance or other events but not all forward-looking statements contain these identifying words.

Forward-looking statements are based on our current expectations and assumptions regarding our business, the economy, and other future conditions. Because forward-looking statements relate to the future, by their nature, they are subject to inherent uncertainties, risks, and changes in circumstances that are difficult to predict. As a result, our actual results may differ materially from those contemplated by the forward-looking statements. Important factors that could cause actual results to differ materially from those in the forward-looking statements include regional, national, or global political, economic, business, competitive, market, and regulatory conditions and those risks described in Part I, Item IA, “Risk Factors” of this Form 10-K. Although we have attempted to identify important risk factors, there may be other risk factors not presently known to us or that we presently believe are not material that could cause actual results and developments to differ materially from those made in or suggested by the forward-looking statements contained in this Form 10-K. If any of these risks materialize, or if any of the above assumptions underlying forward-looking statements prove incorrect, actual results and developments may differ materially from those made in or suggested by the forward-looking statements contained in this Form 10-K. For the reasons described above, we caution you against relying on any forward-looking statements. Any forward-looking statement made by us in this Form 10-K speaks only as of the date on which we make it. Factors or events that could cause our actual results to differ may emerge from time to time, and it is not possible for us to predict all of them. We undertake no obligation to publicly update or to revise any forward-looking statement, whether as a result of new information, future developments, or otherwise, except as may be required by law. Comparisons of results for current and any prior periods are not intended to express any future trends or indications of future performance, unless specifically expressed as such, and should be viewed as historical data.

PART I

Item 1. Business.

Overview

Ceridian is a global human capital management (“HCM”) software company. Dayforce, our flagship cloud HCM platform, provides human resources (“HR”), payroll, benefits, workforce management, and talent management functionality. In addition to Dayforce, we sell Powerpay, a cloud HR and payroll solution for the Canadian small business market, through both direct sales and established partner channels. We also continue to support customers using our Bureau solutions, which we generally stopped actively selling to new customers in 2012, following the acquisition of Dayforce. We invest in maintenance and necessary updates to support our Bureau customers and continue to migrate them to Dayforce.

Our five strategic growth levers drive our long-term perspectives, near-term decision making and stockholder alignment:

- Acquiring new customers in the markets where we have seen success to date;
- Extending the Dayforce platform, thereby allowing us to deliver more value to our current and prospective customers;
- Expanding within the Enterprise segment;
- Accelerating our global expansion both by serving local customers in new geographies, and by extending our scope to service global multinational customers; and finally,
- Driving incremental value for our customers by innovating in adjacent markets around our core HCM suite, such as the Dayforce Wallet.

Products and Services

Dayforce

Dayforce, our principal cloud HCM platform, is a single application that 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. Dayforce offers a comprehensive range of functionality, including global HR, payroll, benefits, workforce management, and talent management on web and native iOS and Android platforms. Our Dayforce mobile app enables employees not only to request and to trade schedules, but also to see the real-time impact of schedule changes on their pay. Our Dayforce 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. Key functionality of our Dayforce platform includes HR, payroll and tax, Dayforce Wallet, benefits, workforce management, and talent management. In 2020, we received several accolades for our Dayforce solution, including Leader in the 2020 Gartner Magic Quadrant for Cloud HCM Suites, Gartner Peer Insights Customers’ Choice, Top HR Products of the Year, and Payroll Software Supplier of the Year.

Human Resources

Dayforce Human Resources functionality provides customers with a single, complete record for all employees. Our HR functionality is centered on a comprehensive, flexible workflow engine that streamlines and automates administrative tasks.

Payroll and Tax

Our payroll capabilities provide customers with the tools needed to accurately and compliantly manage their payroll processes. Through our Dayforce platform, users in the United States, Canada, the United Kingdom, Ireland, Australia, New Zealand, and Mauritius are able to make updates to time and pay in real-time. In countries where we do not currently offer localized payroll, Dayforce ConnectedPay provides payroll aggregation features that allow an organization to have a centralized view of their global payroll. ConnectedPay automates the data exchange with in-country payroll providers and provides a consistent self-service experience for employees to view earnings statements and associated payroll documentation. Dayforce calculates, withholds, and files payroll related taxes in the United States, Canada, the United Kingdom, and Australia as part of our localized payroll offering.

Dayforce Wallet

In 2020, we launched the Dayforce Wallet in the United States, 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 in the United States and requires no changes to payroll processing including the funding, timing, and close-out of pay. The on-demand wages are loaded onto a personal paycard, which customers' employees can use anywhere credit or debit cards are accepted, generating interchange fee revenue. The Dayforce Wallet mobile app makes it easy for customers' employees to check their pay deposits, account balance and transaction history.

Benefits

Dayforce Benefits assists users from benefits enrollment to ongoing benefits administration, including eligibility, open enrollment and Affordable Care Act ("ACA") management. Support and comparative tools can provide information to users about each of the available benefit plans and impact of their plan options to help employees choose the best option for their specific needs.

Workforce Management

Dayforce Workforce Management provides functionality to help organizations manage their workforces, improve operational efficiency, and enhance compliance by configuring the system to meet complex labor and employment rules and policies. Through Dayforce, users are offered absence management, time and attendance, schedule, and labor planning.

Talent Management

Dayforce Talent Management enables organizations to attract, to engage, to develop, and to motivate their workforce. Users can leverage tools for recruiting, onboarding, engagement, performance, succession planning, compensation management, and employee learning.

Powerpay

We offer Powerpay for Canadian organizations with fewer than 100 employees. Powerpay is a cloud platform that provides scalable and straightforward payroll and HR solutions. Specifically designed for small businesses, Powerpay enables clients to pay their employees accurately and on-time.

Bureau

Our Bureau solutions offer payroll and payroll-related services using legacy technology and acquired technology from our acquisition of Excelcity Global Solutions Pte. Ltd. ("Excelcity") on May 29, 2020. We invest in maintenance and necessary updates to support our Bureau customers. We generally stopped selling our legacy North America Bureau solutions to new customers in the United States in 2012, and in Canada in 2015, and continue to convert legacy North America Bureau customers to our Dayforce platform. In addition to customers who use our payroll services, certain customers use our legacy Bureau tax filing services on a stand-alone basis; and we have started to sell stand-alone legacy Bureau tax services again in 2019.

Revenue by Product and Service

For a quantitative discussion of our revenue by solution, please refer to Part II, Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations" of this Form 10-K.

Customers

Dayforce is designed to serve organizations with 100 to over 100,000 employees. The Dayforce customer base has increased from 482 as of December 31, 2012 to 4,906 customers on the platform as of December 31, 2020. For 2020, our 4,906 Dayforce customers represented approximately 4.2 million active global users. We define a customer as a single organization, such as a company, a non-profit association, an educational institution, or government entity. We also have approximately 38,000 Powerpay customer accounts. No single customer accounted for more than 1% of our revenues during the year ended December 31, 2020.

Sales and Marketing

We sell our Cloud solutions through a direct sales force and a variety of third party channels, organized by customer size and geography. We market Dayforce to organizations with more than 100 employees. We market Powerpay to organizations with fewer than 100 employees in Canada. The majority of our revenue growth comes from new Cloud customers, but we also have a small, dedicated account management team focused on serving the needs of our Bureau customers and helping them to migrate to our Dayforce platform.

Services and Support

We offer a broad portfolio of services aimed to ensure customer success. We believe it's important to work closely with our customers to understand their needs and deliver technology solutions and support that address them.

Implementation and Professional Services

Our internal implementation team leverages proprietary onboarding technology for new customer activation and professional services work. Our internal team is supplemented by third party services partners and system integration partners ("SI"). Our implementation services include solution configuration and activation for new customers. Professional services include add-on implementation services for existing customer, ongoing product configuration changes when the customer does not have the resources to do it themselves, product usage consulting and a variety of additional services, such as report writing, usage audits, and process improvement.

Customer Support

Our global customer support organization provides 24/7 application support from offices across North America and in the United Kingdom, Mauritius, and Australia. Our support function is organized into small teams of approximately 20 representatives with deep domain expertise across our platform. These small teams are aligned to groups of customers based on geography, product type, and client vertical to provide a combination of deep product and industry knowledge, consistent relationships, and high availability.

Technology, Hosting, and Research and Development ("R&D")

Technology and innovation are at the core of Ceridian. Our innovation and development process is customer-driven. We work directly with customers to understand their needs and to deliver solutions that address their challenges, taking into consideration the entire user experience, without being constrained by individual modules or applications.

Our R&D team is responsible for the design, development, and testing of our applications. We believe that our modern cloud technology stack, agile design and development methodology, and efficient software deployment process enable us to innovate quickly in response to industry trends. We host Dayforce and Powerpay applications and serve all of our customers from data centers operated by third party providers, primarily NaviSite, VMWare Cloud on AWS, and Microsoft Azure. While we control and have access to our servers and all of the components of our network that are located in our external data centers, we do not control the operation of these facilities. Additionally, we host our internal systems through a data center that we operate and lease in Atlanta, Georgia.

Intellectual Property

Our success depends, in part, on our ability to protect our proprietary technology and intellectual property. We rely on a combination of copyrights, trade secrets, and trademarks, as well as confidentiality and nondisclosure agreements and other contractual protections, to establish and to safeguard our intellectual property rights.

Competition

The market for HCM technology solutions is rapidly changing, with legacy service bureau and on-premise software providers facing increased competition from emerging cloud players. We currently compete with firms that provide both integrated and point solutions for HCM, as well as with local providers in each jurisdiction that we operate. Globally, we compete with legacy payroll service providers, such as Automatic Data Processing (“ADP”), as well as cloud-enabled client-server HCM providers, such as Ultimate Kronos Group (“UKG”). We also face competition from modern HCM providers, such as Workday, Inc. (“Workday”), whose solutions have been specifically built as single application platforms in the cloud. In addition, we face competition from large, long-established enterprise application software vendors, such as Oracle Corporation (“Oracle”) and SAP SE (“SAP”).

We believe the principal competitive factors in our market include the following:

- (i) Breadth and depth of product functionality;
- (ii) Scalability and reliability of applications;
- (iii) Robust workforce management products;
- (iv) Workforce;
- (v) Comprehensive tax service products;
- (vi) Modern and intuitive technology and user experience;
- (vii) Multi-country and jurisdiction domain expertise in payroll and HCM;
- (viii) Quality of implementation and customer service;
- (ix) Integration with a wide variety of third party applications and systems;
- (x) Brand awareness and reputation; and
- (xi) Total cost of ownership, ROI, and pricing.

Our People

Workforce

As of December 31, 2020, we had 5,974 active employees, including 4,197 in North America and 1,777 outside of North America. We also engage temporary employees and consultants when needed to enhance our workforce. None of our employees are represented by a labor union, and we have never experienced any work stoppages. We consider the relationships we have with our employees to be strong. As a human capital management provider, we place significant strategic emphasis on our people and our engagement levels. Our fundamental belief is that, when employees are engaged, they produce great products and provide world-class service that delights our customers. We believe that our workforce is a competitive advantage and we will continue to focus on employee engagement as a core driver of our business success.

We offer many ancillary benefits to our employees which enhance the workplace experience and drive our “Makes Work Life Better” brand. Some of the distinct benefits provided to employees include unlimited time away from work, LifeWorks employee assistance programs, and the Dayforce Wallet for our U.S. employees as of December 31, 2020.

Response to COVID-19

From the outset of the coronavirus disease 2019 (“COVID-19”) crisis, we acted to protect the health and wellbeing of our employees. We pivoted to a virtual working environment for nearly all our employees across all of our offices during the first quarter of 2020. We established preventative health measures to protect our employees, including offering remote work options, implementing social distancing measures where possible, restricting non-essential business travel, and enhancing

preventative cleaning services at all office locations. With all the changes resulting from COVID-19, we prioritized our employees and focused on maintaining our employment levels globally while continuing to hire in key areas. Our crisis management team which consists of leadership and business continuity planning resources throughout the organization continues to monitor the COVID-19 crisis and provide information intended to ensure the continued health and safety of our employees.

Culture

We remain focused on diversity, equity, and inclusion in our organization. We are fully committed to inclusivity and belonging. We believe that all employees – regardless of race, ethnicity, age, gender, sexual orientation, identity or expression, religion, or ability status – should be enabled to achieve their full potential. And we believe all voices have value and should be heard. We encourage participation in our Diversity and Inclusion Program, YOUunity, which is led by employees who aim to promote diversity, inclusion, and equality of women and minority groups in the workplace and throughout the entire lifecycle of our employees. In addition, we maintain our global EDGE certification, the global and business certification standard for evaluating corporate commitment to gender equality. As of December 31, 2020, over 40% of our C-Suite executives were women and approximately 50% of our entire workforce were women.

Ceridian combines the agility and innovation of a start-up with a history of deep domain and operational expertise. As a founder-led organization, we focus on agility, innovation, strong technical leadership, and thoughtful, scalable processes. This culture of excellence fosters creativity and ownership at the grassroots level, with many of our most transformational solutions originating with frontline employee ideas. These are key factors in our emphasis of the selection, development, and retention of top talent in all roles.

In 2020, we received multiple recognitions for our company culture and workplace experiences, including Greater Toronto Area's Top Employers, 2020 Working Mother Best Companies, 2020 Working Mother Best Companies for Dads, 2020 Best Workplaces™ for Women, 2020 Best Workplaces™ for Mental Wellness.

Ceridian Cares

At Ceridian we have always given back to our communities. In 2013, we made a commitment to do that in a very direct and meaningful way, through establishing our own charity, Ceridian Cares. Ceridian Cares provides grants from employee-raised funds directly to families and individuals in need in our communities. 100% of employee donations go towards grants, and we cover the program's operational and administrative costs. In addition to donating to Ceridian Cares, employee volunteers also operate the various local chapters, reviewing grant applications, distributing grants, and engaging staff in fundraising and awareness activities. As of December 31, 2020, there were 18 Ceridian Cares chapters, staffed by over 226 employee volunteers across the company. We are proud that Ceridian Cares has granted more than \$3 million in the form of basic necessities to nearly 2,000 individuals and families since 2013.

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. As of December 31, 2020, approximately \$917.1 million of revenue is expected to be recognized over the next three years from remaining performance obligations.

Seasonality

We have in the past and expect in the future to experience seasonal fluctuations in our revenues and new customer contracts with the fourth quarter historically being our strongest quarter for new customer contracts, renewals, and customer go-lives. Although the growth of our Cloud solutions and the ratable nature of our fees makes this seasonality less apparent in our overall results of operations, we expect our revenue to fluctuate quarterly and to be higher in the fourth and first quarters of each year. Fourth quarter revenue is driven by year-end processing fees and Dayforce customer go-lives; and first quarter revenue is driven by revenue earned for printing of year-end tax packages.

Available Information

Our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, proxy and information statements, Section 16 reports, and amendments to reports and any registration statements filed or furnished pursuant to Sections 13(a), 14 and 15(d) of the Exchange Act are available, free of charge at <http://investors.ceridian.com> as soon as reasonably practicable after we file such material with, or furnish it to, the Securities and Exchange Commission (“SEC”), and are also available on the SEC’s website at <http://www.sec.gov>.

Our third amended and restated certificate of incorporation and bylaws, charters of our Audit, Compensation, and Corporate Governance and Nominating Committees of our Board of Directors (our “Board”), our Corporate Governance Guidelines, and our Code of Conduct, as well as any waivers from and amendments to our Code of Conduct are available on our website at <https://investors.ceridian.com/corporate-governance/governance-documents>. Our website and the information contained on, or that can be accessed through, the website is not deemed to be incorporated by reference into, and should not be considered part of, this Form 10-K.

Executive Officers

Our executive officers as of February 26, 2021 are as follows:

Name	Age	Position
David D. Ossip	54	Chair and Chief Executive Officer
Leagh E. Turner	49	President and Chief Operating Officer
Christopher R. Armstrong	52	Executive Vice President and Chief Customer Officer
Joseph B. Korngiebel	50	Executive Vice President, Chief Product and Technology Officer
Noémie C. Heuland	43	Executive Vice President and Chief Financial Officer
Jeffrey S. Jacobs	45	Head of Accounting and Financial Reporting
Scott A. Kitching	51	Executive Vice President, General Counsel and Assistant Secretary

David D. Ossip

Mr. Ossip is our Chair and Chief Executive Officer, positions he has held since August 2015 and July 2013, respectively. Mr. Ossip joined the Company following the Company’s acquisition of Dayforce Corporation in 2012, where he held the position of chief executive officer. Mr. Ossip is currently a director for Ossip Consulting Inc. and OSDAC Corp.

Leagh E. Turner

Ms. Turner has served as our President since August 2018 and Chief Operating Officer since February 2020. Prior to joining the Company, Ms. Turner held the position of global chief operating officer, strategic customer program of SAP from October 2016 to August 2018. In addition, Ms. Turner held the positions of acting chief operating officer of SAP Europe, Middle East, and Africa region from March 2017 to August 2017, acting president of SAP Canada Inc. from August 2015 to January 2016, chief operating officer of SAP Canada Inc. from February 2014 to October 2016, and vice president, sales central region of SAP Canada Inc. from July 2010 to February 2014.

Christopher R. Armstrong

Mr. Armstrong is our Executive Vice President, Chief Customer Officer, a position he has held since February 2020. Mr. Armstrong previously served as our Executive Vice President, Chief Operating Officer from May 2019 until February 2020. In addition, Mr. Armstrong has held the positions of Executive Vice President of Operations from March 2018 until May 2019; Executive Vice President of Customer Support from April 2016 to March 2018, Senior Vice President of U.S. Service from October 2014 to April 2016, and Senior Vice President of U.S. Account Management from January 2013 to October 2014. Prior to January 2013, Mr. Armstrong held a number of commercial and operational leadership roles during his tenure with Ceridian which began in 2004.

Joseph B. Korngiebel

Mr. Korngiebel is our Executive Vice President, Chief Product & Technology Officer, a position he has held since August 2020. Prior to joining the Company, Mr. Korngiebel held various positions at Workday, Inc. since March 2006, including Chief Technology Officer from May 2017 until July 2020 and Senior Vice President, Technology & Innovation from January 2014 until May 2017.

Noémie C. Heuland

Ms. Heuland is our Executive Vice President and Chief Financial Officer, positions she has held since October 2020. Prior to joining us, Ms. Heuland held the position of Senior Vice President, Chief Financial Officer of SAP Latin America & Caribbean region since April 2018. In addition, Ms. Heuland held the positions of Vice President, Chief Financial Officer of SAP Latin America and Caribbean North and South from April 2015 to March 2018. Further, Ms. Heuland is a certified public accountant (inactive).

Jeffrey S. Jacobs

Mr. Jacobs is our Head of Accounting and Financial Reporting and serves as the principal accounting officer, positions he has held since May 2020. Mr. Jacobs has served as our Vice President, Finance since December 2016, and as Director, Finance from April 2015 when he joined the Company until December 2016. Prior to joining Ceridian, Mr. Jacobs held accounting and finance positions at General Mills, Inc., and started his career with KPMG LLP. Mr. Jacobs is a certified public accountant (inactive).

Scott A. Kitching

Mr. Kitching is our Executive Vice President, a position he has held since February 2016, and General Counsel and Assistant Secretary, positions he has held since December 2013. Prior to that time, Mr. Kitching held the position of executive vice president and general counsel at our affiliate subsidiary Ceridian Canada from May 2003 to December 2013.

Item 1A. Risk Factors.

Risks Related to Our Business and Industry

Our business has been adversely affected and will likely continue to be adversely affected by the COVID-19 pandemic.

The global spread of the COVID-19 pandemic has created significant global volatility, uncertainty, and economic disruption. The COVID-19 pandemic began to adversely affect our operations in March 2020 and has continued to adversely affect our operations through December 31, 2020. The extent to which the COVID-19 pandemic will continue to adversely affect our business, operations, and financial results will depend on numerous evolving factors that we may not be able to accurately predict, including but not limited to:

- the duration and scope of the pandemic;
- governmental, business, and individuals' actions that have been and continue to be taken in response to the pandemic;
- the impact of the pandemic on economic activity and actions taken in response;
- the employment levels of our customers;
- the effect on our customers' demand for or the timing of implementing our services;
- our ability to sell and to provide our services to our current and future customers, including as a result of travel restrictions and people working from home;
- the ability of our customers to pay for our services or to make us whole for advances of earned net wages and associated tax amounts made on their behalf by us; and
- our ability to safely and efficiently navigate our employees' return to the workplace and adapt to the evolving business environment resulting from the COVID-19 pandemic.

Existing or potential customers have and may continue to reduce employee headcount, to slow down decision-making, to delay planned work, or to seek to modify existing agreements, especially those customers significantly adversely affected by the pandemic's economic impact in areas where we have significant concentrations, including the retail and hospitality sectors.

Further, the effects of the pandemic have and may continue to reduce our float revenue as our customers employ fewer employees and as governments take actions to stimulate the global economy, such as the U.S. Federal Reserve and Bank of Canada lowering interest rates. A sustained downturn in the financial markets and asset values may have the effect of reducing our float revenue, or limiting our ability to liquidate securities held in our customer trust funds. The effects of the pandemic, including remote working arrangements for employees, may also impact our financial reporting systems and internal control over financial reporting, including our ability to ensure information required to be disclosed in our reports under the Securities Exchange Act of 1934, as amended, is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and forms and that such information is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow for timely decisions regarding required disclosure.

As we cannot predict the duration or scope of the COVID-19 pandemic, the anticipated negative financial impact to our business, financial condition, results of operations and/or stock price cannot be reasonably estimated, but could be material and could last for an extended period of time.

Our quarterly results of operations may fluctuate significantly and may not fully reflect the underlying performance of our business.

Our quarterly results of operations, including the levels of our revenues, gross margin, profitability, cash flow, and deferred revenue, may vary significantly in the future, and period-to-period comparisons of our results of operations may not be meaningful. Accordingly, the results of any one quarter should not be relied upon as an indication of future performance. Our quarterly financial results may fluctuate as a result of a variety of factors, many of which are outside of our control, and as a result, may not fully reflect the underlying performance of our business. Fluctuation in quarterly results may negatively impact the value of our common stock. Factors that may cause fluctuations in our quarterly financial results include, without limitation:

- our ability to attract new Cloud customers;
- our ability to replace declining Bureau revenue with Cloud revenue;

- the addition or loss of large Cloud customers, including through acquisitions or consolidations;
- the addition or loss of employees by our Cloud customers;
- customer renewal rates;
- the timing and number of paydays in a period;
- the adoption of the Dayforce Wallet by customers and their employees;
- the losses, if any, caused by customer failure to repay advances we make on their behalf for our Dayforce Wallet or other services;
- the timing of recognition of revenue;
- increases or decreases in the number of elements of our services or pricing changes upon any renewals of customer agreements;
- changes in our pricing policies or those of our competitors;
- the mix of applications sold during a period;
- seasonal variations in sales of and revenue from our applications, which has historically been highest in the fourth quarter of a calendar year;
- the timing and success of new application and service introductions by us or our competitors or any other change in the competitive dynamics of our industry, including consolidation among competitors, customers, or strategic partners;
- the amount and timing of operating expenses related to the maintenance and expansion of our business, operations, and infrastructure;
- network outages or security breaches;
- general economic, industry, and market conditions;
- fluctuation in market interest rates, which impacts debt interest expense as well as float revenue; and
- the impact of new accounting rules.

Our business plan is focused on an aggressive growth strategy. If we fail to manage our growth effectively or if our strategy is not successful, we may be unable to execute our business plan, to maintain high levels of service, or to adequately address competitive challenges.

We have and we believe we will continue to experience a period of rapid growth in our operations and Cloud solutions. The growth of our operations and Cloud solutions may place a strain on our management, administrative, operational, technological and financial infrastructure. In order to manage our growth effectively, we will need to continuously improve our operational, financial, technological and management systems, and our internal controls, reporting systems and procedures. Failure to effectively manage growth or to achieve our growth strategy could result in problems or delays in implementing customers, declines in quality or customer satisfaction, increases in costs, complications in introducing new features, or other operational challenges; and any of these difficulties could have a material adverse effect on our business, financial condition, and results of operations.

Revenues from our Cloud solutions have grown substantially over the last few years. Our efforts to increase use of our Cloud solutions and our other applications, including the Dayforce Wallet, may not succeed and may reduce our revenue growth rate.

Our ability to continue to grow the revenues from our Cloud solutions through execution against our growth levers depends on the quality of our platform and solutions, and our ability to design our Cloud solutions to meet consumer demand; and our ability to increase sales from existing customers depends on our customers' satisfaction with our product and need for additional solutions. Our participation in new markets for native payroll, and application expansion in various modules and features, including the Dayforce Wallet, is relatively new, and it is uncertain whether these areas will ever result in significant revenues for us. Further, the entry into new markets or the introduction of new features, functionality, or applications beyond our current markets and functionality may not be successful. If we are unable to sell our Cloud solutions, including the Dayforce Wallet, into new markets or to further penetrate existing markets, or to increase sales from existing customers, our revenue may not grow as expected, which could have a material adverse effect on our business, financial condition, and results of operations.

Any factor adversely affecting sales of our Cloud solutions, including application release cycles, delays, or failures in new product functionality, market acceptance, product competition, performance and reliability, reputation, price

competition, and economic and market conditions, could have a material adverse effect on our business, financial condition, and results of operations.

If we are not able to provide new or enhanced functionality and features or keep pace with rapid technological changes and evolving industry standards, we may not be able to satisfy our aggressive growth strategy and the demand for our services may decline.

Our ability to increase revenue will depend, in large part, on our ability to develop our existing Cloud solutions to drive sales into new markets around the world, to further penetrate our existing markets, and to increase sales from existing customers who do not utilize the full Dayforce suite. Our future success, and the success of our growth strategy, will depend upon our ability to anticipate and to adapt to changes in technology and industry standards, and to effectively develop, to introduce, to market, and to gain broad acceptance of new service offerings and enhancements incorporating the latest technological advancements. We may not be able to successfully provide new or enhanced functionality and features for our existing solutions that achieve market acceptance or that keep pace with rapid technological developments. Our attempts to develop new or enhanced functionality may be expensive and impact our profitability. Failure in this regard may have a material adverse effect on our business, growth strategy, financial condition, and results of operations.

Our international growth strategy has and will expose us to risks inherent in international sales and operations.

One of our growth levers is international sales growth into new markets and we anticipate that customers and potential customers may increasingly require and demand that a single vendor provide HCM solutions and services for their employees in a number of countries. Any expansion into new markets will require commensurate ongoing expansion of our monitoring of local laws and regulations, which increases our costs as well as the risk of the product not incorporating in a timely fashion or at all the necessary changes to enable a customer to be compliant with such laws. Additionally, our international operations are subject to risks that could adversely affect those operations or our business as a whole, including but not limited to the costs of localizing service offerings for foreign customers, difficulties in managing and staffing international operations, and increased expenses related to introducing corporate policies and controls in our international operations.

If we are unable to provide the required services on a multinational basis, or if we are unable to effectively manage our international expansion, we could be subject to negative customer experiences, harm to our reputation or loss of customers, claims for any fines, penalties or other damages suffered by our customer, and other financial harm, including fines, penalties, or other damages suffered by us directly, which would negatively impact revenue and earnings. Although we have a multinational strategy, additional investment and efforts may be necessary to implement such strategy. Some of our business partners also have international operations and are subject to the risks described above.

The markets in which we participate are highly competitive, and if we do not compete effectively, it could have a material adverse effect on our business, financial condition, and results of operations.

The markets in which we participate are highly competitive, and competition could intensify in the future. We believe the principal competitive factors in our market include: breadth and depth of product functionality, scalability and reliability of applications, robust workforce management, comprehensive tax services, modern and innovative cloud technology platforms combined with an intuitive user experience, multi-country and jurisdiction domain expertise in payroll and HCM, quality of implementation and customer service, integration with a wide variety of third party applications and systems, total cost of ownership and return on investment, brand awareness, and reputation, pricing and distribution.

We face a variety of competitors, some of which are long-established providers of HCM solutions. Many of our current and potential competitors are larger, have greater name recognition, longer operating histories, larger marketing budgets, and significantly greater resources than we do, and are able to devote greater resources to the development, promotion, and sale of their products and services. Some of our competitors could offer HCM solutions bundled as part of a larger product offering. Furthermore, our current or potential competitors may be acquired by third parties with greater available resources and the ability to initiate or to withstand substantial price competition. In addition, many of our competitors have established marketing relationships, access to larger customer bases, and major distribution agreements with consultants, system integrators, and resellers. Our competitors may also establish cooperative relationships among themselves or with third parties that may further enhance their product offerings or resources. Although we have a global partnership strategy, additional investment and efforts may be necessary to implement such a strategy.

If our competitors' products, services, or technologies become more accepted than our applications, if they are successful in bringing their products or services to market earlier than ours, or if their products or services are more

technologically capable than ours, it could have a material adverse effect on our business, financial condition, and results of operations. In addition, some of our competitors may offer their products and services at a lower price. If we are unable to achieve our target pricing levels or if we experience significant pricing pressures, it could have a material adverse effect on our business, financial condition, and results of operations.

Our aging software infrastructure, technology, and sophistication of these systems may lead to increased costs, vulnerability to cyber-attack, or disruptions in operations that could have a material adverse effect on our business, market brand, financial condition, and results of operations.

Our business continues to demand the use of sophisticated systems and technology, including technology infrastructure assets. These systems and technologies must be refined, updated and replaced with more advanced systems on a regular basis in order for us to meet both our customers' and employees' demands and expectations. Some of the crucial platforms on which we host our back office and bureau systems are aged and are in need of replacement. If we are unable to replace our aged, crucial platforms, if some or all these platforms fail to operate due to a software error or infrastructure failure, if we fail to continue to refine and update our systems and technologies on a timely basis or within reasonable cost parameters, if we do not appropriately and timely train our employees to operate any of these new systems, or we are unable to appropriately protect any of these systems, we could suffer the loss of data, vulnerabilities to cyber-attack, system outages or other performance problems, which could have a material adverse effect on our business, financial condition and results of operations.

An information security breach of our systems or the loss of, or unauthorized access to, customer information or sensitive company information; the failure to comply with the U.S. Federal Trade Commission's ("FTC") ongoing consent order regarding data protection; or a system disruption could have a material adverse effect on our business, market brand, financial condition, and results of operations.

Our business is dependent on our payroll, transaction, financial, accounting, and other data processing systems. We rely on these systems, which are maintained both internally and externally at third parties, to process, on a daily and time sensitive basis, a large number of complicated transactions. We, both through our internal systems and systems maintained by third parties, electronically receive, process, store, and transmit data and personal information about our customers and their employees, as well as our vendors and other business partners. We keep this information confidential. However, both our internal and third party partners' websites, networks, applications and technologies, and other information systems may be targeted for sabotage, disruption, or data misappropriation. Further, as we grow by acquisition, these risks become acute in the period following the acquisition, as we set about integrating the acquisition target's systems into ours. Additionally, as we retire our legacy products like our bureau payroll services, we are no longer investing in maintaining those systems as much as other active solutions, which creates the potential for a potential security breach of one of those systems. The uninterrupted operation of our information systems and our ability to maintain the confidentiality of personal information and other customer and individual and company information that resides on our systems are critical to the successful operation of our business. We maintain systems and processes designed to protect this data and maintain business continuity, but notwithstanding such protective measures, there is a risk of intrusion, cyber-attacks or tampering that could compromise the integrity and privacy of this data. Any information security breach in our business processes or of our processing systems (whether they are maintained internally or externally at third parties) has the potential to impact our customer information and sensitive company information, including our financial reporting capabilities, which could result in the potential loss of business and our ability to accurately report financial results. If any of these systems fail to operate properly or become disabled even for a brief period of time, we could potentially miss a critical filing period, resulting in potential fees and penalties, or lose control of customer data, all of which could result in financial loss, a disruption of our business, liability to customers, regulatory intervention, or damage to our reputation.

We are subject to a twenty-year consent order with the FTC that became final in June 2011 stemming from a December 2009 criminal hack into our discontinued U.S. payroll application. We conceded no wrongdoing in the order and we were not subject to any monetary fines or penalties. However, in connection with the order, we are required to, among other things, maintain a comprehensive information security program that is reasonable and appropriate for our size and complexity, and for the type of personal information we collect. We are also required to have portions of our security program, which apply to certain segments of our U.S. business, reviewed by an independent third party on a biennial basis. Maintaining, updating, monitoring, and revising an information security program in an effort to ensure that it remains reasonable and appropriate in light of changes in security threats, changes in technology, and security vulnerabilities that arise from legacy systems is time-consuming and complex, and is an ongoing effort.

While we have taken and continue to take steps to ensure compliance with the consent order, if we are determined not to be in compliance with the consent order, or if any new breaches of security occur, the FTC may take enforcement actions or other parties may initiate a lawsuit. Any such resulting fines and penalties could have a material adverse effect on our liquidity and financial results, and any reputational damage therefrom could adversely affect our relationships with our existing customers and our ability to attain new customers. Insurance may be inadequate or may not be available in the future on acceptable terms, or at all. In addition, our insurance policies may not cover all claims made against us, and defending a lawsuit, regardless of its merit, could be costly, divert management's attention, or damage our reputation.

Our solutions and our business are subject to a variety of U.S. and international laws and regulations, including those regarding privacy, data protection, and information security. Any failure by us or our third party service providers, as well as the failure of our services, to comply with applicable laws and regulations related to privacy, data protection or cyber security could have a material adverse effect on our business, financial condition, and results of operations.

Failure to comply with privacy, data protection and cyber security laws and regulations could have a material adverse effect on our business, results of operations or financial condition, or have other adverse consequences. The collection, storage, hosting, transfer, processing, disclosure, use, security, retention and destruction of personal information required to provide our services is subject to federal, state and foreign privacy, data protection and cyber security laws. These laws, which are not uniform, generally do one or more of the following: regulate the collection, storage, hosting, transfer (including in some cases, the transfer outside the country of collection), processing, disclosure, use, security and retention and destruction of PII; require notice to individuals of privacy practices; give individuals certain access and correction rights with respect to their personal information; and regulate the use or disclosure of PII for secondary purposes such as marketing. Under certain circumstances, some of these laws require us to provide notification to affected individuals, clients, data protection authorities and/or other regulators in the event of a data breach. In many cases, these laws apply not only to third-party transactions, but also to transfers of information among the Company and its subsidiaries. The European Union (the "EU") General Data Protection Regulation (the "GDPR"), and the California Consumer Protection Act (the "CCPA"), are among the most comprehensive of these laws. Complying with these laws and requirements, including the enhanced obligations imposed by the GDPR and the CCPA, may result in significant costs to our business and require us to amend certain of our business practices. Further, enforcement actions and investigations by regulatory authorities related to data security incidents and privacy violations continue to increase. The future enactment of more restrictive laws, rules or regulations and/or future enforcement actions or investigations could have a material adverse impact on us through increased costs or restrictions on our businesses and noncompliance could result in significant regulatory penalties and legal liability and damage our reputation. In addition, data security events and concerns about privacy abuses by other companies are changing consumer and social expectations for enhanced privacy and data protection. As a result, even the perception of noncompliance, whether or not valid, may damage our reputation.

Customers depend on our solutions to assist them to comply with applicable laws, which requires us and our third party providers to constantly monitor applicable laws and to make applicable changes to our solutions. If our solutions have not been updated to enable the customer to comply with applicable laws or we fail to update our solutions on a timely basis, it could have a material adverse effect on our business, financial condition, and results of operations.

Customers use our solutions to assist them to comply with payroll, HR, and other applicable laws for which the solutions are intended for use. We and our third party providers must monitor all applicable laws and as such laws expand, evolve, or are amended in any way, and when new regulations or laws are implemented, we may be required to modify our solutions to assist our customers to comply with such new regulations or laws, which requires an investment of our time and resources. We are also reliant on our third party providers to modify the solutions that they provide to our customers as part of our solutions to comply with changes to such laws and regulations. The number of laws and regulations that we are required to monitor will increase as we expand the geographic regions in which the solutions are offered. These risks become exacerbated when we expand by acquisition and are most acute in the period following the acquisition as we integrate the acquired business and its systems. If our solutions fail to enable a customer to comply with applicable laws, we could be subject to negative customer experiences, harm to our reputation or loss of customers, claims for any fines, penalties or other damages suffered by our customer, and other financial harm, including fines, penalties or other damages suffered by us directly.

If our current or future applications fail to perform properly, our reputation could be adversely affected, our market share could decline, and we could be subject to liability claims, which could have a material adverse effect on our business, financial condition, and results of operations.

Our applications are inherently complex and may contain material defects or errors. Because of the large amount of data that we collect and manage, it is possible that failures or errors in our systems could result in data loss or corruption or cause the information that we collect to be incomplete or to contain inaccuracies that our customers regard as significant. Any defects in functionality or that cause interruptions in the availability of our applications could result in reputational, competitive, operational or other business harm as well as financial costs and regulatory action, any of which could have a material adverse effect on our business, financial condition, and results of operations. In addition, the costs incurred in correcting any material defects or errors might be substantial. While we conduct standard due diligence during our acquisition process, these risks are heightened as we grow by acquisition and dedicate resources to integrating the acquisition target's systems into ours, and take on the vulnerabilities that may exist at the acquisition target.

Regulatory requirements placed on our software and services could impose increased costs on us, delay or prevent our introduction of new products and services, and impair the function or value of our existing products and services.

Our services are subject to increasing regulatory requirements, and as these requirements proliferate, we are required to change or adapt our services to comply. Changing regulatory requirements might render our services obsolete or might block us from developing new products and services. This might in turn impose additional costs upon us to comply or to further develop our services. It might also make introduction of new services more costly or more time-consuming than we currently anticipate and could even prevent introduction by us of new services or cause the continuation of our existing services to become more costly.

Federal, state or foreign government bodies or agencies have in the past adopted, and may in the future adopt, laws or regulations affecting the use of the Internet as a commercial medium. Changes in these laws or regulations could require us to modify our applications in order to comply with these changes. In addition, government agencies or private organizations may begin to impose taxes, fees, or other charges for accessing the Internet or commerce conducted via the Internet. These laws or charges could limit the growth of Internet-related commerce or communications generally, resulting in reductions in the demand for Internet-based applications such as ours, any of which could have a material adverse effect on our business, financial condition, and results of operations.

If we fail to manage our technical operations infrastructure, our existing customers may experience service outages, and our new customers may experience delays in the implementation of our applications, which could have a material adverse effect on our business, financial condition, and results of operations.

We have experienced significant growth in the number of users, transactions, and data that our operations infrastructure supports, including the acquisition of new systems via strategic transactions. We seek to maintain sufficient excess capacity in our operations infrastructure to meet the needs of all of our customers and to facilitate the rapid provision of new customer activations and the expansion of existing customer activations. In addition, we need to properly manage our technological operations infrastructure to support version control, changes in hardware and software parameters, and the evolution of our applications. We have experienced, and may in the future experience, website disruptions, outages, and other performance problems. These problems may be caused by a variety of factors, including infrastructure changes, human or software errors, viruses, security attacks, fraud, increased resource consumption from expansion or modification to our Dayforce code, spikes in customer usage, and denial of service issues. The risks of these problems occurring may be exacerbated by our strategic acquisitions, especially in the period following the acquisition as we integrate the acquisition target's systems into ours, as well as our aging technology infrastructure which in some cases is supported by older platforms. In some instances, we may not be able to identify the cause or causes of these performance problems within an acceptable period of time. If we do not accurately predict our infrastructure requirements, our existing customers may experience service outages that may subject them to financial penalties, causing us to incur financial liabilities and customer losses; and our operations infrastructure may fail to keep pace with increased sales, causing new customers to experience delays as we seek to obtain additional capacity, which could have a material adverse effect on our business, financial condition, and results of operations.

Our growth depends in part on the success of our strategic relationships with third parties who provide us with services and license us software for use in or with both our applications and our internal operations.

In order to maintain and grow our business, we do, and we anticipate that we will continue to, depend on the continuation and expansion of relationships with third parties who provide us with services. These service provider partners include implementation partners, systems integrators, third party sales channel partners, the operators of data centers, and the providers who execute wire transfers and other money movement services to support our customer payroll and tax services. Our agreements with these third party service providers are typically non-exclusive and do not prohibit them from working with our competitors. If any third-party service providers on which we rely to provide us with services experience a disruption, go out of business, are acquired by our competitors, experience a decline in quality, or terminate their relationship with us, we could experience a material adverse effect on our business, financial condition, and results of operation.

In addition, we license software from third parties for use in or with both our applications and our internal operations, and the inability to maintain these licenses could result in increased costs, or reduced service levels, which could have a material adverse effect on our business, financial condition, and results of operations. To the extent that our applications depend upon the successful operation of third party software in conjunction with our software, any undetected errors or defects in this third party software could prevent the deployment or impair the functionality of our applications, delay new application introductions, and result in a failure of our applications, which could have a material adverse effect on our business, financial condition, and results of operations.

Any failure to offer high-quality technical support services may adversely affect our relationships with our customers and could have a material adverse effect on our business, financial condition, and results of operations.

Once our applications are deployed, our customers depend on our support organization and the support capabilities of our partners to resolve technical issues relating to our applications. We may be unable to respond quickly enough to accommodate short-term increases in customer demand for support services. We also may be unable to modify the format of our support services to compete with changes in support services provided by our competitors. Increased customer demand for these services, without corresponding revenues, could increase costs and have an adverse effect on our results of operations. Ultimately, a client could elect to terminate their agreement due to dissatisfaction with support, resulting in lost recurring revenue. In addition, our sales process is highly dependent on our applications and business reputation and on positive recommendations from our existing customers. Any failure to maintain high-quality technical support, or a market perception that we do not maintain high-quality support, could adversely affect our reputation and our ability to sell our applications to existing and prospective customers, which could have a material adverse effect on our business, financial condition, and results of operations.

If our customers are not satisfied with the implementation and professional services provided by us or our partners, it could have a material adverse effect on our business, financial condition, and results of operations.

Our business depends on the ability to implement our solutions on a timely, accurate, and cost-efficient basis and to provide professional services at the high level demanded by our customers. Implementation and other professional services may be performed by our own staff, by a third party, or by a combination of the two. If a customer is not satisfied with the quality of work performed, or there are inaccuracies or errors in the work delivered, then we could incur additional costs to address the situation, the customer's dissatisfaction with such services could damage our ability to expand the number of applications subscribed to by that customer or we could be liable for loss or damage suffered as a result, any of which could have a material adverse effect on our business, financial condition, and results of operations. If a new customer is dissatisfied with implementation, the customer could refuse to go-live, which could result in a delay in our collection of revenue or could result in a customer seeking repayment of its implementation fees or suing us for damages, or could force us to enforce the termination provisions in our customer contracts in order to collect revenue. In addition, negative publicity related to our customer relationships, regardless of its accuracy, may affect our ability to compete for new business with current and prospective customers, which could also have a material adverse effect on our business, financial condition, and results of operations.

We depend on our senior management team, and the loss of one or more key employees or an inability to attract and to retain highly skilled employees could have a material adverse effect on our business, financial condition, and results of operations.

Our success depends largely upon the continued services of our key executive officers. We do not have employment agreements with our executive officers or other key personnel that require them to continue to work for us for any specified period, and, therefore, they could terminate their employment with us at any time. Additionally, we do not maintain key man insurance on any of our executive officers or key employees. The loss of one or more of our executive officers or key employees could have a material adverse effect on our business, financial condition, and results of operations.

To execute our growth plan, we must attract and retain highly qualified personnel. Competition for personnel is intense, including without limitation for individuals with high levels of experience in designing and developing software and Internet-related services and senior sales executives. We have, from time to time, experienced, and we expect to continue to experience, difficulty in hiring and retaining employees with appropriate qualifications.

If our vendors or affiliates initiate transactions on behalf of our customers and do not receive funds from the customer sufficient to cover the amounts paid on their behalf, we may suffer significant losses which could have a material adverse effect on our business, financial condition, and results of operations.

Our payroll and tax processing services involve the movement of significant funds from the account of a customer to its employees and to relevant taxing authorities. Typically, we rely upon third party vendors to initiate payments on behalf of our customers. In certain jurisdictions, where permitted, our affiliates may also initiate payments on behalf of our customers. Under certain circumstances, funds may not be received to cover the transactions that our affiliates and third party vendors have initiated on our customers' behalf. Additionally, there is a risk that an erroneous payment instruction may trigger inaccurate payments. There is, therefore, a risk that the customer's funds will be insufficient to cover the amounts already paid on its behalf. Should customers default on their payment obligations in the future, should our affiliates or vendors make erroneous payments on behalf of a customer, should erroneous or defaulted payment recovery be unsuccessful, or should our affiliates or vendors suffer losses from similar issues, we may be required to advance substantial amounts of funds to cover such obligations, or to make our partners whole for any losses they suffer. In such an event, we may be required to seek additional sources of short-term liquidity, which may not be available on reasonable terms, which could have a material adverse effect on our business, financial condition, and results of operations. Further, should a customer on whose behalf our affiliate or vendor has initiated a transaction subsequently have financial difficulty or refuse to pay, collection of any funds advanced on its behalf may be difficult and we may suffer losses that could have a material adverse effect on our business, financial condition and results of operation.

For our Dayforce Wallet service, we advance earned net wages and associated tax amounts on behalf of customers in connection with the "on demand pay" payroll feature of the service in order to provide their employees access to earned wages in advance of their standard payroll cycles. A customer may fail to satisfy its obligation to repay us for those advanced monies which could have a material adverse effect on our business, financial condition, and results of operations.

In the case of our "on demand pay" service (a service that is offered as part of the Dayforce Wallet), credit is provided to our customers and funds are advanced on the customers' behalf in order to fund the customers' employees' interim earned net wage payroll demands (including associated source and other deductions) with the requirement that the customers will repay the advance on the date of their next ordinary payroll run. These advances may or may not have priority over other creditors of our customers, and our security interest and/or other credit protection measures, if implemented, may be inadequate to make us whole. There is, therefore, a risk that our customers do not pay back the amounts we have already paid on their behalf, and in that event, we may possess limited legal recourse to recoup those funds from our customers. In the event of a customer's failure to repay us, we may be required to seek additional sources of short-term liquidity, which may not be available on reasonable terms, or suffer credit losses, which could have a material adverse effect on our business, financial condition, and results of operations.

Customer funds and wage funds of their employees that our trustees and third-party financial institution partners hold are subject to market, interest rate, credit, and liquidity risks. The loss of these funds could have a material adverse effect on our business, financial condition, and results of operations.

Our trustees (in the case of customer funds held in our U.S. Clients' Funds Trust and our Canada payroll trust) and our third party financial institution partners (in the case of employee wage funds held on their behalf as part of the U.S. Dayforce Wallet program and certain of our non-U.S. operations) may invest funds in one or more high-quality bank deposits, money market mutual funds, commercial paper, collateralized short-term investments, government securities, as well as highly rated asset-backed, mortgage-backed, municipal, corporate, and bank securities. Nevertheless, these assets are subject to general market, interest rate, credit, and liquidity risks. These risks may be exacerbated, individually or in unison, during periods of unusual financial market volatility. We are required to fund the payroll and wage funds of our customers and their employees regardless of any loss realized on those investments affecting the principal funds held. In the event of a global financial crisis, such as that experienced in 2008, we could be faced with a severe constriction of the availability of liquidity, which could impact our ability to fund payrolls. Any loss of principal, or inability to access customer funds could have an adverse impact on our cash position and results of operations and could require us to obtain additional sources of liquidity, and could have a material adverse effect on our business, financial condition, and results of operations.

We may acquire other companies or technologies, which could divert our management's attention, result in additional indebtedness or dilution to our stockholders, and otherwise disrupt our operations, which could have a material adverse effect on our business, financial condition, and results of operations.

We may in the future seek to acquire or to invest in businesses, applications or technologies that we believe could complement or expand our applications, enhance our technical capabilities, or otherwise offer growth opportunities. The pursuit of potential acquisitions may divert the attention of management and cause us to incur various expenses in identifying, investigating, and pursuing suitable acquisitions, whether or not they are consummated. In addition, we have limited experience in acquiring other businesses. If we acquire additional businesses, we may incur significant costs to integrate such businesses. Further, we may not be able to integrate the acquired personnel, operations, and technologies successfully or profitably, or to effectively manage the combined business following the acquisition. If an acquired business fails to meet our expectations, it could have a material adverse effect on our business, financial condition, and results of operations. In order to fund acquisitions, we may issue dilutive equity securities or incur additional debt, resulting in an increase our interest payments.

A significant portion of the purchase price of companies we acquire may be allocated to goodwill and other intangible assets, which must be assessed for impairment at least annually. In the future, if our acquisitions do not yield expected returns, we may be required to record charges based on this impairment assessment, which could have a material adverse effect on our financial condition and results of operations.

Failure to comply with anti-corruption laws and regulations, economic and trade sanctions, anti-money laundering laws and regulations, and similar laws could have a materially adverse effect on our reputation, results of operations or financial condition, or have other adverse consequences.

Regulators worldwide are exercising heightened scrutiny with respect to anti-corruption, economic and trade sanctions, and anti-money laundering laws and regulations. Such heightened scrutiny has resulted in more aggressive investigations and enforcement of such laws and more burdensome regulations, any of which could have a material adverse impact on our business. We are growing our business throughout the world, including in numerous developing economies where companies and government officials are more likely to engage in business practices that are prohibited by domestic and foreign laws and regulations, including the United States Foreign Corrupt Practices Act, the Canadian Corruption of Foreign Public Officials Act, the anti-corruption provisions of the Australian criminal code, and the U.K. Bribery Act. Such laws generally prohibit improper payments or offers of payments to foreign government officials and leaders of political parties, and in some cases, to other persons, for the purpose of obtaining or retaining business. We are also subject to economic and trade sanctions programs, including those administered by the U.S. Treasury Department's Office of Foreign Assets Control, which prohibit or restrict transactions or dealings with specified countries, their governments and, in certain circumstances, their nationals, and with individuals and entities that are specially designated, including narcotics traffickers and terrorists or terrorist organizations, among others. In addition, some of our businesses and entities in the U.S. and a number of other countries in which we operate may be subject to anti-money laundering laws and regulations. These laws require us to develop and implement risk-based anti-money laundering programs, report large cash transactions and suspicious activity, and maintain transaction records.

We have implemented policies and procedures to monitor and address compliance with applicable anti-corruption, economic and trade sanctions and anti-money laundering laws and regulations, and we are continuously in the process of reviewing, upgrading and enhancing certain of our policies and procedures. However, there can be no assurance that our employees, consultants or agents will not take actions in violation of our policies for which we may be ultimately responsible, or that our policies and procedures will be adequate or will be determined to be adequate by regulators. Any violations of applicable anti-corruption, economic and trade sanctions or anti-money laundering laws or regulations could limit certain of our business activities until they are satisfactorily remediated and could result in civil and criminal penalties, including fines, which could damage our reputation and have a material adverse effect on our results of operation or financial condition. Further, banks are increasingly viewing money services businesses, as a class, to be higher risk customers for money laundering. As a result, our banking partners that assist in processing our money movement transactions may limit the scope of services they provide to us or may impose additional material requirements on us. These regulatory restrictions on banks and changes to banks' internal risk-based policies and procedures may result in a decrease in the number of banks that may do business with us, may require us to materially change the manner in which we conduct some aspects of our business, may decrease our revenues and earnings and could have a material adverse effect on our results or financial condition.

Catastrophic events may disrupt our business which could have a material adverse effect on our business, financial condition, and results of operations.

Our business, financial condition, results of operations, access to capital markets and borrowing costs may be adversely affected by a major natural disaster or catastrophic event, including civil unrest, geopolitical instability, war, terrorist attack, or pandemics or other public health emergencies such as the recent COVID-19 outbreak, and measures taken in response thereto. In the event of a major disaster or event impacting any of our locations, we may be unable to continue our operations and may endure system interruptions, reputational harm, delays in our application development, lengthy interruptions in our services, breaches of data security and loss of critical data, all of which could have a material adverse effect on our business, financial condition, and results of operations.

We may not be able to utilize a significant portion of our net operating loss, which could have a material adverse effect on our financial condition and results of operations.

As of December 31, 2020, we had federal and state net operating loss carryforwards due to prior period losses, which, if not utilized, will begin to expire in 2034 and 2021 for federal and state purposes, respectively. These net operating loss carryforwards could expire unused and be unavailable to offset future income tax liabilities, which could have a material adverse effect on our financial condition and results of operations.

In addition, under Section 382 of the Internal Revenue Code of 1986, as amended (the "Code"), our ability to utilize net operating loss carryforwards or other tax attributes in any taxable year may be limited if we experience an "ownership change." A Section 382 "ownership change" generally occurs if one or more stockholders or groups of stockholders who own at least 5% of our stock increase their ownership by more than 50 percentage points over their lowest ownership percentage within a rolling three-year period. Similar rules may apply under state tax laws. Future issuances of our stock could cause an "ownership change." It is possible that an ownership change could have a material effect on our ability to utilize our net operating loss carryforwards, which could have a material adverse effect on our financial condition and results of operations.

We operate and are subject to tax in multiple jurisdictions. Audits, investigations, and tax proceedings could have a material adverse effect on our business, results of operations, and financial condition.

We are subject to income and non-income taxes in multiple jurisdictions. Income tax accounting often involves complex issues, and significant judgment is often required in determining our worldwide provision for income taxes. We are regularly subject to tax examinations in these jurisdictions during which the tax authorities may challenge our tax positions. We regularly assess the likely outcomes of these examinations to determine the appropriateness of our tax reserves as well as our future tax liabilities. In addition, the application of withholding tax, value added tax, goods and services tax, sales tax, and other non-income taxes is not always certain and we may be subject to examinations relating to such withholding or non-income taxes. We believe that our tax positions are reasonable and our tax reserves are adequate to cover any potential liability. However, if any of these tax authorities successfully challenge our positions, we may be liable for additional tax, penalties, and interest in excess of any reserves established, which may have a significant impact on our results and operations and future cash flow.

Our failure to maintain effective internal control over financial reporting in accordance with Section 404 of the Sarbanes-Oxley Act could have a material adverse effect on our business, financial condition, and results of operations.

As a public company, we are required to design and maintain proper and effective internal controls over financial reporting and to report any material weaknesses in such internal controls. Section 404 of the Sarbanes-Oxley Act of 2002 requires that we evaluate and determine the effectiveness of our internal controls over financial reporting and provide a management report on the internal controls over financial reporting, which must be attested to by our independent registered public accounting firm. We have previously identified and reported material weaknesses, and we may identify additional material weaknesses in internal controls in future periods. If we were to have another material weakness in our internal controls over financial reporting, we may not detect errors on a timely basis and our financial statements may be materially misstated. There could also be a negative reaction in the financial markets due to a loss of investor confidence in us and the reliability of our consolidated financial statements, which could have a material adverse effect on our business, financial condition, and results of operations.

Changes in generally accepted accounting principles in the United States could have a material adverse effect on our previously reported results of operations.

Generally accepted accounting principles in the United States are subject to interpretation by the Financial Accounting Standards Board (the “FASB”), the SEC, and various bodies formed to promulgate and to interpret appropriate accounting principles. A change in these principles or interpretations could have a significant effect on our previously reported results of operations and could affect the reporting of transactions completed before the announcement of a change. Please refer to Part II, Item 8, Note 2, “Summary of Significant Accounting Policies”, of this report for our assessment of recently issued and adopted accounting pronouncements.

Litigation and regulatory investigations aimed at us or resulting from actions of our predecessor may result in significant financial losses and harm to our reputation.

We face risk of litigation, regulatory investigations, and similar actions in the ordinary course of our business, including the risk of lawsuits and other legal actions relating to breaches of contractual obligations or tortious claims from customers or other third parties, fines, penalties, interest, or other damages as a result of erroneous transactions, or breach of data privacy laws. Litigation might result in substantial costs and may divert management’s attention and resources, which might materially harm our business, overall financial condition, and operating results. We may also be subject to various regulatory inquiries, such as information requests, and book and records examinations, from regulators and other authorities in the geographical markets in which we operate. A substantial liability arising from a lawsuit judgment or settlement or a significant regulatory action against us or a disruption in our business arising from adverse adjudications in proceedings against our directors, officers, or employees could have a material adverse effect on our business, financial condition, and results or operations. Insurance might not cover such claims, might not provide sufficient payments to cover all the costs to resolve one or more such claims and might not continue to be available on terms acceptable to us. A claim brought against us that is uninsured or underinsured could result in unanticipated costs, thereby harming our operating results and leading analysts or potential investors to lower their expectations of our performance, which could reduce the trading price of our stock.

Additionally, we are subject to claims and investigations as a result of our predecessor, Control Data Corporation (“CDC”), Ceridian Corporation, and other former entities for whom we are successor-in-interest with respect to assumed liabilities. For example, in September 1989, CDC became party to an environmental matters agreement with Seagate Technology plc (“Seagate”) related to groundwater contamination on a parcel of real estate in Omaha, Nebraska sold by CDC to Seagate. In February 1988, CDC entered into an arrangement with Northern Engraving Corporation and the Minnesota Pollution Control Agency in relation to groundwater contamination at a site in Spring Grove, Minnesota. Although we are fully reserved for these groundwater contamination liabilities, we cannot be certain if additional claims, investigations or liabilities related to such predecessor companies will surface.

Any failure to protect our intellectual property rights could impair our ability to protect our proprietary technology and our brand.

Our success and ability to compete depend in part upon our intellectual property. We primarily rely on copyright, trade secret, and trademark laws; trade secret protection; and confidentiality or license agreements with our employees, customers,

partners and others to protect our intellectual property rights. However, the steps we take to protect our intellectual property rights may be ineffective or inadequate.

In order to protect our intellectual property rights, we may be required to spend significant resources to monitor and to protect these rights. Litigation brought to protect and to enforce our intellectual property rights could be costly, time-consuming, and distracting to management, with no guarantee of success, and could result in the impairment or loss of portions of our intellectual property. Furthermore, our efforts to enforce our intellectual property rights may be met with defenses, counterclaims, and countersuits attacking the validity and enforceability of our intellectual property rights. Our failure to secure, to protect, and to enforce our intellectual property rights could have a material adverse effect on our business, financial condition, and results of operations.

We may be sued by third parties for alleged infringement of their proprietary rights which could have a material adverse effect on our business.

There is considerable intellectual property development activity in our industry. Third parties, including our competitors, may own or claim to own intellectual property relating to our service offerings and may claim that we are infringing their intellectual property rights. We may be found to be infringing upon such rights, even if we are unaware of their intellectual property rights. Any claims or litigation could cause us to incur significant expenses and, if successfully asserted against us or if we decide to settle, could require that we pay substantial damages or ongoing royalty payments, obtain licenses, modify applications, prevent us from offering our services, or require that we comply with other unfavorable terms. We may also be obligated to indemnify our customers, vendors or partners in connection with any such claim or litigation. Even if we were to prevail in such a dispute, any litigation regarding our intellectual property could be costly and time consuming.

The use of open source software in our applications may expose us to additional risks and harm our intellectual property rights.

Some of our applications include software covered by open source licenses. From time to time, there have been claims challenging the ownership of open source software against companies that incorporate such software into their products or applications. The terms of various open source licenses have not been interpreted by U.S. courts, and there is a risk that such licenses could be construed in a manner that imposes unanticipated conditions or restrictions on our ability to market our applications. By the terms of certain open source licenses, we could be required to release the source code of our proprietary software and to make our proprietary software available under open source licenses if we combine our proprietary software with open source software in a certain manner. In the event that portions of our proprietary software are determined to be subject to an open source license, we could be required to publicly release the affected portions of our source code, to re-engineer all or a portion of our technologies, or otherwise to be limited in the licensing of our technologies, each of which could reduce or eliminate the value of our technologies and services. In addition to risks related to license requirements, usage of open source software can lead to greater risks than use of third party commercial software, as open source licensors generally do not provide warranties or controls on the origin of the software. Many of the risks associated with usage of open source software cannot be eliminated and could have a material adverse effect on our business, financial condition, and results of operations.

The implementation of new accounting systems or applications could interfere with our business and operations.

In 2020, we implemented a new general ledger system, NetSuite. The implementation of new systems and enhancements may be disruptive to our business and can be time-consuming and divert management's attention. Any disruptions relating to our systems or any problems with the implementation, particularly any disruptions impacting our operations or our ability to accurately report our financial performance on a timely basis during the implementation period, could materially and adversely affect our business and operations.

Risks Related to Our Indebtedness

Our outstanding indebtedness could have a material adverse effect on our financial condition and our ability to operate our business, and we may not be able to generate sufficient cash flows to meet our debt service obligations.

Our credit facilities are secured substantially by all of our assets. Our outstanding indebtedness and any additional indebtedness we incur may have important consequences for us, including, without limitation, that:

- we may be required to use a substantial portion of our cash flow to pay the principal of and interest on our indebtedness;
- our indebtedness and leverage may increase our vulnerability to adverse changes in general economic and industry conditions, as well as to competitive pressures;
- our ability to obtain additional financing for working capital, capital expenditures, acquisitions and for general corporate and other purposes may be limited;
- our indebtedness may expose us to the risk of increased interest rates because certain of our borrowings, including and most significantly our borrowings under our debt facilities, are at variable rates of interest;
- our indebtedness may prevent us from taking advantage of business opportunities as they arise or successfully carrying out our plans to expand our business; and
- our flexibility in planning for, or reacting to, changes in our business and our industry may be limited.

Under the terms of the agreements governing our debt facilities, we are required to comply with specified operating covenants and, under certain circumstances, a financial covenant applicable to the revolving credit facility, which may limit our ability to operate our business as we otherwise might operate it. If not cured, an event of default under our Senior Credit Facilities could result in any amounts outstanding, including any accrued interest and unpaid fees, becoming immediately due and payable, which would require us, among other things, to seek additional financing in the debt or equity markets, to refinance or restructure all or a portion of our indebtedness, to sell selected assets, and/or to reduce or to delay planned capital or operating expenditures. Such measures might not be sufficient to enable us to service our debt, and any such financing or refinancing might not be available on economically favorable terms or at all. If we are not able to generate sufficient cash flows to meet our debt service obligations or are forced to take additional measures to be able to service our indebtedness, it could have a material adverse effect on our business, financial condition, and results of operations.

Volatility and weakness in bank and capital markets may adversely affect credit availability and related financing costs for us.

Disruptions in the financial markets can also adversely affect our lenders, insurers, customers, and other counterparties. During periods of volatile credit markets, there is risk that lenders, even those with strong balance sheets and sound lending practices, could fail, no longer participate in credit offerings, or refuse to honor their existing legal commitments and obligations to us, including but not limited to, extending credit up to the maximum amount permitted by the Revolving Facility. If our lenders are unable to fund borrowings under their revolving credit commitments or we are unable to borrow or refinance our debt in the financial markets, it could be difficult to obtain sufficient funding to execute our business strategy or to meet our liquidity needs, which could have a material adverse effect on our business, financial condition, and results of operations.

Our debt may be downgraded, which could have a material adverse effect on our business, financial condition, and results of operations.

A reduction in the ratings that rating agencies assign to our short and long-term debt may negatively impact our access to the debt capital markets and increase our cost of borrowing, which could have a material adverse effect on our business, financial condition, and results of operations.

Risks Related to Ownership of Our Common Stock

The price of our common stock may be volatile and investors may lose all or part of their investment.

The market price and volume of our common stock trading has experienced, and may continue to experience, wide fluctuations and volatility. This market volatility, as well as general economic, market, or political conditions could reduce the market price of our common stock regardless of our results of operations. Additional factors that may impact our performance and market price include those discussed elsewhere in this “Risk Factors” section of this Annual Report on Form 10-K and others such as:

- actual or anticipated variations in our quarterly results of operations and the performance of similar companies;
- guidance, if any, that we provide to the public, any changes in this guidance, or our failure to meet this guidance;
- announcements, including filing with the SEC by us or our competitors of acquisitions, business plans or commercial relationships;
- any major change in our senior management or board of directors;
- sales, or anticipated sales, of our stock, including sales by our officers, directors, and significant stockholders;
- introduction of new services by us or our competitors;
- issuance of new, negative, or changed securities analysts’ reports or recommendations or estimates;
- investor perceptions of us and the industries in which we or our customers operate;
- threatened or actual litigation and governmental investigations; and
- other events or factors, including catastrophic events impacting our business, changing economic conditions, regulatory or political developments, and general conditions in the United States and global economies and financial markets.

These and other factors may cause the market price and demand for shares of our common stock to fluctuate substantially, which may limit or prevent investors from readily selling their shares of common stock and may otherwise negatively affect the liquidity of our common stock. In addition, in the past, when the market price of a stock has been volatile, holders of that stock sometimes have instituted securities class action litigation against the company that issued the stock. Securities litigation against us, regardless of the merits or outcome, could result in substantial costs, damage to our reputation, and divert the time and attention of our management from our business, which could have a material adverse effect on our business, financial condition, and results of operations.

The issuance of additional stock will dilute all other stockholders.

The issuance of additional stock in connection with acquisitions, financings, our equity incentive plans, or otherwise will dilute all other stockholders. Our third amended and restated certificate of incorporation authorizes us to issue up to five hundred million shares of common stock and up to ten million shares of preferred stock with such rights and preferences as may be determined by our board of directors. Subject to compliance with applicable rules and regulations, we may issue all of these shares that are not already outstanding without any action or approval by our stockholders. We intend to continue to evaluate strategic acquisitions or opportunities in the future. We may pay for such acquisitions or opportunities, in part or in full, through the issuance of additional equity securities.

Because we do not intend to pay cash dividends in the foreseeable future, investors may not receive any return on investment unless they are able to sell common stock for a price greater than the purchase price.

We have never declared nor paid cash dividends on our capital stock. We currently intend to retain any future earnings to finance the operation and expansion of our business, and we do not expect to declare or to pay any dividends in the foreseeable future. Consequently, stockholders must rely on sales of their common stock after price appreciation, which may never occur, as the only way to realize any future gains on their investment. There is no guarantee that shares of our common stock will appreciate in value or even maintain the price at which investors have purchased their shares.

Anti-takeover protections in our third amended and restated certificate of incorporation, our amended and restated bylaws or our contractual obligations may discourage or prevent a takeover of our company, even if an acquisition would be beneficial to our stockholders.

Provisions contained in our third amended and restated certificate of incorporation and amended and restated bylaws as well as provisions of Delaware law could delay or make it more difficult to remove incumbent directors or could impede a merger, takeover or other business combination involving us or the replacement of our management, or discourage a potential investor from making a tender offer for our common stock, which, under certain circumstances, could reduce the market value of our common stock, even if it would benefit our stockholders.

In addition, under the agreements governing our credit facilities, a change of control would cause us to be in default. In the event of a change of control default, the administrative agent under our credit facilities would have the right (or, at the direction of lenders holding a majority of the loans and commitments under our credit facilities, the obligation) to accelerate the outstanding loans and to terminate the commitments under our credit facilities, and if so accelerated, we would be required to repay all of our outstanding obligations under our credit facilities.

Item 1B. Unresolved Staff Comments.

None.

Item 2. Properties.

Our corporate headquarters is located in Minneapolis, Minnesota, in a leased facility consisting of approximately 52,000 square feet of space. We also have a major office location in Toronto, Ontario, Canada, where we lease approximately 87,000 square feet of space. In addition, as of December 31, 2020, we lease approximately 904,000 square feet of office space in various other locations across North America, Europe, Mauritius, Asia-Pacific, and Australia. We own our St. Petersburg, Florida facility, which consists of 383,000 square feet. We believe that our current facilities meet our needs, and we are confident that we will be able to obtain additional space on commercially reasonable terms to accommodate future growth.

Item 3. Legal Proceedings.

From time to time, we may become involved in legal proceedings arising in the ordinary course of our business. We are not presently a party to any legal proceedings that, if determined adversely to us, we believe would individually or taken together have a material adverse effect on our business, financial condition or liquidity. Discussion of Legal Matters is incorporated by reference from Part II, Item 8, Note 17, “Commitments and Contingencies,” of this Form 10-K and should be considered an integral part of Part I, Item 3, “Legal Proceedings”.

Item 4. Mine Safety Disclosures.

Not applicable.

PART II

Item 5. Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities.

Market Information for Common Stock

Our common stock has traded on the New York Stock Exchange (“NYSE”) and the Toronto Stock Exchange under the symbol “CDAY” since April 26, 2018, the date of our initial public offering.

Dividend Policy

We do not currently intend to pay cash dividends on our common stock in the foreseeable future. However, in the future, subject to factors described below and our future liquidity and capitalization, we may change this policy and choose to pay dividends.

Stockholders

As of December 31, 2020, there were 83 stockholders of record of our common stock. The actual number of stockholders is considerably greater than this number of record holders, and includes stockholders who are beneficial owners but whose shares are held in street name by brokers and other nominees.

Recent Sales of Unregistered Securities

None.

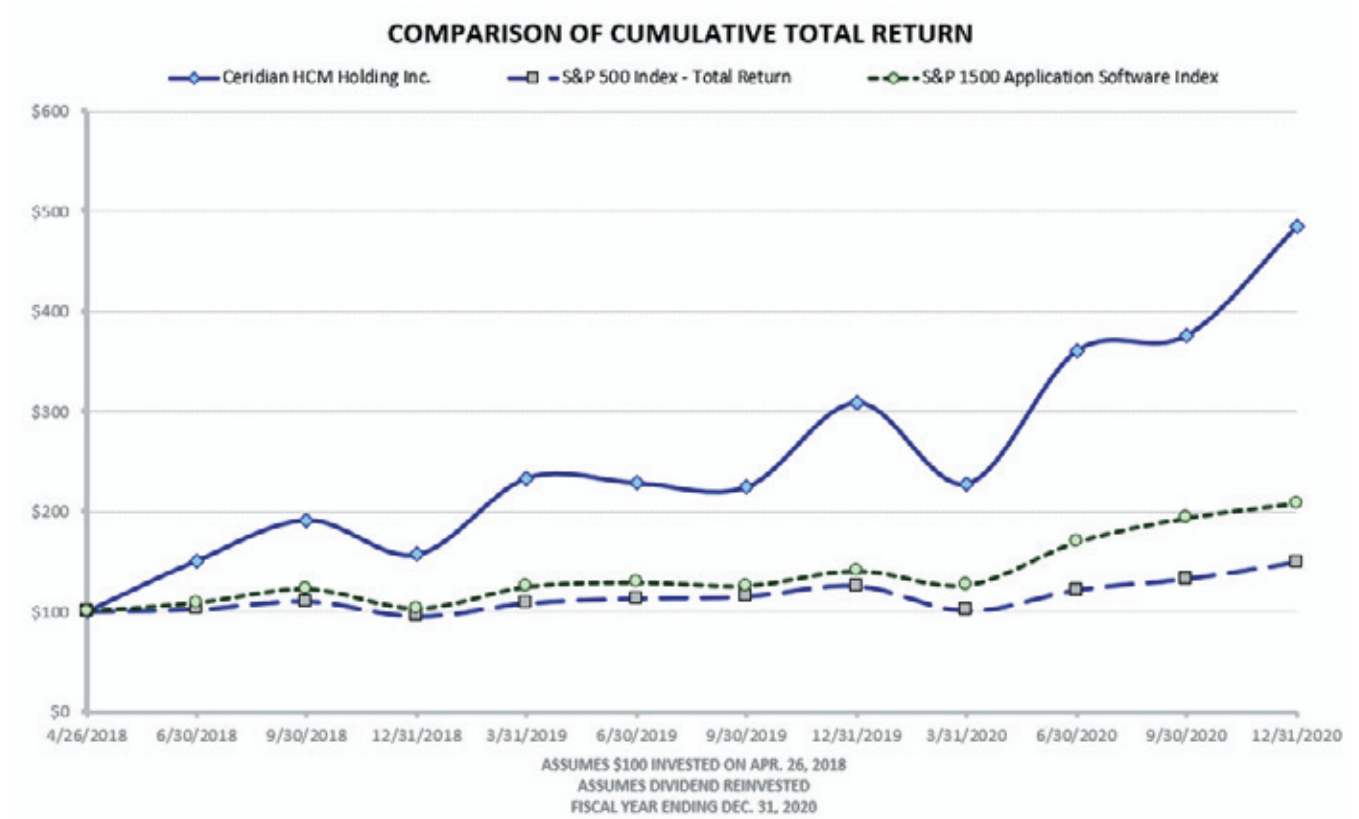
Issuer Purchases of Equity Securities

None.

Stock Performance Graph

The following shall not be deemed "filed" for purposes of Section 18 of the Exchange Act, or incorporated by reference into any of our other filings under the Exchange Act or the Securities Act, except to the extent we specifically incorporate it by reference into such filing.

The following graph compares the cumulative total shareholder returns on our common stock with the cumulative total return on the S&P 500 Index and the S&P 1500 Application Software Index. The graph assumes \$100 was invested in each, based on closing prices, from our initial public offering to the last trading day of each quarter for the period April 26, 2018 (the date our common stock began trading on the NYSE) through December 31, 2020. Stock price performance shown in the Stock Performance Graph for our common stock is historical and not necessarily indicative of future performance.



Item 6. Selected Financial Data.

The following tables set forth selected historical consolidated financial data for the periods as of the dates indicated. We derived the consolidated statements of operations data and the consolidated balance sheet data from our audited consolidated financial statements included elsewhere in this report.

Our historical results are not necessarily indicative of future results of operations. You should read the information set forth below together with “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” and our consolidated financial statements and the related notes thereto included elsewhere in this report.

(Dollars in millions, except share and per share amounts)	Year Ended December 31,		
	2020	2019	2018
Consolidated Statements of Operations Data:			
Total revenue	\$ 842.5	\$ 824.1	\$ 740.7
Cost of revenue	501.2	455.9	425.8
Selling, general, and administrative expenses	333.5	295.9	258.8
Operating profit	7.8	72.3	56.1
Interest expense, net	25.1	32.4	83.2
Other expense (income), net	2.7	5.6	(0.2)
(Loss) income from continuing operations before income taxes	(20.0)	34.3	(26.9)
Income tax (benefit) expense	(16.0)	(44.4)	8.4
(Loss) income from continuing operations	(4.0)	78.7	(35.3)
Loss from discontinued operations	—	—	(25.8)
Net (loss) income	(4.0)	78.7	(61.1)
Net loss attributable to noncontrolling interest	—	—	(0.5)
Net (loss) income attributable to Ceridian	\$ (4.0)	\$ 78.7	\$ (60.6)
Net (loss) income per share attributable to Ceridian:			
Basic	\$ (0.03)	\$ 0.55	\$ (0.60)
Diluted	\$ (0.03)	\$ 0.53	\$ (0.60)
Weighted average shares outstanding:			
Basic	146,774,471	142,049,112	114,049,682
Diluted	146,774,471	148,756,592	114,049,682

(Dollars in millions)	As of December 31,		
	2020	2019	2018
Consolidated Balance Sheet Data:			
Cash and equivalents	\$ 188.2	\$ 281.3	\$ 217.8
Total assets	6,701.3	6,085.7	5,247.8
Long-term debt (1)	660.6	666.3	663.5
Total liabilities	4,603.1	4,203.4	3,632.3
Working capital	258.7	252.0	164.5
Total stockholders’ equity	\$ 2,098.2	\$ 1,882.3	\$ 1,615.5

- (1) Excludes the current portion of our long-term debt of \$7.2 million as of December 31, 2020, \$10.8 million as of December 31, 2019, and \$6.8 million as of December 31, 2018.

Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations.

You should read the following discussion and analysis of our financial condition and results of operations together with our consolidated financial statements and the related notes thereto included elsewhere in this report. This discussion and analysis contains forward-looking statements, including statements 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 “Risk Factors” and “Forward-Looking Statements.” Our actual results may differ materially from those contained in or implied by these forward-looking statements.

The following discussion and analysis of our financial condition and results of operations covers fiscal 2020 and fiscal 2019 items and year-over-year comparisons between fiscal 2020 and fiscal 2019. Discussions of fiscal 2018 items and year-over-year comparisons between fiscal 2019 and 2018 that are not included in this Form 10-K can be found in “Management’s Discussion and Analysis of Financial Condition and Results of Operations” in Part II, Item 7 of our Annual Report on Form 10-K for the fiscal year ended December 31, 2019, that was filed with the SEC on February 28, 2020.

Overview

Ceridian is a global 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 legacy North America Bureau solutions, which we generally stopped actively selling to new customers following the acquisition of Dayforce in 2012. 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 in the United States, 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. The on-demand wages are loaded onto a paycard, which customers’ employees can use anywhere credit or debit cards are accepted, generating interchange fee revenue.

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 4,906 live Dayforce customers, representing approximately 4.2 million active global users as of December 31, 2020. In 2020, we added 543 net new live Dayforce customers. Our customers vary across industries, and no single customer constituted more than 1% of our revenues for the year ended December 31, 2020. Our annual Cloud revenue retention rate continues to exceed 95% due to our focus on solving complex problems and our superior customer experience.

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 our high customer retention rates, we have a high level of visibility into our future revenues. The profitability of a customer to our business depends, in large part, on how long they have been a customer. Because in our current business model, PEPM subscription fees are generally 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 2 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 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 year ended December 31, 2020, and 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.

	Year Ended December 31,		
	2020	2019	2018
Live Dayforce customers	4,906	4,363	3,718
Annual Cloud revenue retention rate (a)	95.8%	96.3%	96.0%
Cloud annualized recurring revenue (ARR) (a) (Dollars in millions)	\$ 617.9	\$ 582.0	\$ 476.2
Adjusted EBITDA (b) (Dollars in millions)	\$ 159.0	\$ 184.6	\$ 160.6
Adjusted EBITDA margin	18.9%	22.4%	21.7%

- (a) Annual Cloud revenue retention rate and Cloud annualized recurring revenue are calculated on an annual basis, and the disclosure reflects data as of the most recent fiscal year end. Please see below for further explanation.
- (b) For a reconciliation of Adjusted EBITDA to net income, please refer to the “Non-GAAP Measures” section.

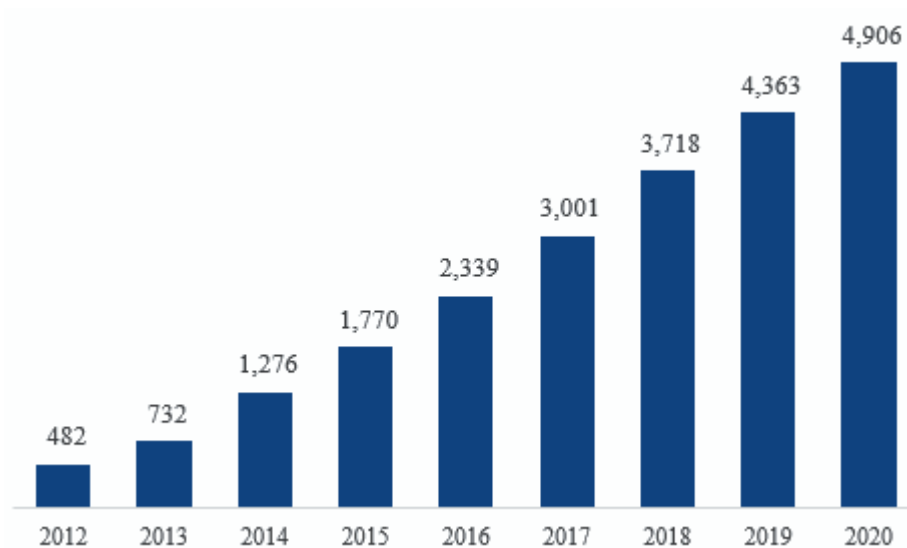
Live Dayforce Customers

We use the number of live Dayforce customers as an indicator of future revenue and the overall performance of the business and to assess the performance of our implementation services. As shown in the table below, the number of customers live on Dayforce has increased from 482 as of December 31, 2012 to 4,906 as of December 31, 2020. For 2020, our 4,906 live Dayforce customers represented approximately 4.2 million active global users.

We market Dayforce to customers of all sizes, including small (under 500 employees), major (500 to 5,999 employees), and enterprise (6,000 or more employees). For 2020, small businesses accounted for 12% of the total number of active global users, major businesses accounted for 53% of the total number of active global users, and enterprise businesses accounted for 35% of the total number of active global users.

From 2019 to 2020, live Dayforce customers increased from 4,363 to 4,906, a net increase of 543. Of the customers taken live during 2020, 76% represented net new customers to Dayforce, and the remainder were migration customers from our Bureau solutions.

The following table sets forth the number of live Dayforce customers at the end of the years presented:



Annual Cloud Revenue Retention Rate

Our annual Cloud revenue retention rate measures the percentage of revenues that we retain from our existing Cloud customers. We use this retention rate as an indicator of customer satisfaction and future revenues. We calculate the annual Cloud revenue retention rate as a percentage, where the numerator is the Cloud annualized recurring revenue for the prior year, less the Cloud annualized recurring revenue from lost Cloud customers during that year; and the denominator is the Cloud annualized recurring revenue for the prior year. Our annual Cloud revenue retention rate has been 95% or above for the years ended December 31, 2020, 2019, and 2018. We set annual targets for Cloud revenue retention rate and monitor progress toward those targets on a quarterly basis by reviewing known and anticipated customer losses. Our Cloud revenue retention rate may fluctuate as a result of a number of factors, including the mix of Cloud solutions used by customers, the level of customer satisfaction, and changes in the number of users live on our Cloud solutions.

Cloud Annualized Recurring Revenue (“ARR”)

We derive the majority of our Cloud revenues from recurring fees, primarily PEPM subscription charges. We also derive recurring revenue from fees related to the rental and maintenance of clocks, charges for once-a-year services, such as year-end tax statements, and investment income on our customer funds held in trust before such funds are remitted to taxing authorities, customer employees, or other third parties (often referred to as “float revenue”). To calculate Cloud ARR, we start with recurring revenue at year end, subtract the once-a-year charges, annualize the revenue for customers live for less than a full year to reflect the revenue that would have been realized if the customer had been live for a full year, and add back the once-a-year charges. We set annual targets for Cloud ARR and monitor progress toward those targets on a quarterly basis.

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 gains or losses 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.

Our History

On April 30, 2018, we completed our IPO, issuing a total of 24,150,000 shares of common stock at a public offering price of \$22.00 per share. Immediately subsequent to the closing of our IPO on April 30, 2018, we issued 4,545,455 shares of common stock in a private placement with certain of our existing stockholders. We received gross proceeds of \$631.3 million for the IPO and concurrent private placement before deducting underwriting discounts, commissions, and other offering related expenses.

On September 13, 2019, we completed the purchase of 100% of the issued and outstanding shares of Lusworth Holding Pty Ltd. (“RITEQ”) for \$20.1 million. RITEQ is an Australian-based workforce management solutions provider, with operations within Australia, New Zealand, and the United Kingdom. On May 29, 2020, we completed the purchase of 100% of the outstanding shares of Excelity Global Solutions Pte. Ltd. (“Excelity”) for \$77.2 million. Excelity is a human capital management service provider in the Asia-Pacific region.

Components of Our Results of Operations

Revenues

We generate recurring revenues primarily from recurring fees charged for the use of our Cloud solutions, Dayforce and Powerpay, as well as from our Bureau solutions. We also generate professional services and other revenue associated primarily with the work performed to assist customers with the planning, design, and implementation of their cloud-based solution. Our solutions are typically provided through long-term customer relationships that result in a high level of recurring revenue. We also generate recurring services revenue from investment income on our Cloud and Bureau customer funds held in trust before such funds are remitted to taxing authorities, customer employees, or other third parties. We refer to this investment income as float revenue.

For Dayforce, we primarily charge monthly recurring fees on a PEPM basis, generally one-month in advance of service, based on the number and type of solutions provided to the customer and the number of employees and other users at the customer. Our standard Dayforce contracts are generally for a three to five-year period. The average time it takes to implement Dayforce typically ranges from three months for smaller customers to nine months for larger customers. We begin to generate recurring revenue when we provide a production instance to the customer, generally when they are ready to go live. We also provide outsourced human resource solutions to certain of our Dayforce customers, which are tailored to meet their individual needs, and entail performing the duties of a customer’s human resources department, including payroll processing, time and labor management, performance management, and recruiting, as needed.

The Powerpay offering is our solution designed primarily for small market Canadian customers. The typical Powerpay customer has fewer than 20 employees, and the majority of the revenue is generated from recurring fees charged on a per-employee, per-process basis. Typical processes include the customer's payroll runs, year-end tax packages, and delivery of customers' remittance advices or checks. Powerpay can typically be implemented on a remote basis within one to three days, at which point we start receiving recurring fees.

For our Bureau solutions, we typically charge recurring fees on a per-process basis. Typical processes include the customer's payroll runs, year-end tax packages, and delivery of customers' remittance advices or checks. In addition to customers who use our payroll services, certain customers use our tax filing services on a stand-alone basis; and we started to sell stand-alone tax services again in 2019. Our outsourced human resource solutions are tailored to meet the needs of individual customers, and entail our contracting to perform many of the duties of a customer's human resources department, including payroll processing, time and labor management, performance management, and recruiting. We also perform individual services for customers, such as check printing, wage attachment and disbursement, and ACA management.

Cost of Revenue

Cost of revenue consists of costs to deliver our solutions. Most of these costs are recognized as incurred. Some costs of revenue are recognized in the period that a service is sold and delivered. Other costs of revenue are recognized over the period of use or in proportion to the related revenue.

The costs recognized as incurred consist primarily of customer service staff costs, customer technical support costs, implementation personnel costs, costs of hosting applications, consulting and purchased services, delivery services, and royalties. The costs of revenue recognized over the period of use are depreciation and amortization, rentals of facilities and equipment, and direct and incremental costs associated with deferred implementation service revenue.

Cost of recurring services revenues primarily consists of costs to provide maintenance and technical support to our customers and the costs of hosting our applications. The cost of recurring services revenues also includes compensation and other employee-related expenses for data center staff, payments to outside service providers, data center expenses, and networking expenses.

Cost of professional services and other revenues primarily consists of costs to provide implementation consulting services and training to our customers, as well as the cost of time clocks. Costs to provide implementation consulting services include compensation and other employee-related expenses for professional services staff, costs of subcontractors, and travel. Implementation consulting services are expected to continue to be primarily associated with the implementation of our Cloud solutions.

Product development and management expense, included in cost of revenue, consists of costs related to software development activities that do not qualify for capitalization, such as development, quality assurance, testing of new technologies, and enhancements to our existing solutions that do not result in additional functionality. Product development and management expense also includes costs related to the management of our solutions.

Depreciation and amortization related to cost of revenue primarily consists of amortization of capitalized software.

Selling, General, and Administrative Expense

Selling expense includes costs related to maintaining a direct marketing infrastructure and sales force and other direct marketing efforts, such as marketing events, advertising, telemarketing, direct mail, and trade shows. Advertising costs are expensed as incurred. Our sales and marketing expenses are expected to continue to be primarily associated with selling and marketing our Cloud solutions.

General and administrative expense includes costs that are not directly related to delivery of services, selling efforts, or product development and management, primarily consisting of corporate-level costs, such as administration, finance, legal, and human resources. Also included in this category are depreciation, and amortization of other intangible assets not reflected in cost of revenue, and the provision for doubtful accounts receivable.

Other (Income) Expense, net

Other (income) expense, net includes the results of transactions that are not appropriately classified in another category. These items include certain foreign currency translation gains and losses resulting mainly from intercompany receivables and payables denominated in currencies other than the subsidiary's functional currency, and net periodic benefit plan expense.

Income Tax Provision

Our income tax provision represents federal, state, and international taxes on our income recognized for financial statement purposes and includes the effects of temporary differences between financial statement income and income recognized for tax return purposes. Deferred tax assets and liabilities are recorded for temporary differences between the financial reporting basis and the tax basis of assets and liabilities as adjusted for the expected benefits of utilizing net operating loss carryforwards. We record a valuation allowance to reduce our deferred tax assets to reflect the net deferred tax assets that we believe will be realized. As of December 31, 2020, we will continue to record a valuation allowance against certain deferred tax assets including some state net operating loss carryovers.

Results of Operations

Year Ended December 31, 2020 Compared with Year Ended December 31, 2019

The following table sets forth our results of operations for the periods presented:

	Year Ended December 31,		Increase/ (Decrease)		% of Revenue	
	2020	2019	Amount	%	2020	2019
(Dollars in millions)						
Revenue:						
Recurring services						
Cloud	\$ 579.7	\$ 518.0	\$ 61.7	11.9%	68.8%	62.9%
Bureau	110.5	162.1	(51.6)	(31.8)%	13.1%	19.7%
Total recurring services	690.2	680.1	10.1	1.5%	81.9%	82.5%
Professional services and other	152.3	144.0	8.3	5.8%	18.1%	17.5%
Total revenue	842.5	824.1	18.4	2.2%	100.0%	100.0%
Cost of revenue:						
Recurring services						
Cloud	166.9	157.5	9.4	6.0%	19.8%	19.1%
Bureau	46.4	44.3	2.1	4.7%	5.5%	5.4%
Total recurring services	213.3	201.8	11.5	5.7%	25.3%	24.5%
Professional services and other	163.7	149.8	13.9	9.3%	19.4%	18.2%
Product development and management	83.7	67.9	15.8	23.3%	9.9%	8.2%
Depreciation and amortization	40.5	36.4	4.1	11.3%	4.8%	4.4%
Total cost of revenue	501.2	455.9	45.3	9.9%	59.5%	55.3%
Gross profit	341.3	368.2	(26.9)	(7.3)%	40.5%	44.7%
Selling, general, and administrative	333.5	295.9	37.6	12.7%	39.6%	35.9%
Operating profit	7.8	72.3	(64.5)	(89.2)%	0.9%	8.8%
Interest expense, net	25.1	32.4	(7.3)	(22.5)%	3.0%	3.9%
Other expense, net	2.7	5.6	(2.9)	(51.8)%	0.3%	0.7%
(Loss) income before income taxes	(20.0)	34.3	(54.3)	(158.3)%	(2.4)%	4.2%
Income tax benefit	(16.0)	(44.4)	28.4	64.0%	(1.9)%	(5.4)%
Net (loss) income	(4.0)	78.7	(82.7)	(105.1)%	(0.5)%	9.5%
Adjusted EBITDA (a)	\$ 159.0	\$ 184.6	\$ (25.6)	(13.9)%	18.9%	22.4%
Adjusted EBITDA margin (a)	18.9%	22.4%	(3.5)%	(15.7)%		

(a) For a reconciliation of Adjusted EBITDA to net income, please refer to the "Non-GAAP Measures" section.

Revenue. The following table sets forth certain information regarding our consolidated revenues for periods presented:

	Year Ended December 31,		Percentage change in revenue as reported	Impact of changes in foreign currency (a)	Percentage change in revenue on a constant currency basis (a)
	2020	2019	2020 vs. 2019		2020 vs. 2019
(Dollars in millions)					
Revenue:					
Dayforce recurring services, excluding float	\$ 463.1	\$ 377.9	22.5%	(0.2)%	22.7%
Dayforce float	37.1	51.1	(27.4)%	(0.2)%	(27.2)%
Total Dayforce recurring services	500.2	429.0	16.6%	(0.1)%	16.7%
Powerpay recurring services, excluding float	70.8	76.9	(7.9)%	(0.4)%	(7.5)%
Powerpay float	8.7	12.1	(28.1)%	(—)%	(28.1)%
Total Powerpay recurring services	79.5	89.0	(10.7)%	(0.4)%	(10.3)%
Total Cloud recurring services	579.7	518.0	11.9%	(0.2)%	12.1%
Dayforce professional services and other	148.6	140.7	5.6%	(0.2)%	5.8%
Powerpay professional services and other	1.1	1.3	(15.4)%	(—)%	(15.4)%
Total Cloud professional services and other	149.7	142.0	5.4%	(0.2)%	5.6%
Total Cloud revenue	729.4	660.0	10.5%	(0.2)%	10.7%
Bureau recurring services, excluding float	104.0	145.1	(28.3)%	(0.3)%	(28.0)%
Bureau float	6.5	17.0	(61.8)%	1.1%	(62.9)%
Total Bureau recurring services	110.5	162.1	(31.8)%	(0.2)%	(31.6)%
Bureau professional services and other	2.6	2.0	30.0%	5.0%	25.0%
Total Bureau revenue	113.1	164.1	(31.1)%	(0.1)%	(31.0)%
Total revenue	\$ 842.5	\$ 824.1	2.2%	(0.2)%	2.4%
Cloud revenue:					
Dayforce	\$ 648.8	\$ 569.7	13.9%	(0.1)%	14.0%
Powerpay	80.6	90.3	(10.7)%	(0.3)%	(10.4)%
Total Cloud revenue	\$ 729.4	\$ 660.0	10.5%	(0.2)%	10.7%
Professional services and other:					
Dayforce, excluding float	\$ 611.7	\$ 518.6	18.0%	(0.1)%	18.1%
Powerpay, excluding float	71.9	78.2	(8.1)%	(0.4)%	(7.7)%
Cloud float	45.8	63.2	(27.5)%	(0.1)%	(27.4)%
Total Cloud revenue	\$ 729.4	\$ 660.0	10.5%	(0.2)%	10.7%

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

The COVID-19 pandemic has had an adverse impact on our revenue streams during the year ended December 31, 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 \$27.5 million reduction in our revenue for the year ended December 31, 2020, of which approximately \$20.5 million was related to Dayforce and approximately \$7 million was related to Powerpay. In addition, we estimate the reduction in float revenue was approximately \$20 million for the year ended December 31, 2020. Of the approximately \$20 million reduction in float revenue, approximately \$15 million was due to rate reductions that occurred during the first quarter of 2020, and approximately \$5 million was due to lower average float balances for our customer trust funds.

Total revenue increased \$18.4 million, or 2.2%, to \$842.5 million for the year ended December 31, 2020, compared to \$824.1 million for the year ended December 31, 2019. This increase was primarily driven by an increase in Cloud revenue of

\$69.4 million, or 10.5%, from \$660.0 million for the year ended December 31, 2019, to \$729.4 million for the year ended December 31, 2020. The Cloud revenue increase was primarily due to an increase of \$61.7 million, or 11.9%, in Cloud recurring services revenue, and \$7.7 million, or 5.4%, in Cloud professional services and other revenue. The increase in Cloud recurring services revenue of \$61.7 million was attributable to increases of \$57.7 million from new customers, additions, and revenue uplift from migrations of Bureau customers; \$21.4 million from the migration of Bureau customers, partially offset by a \$17.4 million decline in float revenue allocated to Cloud recurring services revenue.

Excluding float revenue and on a constant currency basis, total revenue grew 6.4% reflecting a 14.7% increase in Cloud revenue, partially offset by a 27.3% decline in Bureau revenue. Excluding float revenue and on a constant currency basis, Cloud revenue growth reflected a 17.5% increase in Cloud recurring services revenue and a 5.6% increase in Cloud professional services and other revenue. Excluding float revenue and on a constant currency basis, Dayforce revenue increased 18.1%, reflecting a 22.7% increase in Dayforce recurring service revenue and a 5.8% increase in Dayforce professional services and other revenue. Excluding float revenue and on a constant currency basis, Powerpay revenue declined 7.7%.

Dayforce revenue grew 13.9%, and Powerpay revenue declined 10.7% in 2020 as compared to 2019. On a constant currency basis, Dayforce revenue increased 14.0%, and Powerpay revenue declined 10.4% for the year-ended December 31, 2020, compared to the year ended December 31, 2019. Powerpay is designed primarily for small market Canadian customers, which typically have fewer than 20 employees, and we believe those 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 70% of our increase in Cloud revenue for the year ended December 31, 2020, and the remaining 30% consisted primarily of customer migration to Dayforce from our Bureau solutions.

The increase in Cloud revenue was partially offset by a decline in Bureau revenue of \$51.0 million, or 31.1%. Of the decline in Bureau revenue, approximately 41% was attributable to customer migrations to Dayforce. As we continue to sunset the legacy technology of the North America Bureau platforms, we expect to see a continued decline in Bureau revenue. For the year ended December 31, 2020, recurring services revenue from Bureau payroll customers accounted for \$73.0 million, including \$16.8 million from Excelity, and Bureau stand-alone tax recurring services revenue accounted for \$37.5 million.

Float revenue included in recurring services revenue was \$52.3 million and \$80.2 million for the years ended December 31, 2020 and 2019, respectively. Float revenue allocated to Cloud revenue was \$45.8 million and \$63.2 million for the years ended December 31, 2020 and 2019, respectively. The average float balance for our customer trust funds for the year ended December 31, 2020, was \$3,240.8 million, compared to \$3,427.3 million for the year ended December 31, 2019. On a constant currency basis, the average float balance for our customer trust funds declined 5.2% for the year ended December 31, 2020, compared to year ended December 31, 2019. The average yield was 1.61% during the year ended December 31, 2020, a decline of 73 basis points compared to the average yield for the year ended December 31, 2019. For the year ended December 31, 2020, approximately 35% of our average float balance consisted of Canadian customer trust funds, compared to approximately 36% for the year ended December 31, 2019.

Cost of revenue. Total cost of revenue for the year ended December 31, 2020, was \$501.2 million, an increase of \$45.3 million, or 9.9%, compared to the year ended December 31, 2019. Recurring services cost of revenue increased by \$11.5 million for the year ended December 31, 2020, compared to the year ended December 31, 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, partially offset by reductions in costs to support our legacy Bureau customers. The increase in cost of revenue for professional services and other of \$13.9 million for the year ended December 31, 2020, compared to the year ended December 31, 2019, was primarily due to additional costs incurred to implement new customers.

Product development and management expense increased \$15.8 million for the year ended December 31, 2020, compared to the year ended December 31, 2019. Excluding the impact of share-based compensation and related employer taxes, and severance expense, product development and management expense would have increased by \$9.0 million. This increase reflects additional personnel costs that are not eligible for capitalization, as we work to build out the Dayforce Wallet and our international offerings. For the years ended December 31, 2020, and 2019, our investment in software development was \$78.3 million and \$66.7 million, respectively, consisting of \$39.6 million and \$34.1 million of research and development expense, which is included within product development and management expense, and \$38.7 million and \$32.6

million of capitalized software development, respectively. Please refer to Note 2, “Summary of Significant Accounting Policies,” for further discussion of our accounting policy for capitalizing internally developed software costs.

Depreciation and amortization expense associated with cost of revenue increased by \$4.1 million for the year ended December 31, 2020, compared to the year ended December 31, 2019, as we continue to capitalize Dayforce related and other development costs and subsequently amortize those costs.

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

	Year Ended December 31,	
	2020	2019
Total gross margin	40.5%	44.7%
Gross margin by solution:		
Cloud recurring services	71.2%	69.6%
Bureau recurring services	58.0%	72.7%
Professional services and other	(7.5)%	(4.0)%

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 profit for the year ended December 31, 2020, declined by \$26.9 million, or 7.3%, compared to the year ended December 31, 2019. The \$26.9 million decline in gross profit was primarily attributable to the \$27.9 million decline in float revenue for the year ended December 31, 2020, compared to the year ended December 31, 2019.

Cloud recurring services gross margin was 71.2% for the year ended December 31, 2020, compared to 69.6% for the year ended December 31, 2019. Excluding float revenue, Cloud recurring service gross margin was 68.7% for the year ended December 31, 2020, compared to 65.4% for the year ended December 31, 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 69% as of December 31, 2019 to 76% as of December 31, 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 72.7% for the year ended December 31, 2019, to 58.0% for the year ended December 31, 2020, primarily due to lower Bureau recurring revenue, including high margin float revenue. Professional services and other gross margin was (7.5%) for the year ended December 31, 2020, declining from (4.0)% for the year ended December 31, 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 increased \$37.6 million for the year ended December 31, 2020, compared to the year ended December 31, 2019. Excluding the impact of share-based compensation and related employer taxes, severance expense, and certain other non-recurring charges, including lease abandonment charges of \$16.8 million in 2020; selling, general, and administrative expenses would have increased \$7.1 million. This adjusted increase of \$7.1 million was primarily due to a \$11.6 million increase in sales and marketing expenses, primarily personnel costs, partially offset by a \$4.5 million reduction in general and administrative expense, primarily customer list amortization expense.

Interest expense, net. Interest expense, net for the year ended December 31, 2020, was \$25.1 million, compared to \$32.4 million for the year ended December 31, 2019. This \$7.3 million reduction in interest expense, net was primarily due to a reduction in our term debt rate and a reduction in the London Inter-bank Offered Rate (“LIBOR”) rates generally, partially offset by increased debt outstanding under our revolving credit facility.

Other expense (income), net. For the years ended December 31, 2020 and 2019, other expense, net of \$2.7 million and \$5.6 million, respectively, was comprised of net periodic pension expense, as well as foreign currency translation income in 2020 compared to foreign currency translation loss in 2019.

Income tax (benefit) expense. For the years ended December 31, 2020 and 2019, we had income tax benefit of \$16.0 million and \$44.4 million, respectively. The \$28.4 million reduction in tax benefit was primarily due to the \$62.6 million tax benefit from the release of our valuation allowance for the year ended December 31, 2019, that was not repeated in the year ended December 31, 2020, partially offset by a tax benefit of \$13.6 million for a reduction in the base erosion anti-abuse tax (BEAT), a \$11.4 million tax benefit from the results of operations, a \$3.1 million reduction in tax attributable to international rate differences, a \$2.2 million reduction in the tax attributable to unremitted foreign earnings, a \$1.8 million reduction in tax attributable to state and local tax, and \$2.1 million of other tax benefits.

Net income (loss). Net loss was \$4.0 million for the year ended December 31, 2020, which included charges of \$16.8 million related to the abandonment of certain leased facilities. Net income was \$78.7 million for the year ended December 31, 2019, including a tax benefit of \$62.6 million from the release of our valuation allowance. Excluding the lease abandonment charges in 2020 and the tax benefit from the release of the valuation allowance in 2019, net income would have been \$12.8 million and \$16.1 million for the years ended December 31, 2020 and 2019, respectively.

Adjusted EBITDA. Adjusted EBITDA declined by \$25.6 million to \$159.0 million, for the year ended December 31, 2020, compared to the year ended December 31, 2019, primarily due to the decline in float revenue and accordingly, Adjusted EBITDA margin declined to 18.9% in 2020 from 22.4% in 2019. Adjusted EBITDA, excluding float revenue, increased \$2.3 million to \$106.7 million, for the year ended December 31, 2020, compared to the year ended December 31, 2019.

Quarterly Results of Operations

The following table sets forth statements of operations data for each of the quarters presented. We have prepared the quarterly statements of operations data on a basis consistent with the audited consolidated financial statements. In the opinion of management, the financial information reflects all adjustments, consisting of normal recurring adjustments, which we consider necessary for a fair presentation of this data. This information should be read in conjunction with the audited consolidated financial statements and related notes. The results of historical periods are not necessarily indicative of the results for any future period.

	Three Months Ended							
	December 31, 2020	September 30, 2020	June 30, 2020	March 31, 2020	December 31, 2019	September 30, 2019	June 30, 2019	March 31, 2019
	(Dollars in millions)							
Revenue:								
Recurring services	\$ 181.5	\$ 168.1	\$ 159.1	\$ 181.5	\$ 176.4	\$ 167.4	\$ 163.5	\$ 172.8
Professional services and other	41.3	36.3	33.5	41.2	45.4	34.9	32.8	30.9
Total revenue	222.8	204.4	192.6	222.7	221.8	202.3	196.3	203.7
Cost of revenue:								
Recurring services	57.5	54.3	49.3	52.2	52.8	49.4	48.7	50.9
Professional services and other	43.0	40.2	37.9	42.6	42.7	37.6	34.2	35.3
Product development and management	26.2	22.9	17.0	17.6	18.8	17.5	16.4	15.2
Depreciation and amortization	10.6	10.3	9.8	9.8	9.7	9.0	9.0	8.7
Total cost of revenue	137.3	127.7	114.0	122.2	124.0	113.5	108.3	110.1
Gross profit	85.5	76.7	78.6	100.5	97.8	88.8	88.0	93.6
Selling, general, and administrative	107.4	77.3	74.6	74.2	78.1	82.3	69.3	66.2
Operating (loss) profit	(21.9)	(0.6)	4.0	26.3	19.7	6.5	18.7	27.4
Interest expense, net	5.7	5.9	6.6	6.9	7.2	7.8	8.5	1.6
Other expense (income), net	—	(0.2)	0.3	2.6	0.9	1.6	1.5	8.9
(Loss) income before income taxes	(27.6)	(6.3)	(2.9)	16.8	11.6	(2.9)	8.7	16.9
Income tax (benefit) expense	(10.3)	(5.5)	(8.4)	8.2	13.1	(65.6)	2.4	5.7
Net (loss) income	<u>\$ (17.3)</u>	<u>\$ (0.8)</u>	<u>\$ 5.5</u>	<u>\$ 8.6</u>	<u>\$ (1.5)</u>	<u>\$ 62.7</u>	<u>\$ 6.3</u>	<u>\$ 11.2</u>

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 December 31, 2020, we had cash and equivalents of \$188.2 million and availability under our revolving credit facility of \$300.0 million. Our total debt balance was \$673.4 million as of December 31, 2020. Please refer to Note 10, "Debt," to our consolidated financial statements, for further information on our debt and the "Our Indebtedness" section below. In October 2020, we contributed \$105.0 million to the U.S. pension plan, which represented \$17.0 million of required minimum contributions and \$88.0 million of voluntary contributions. In 2019, we contributed \$18.0 million to our U.S. pension plan.

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.

Our primary liquidity needs are related to funding of general business requirements, including the payment of interest and principal on our debt, capital expenditures, and product development. We believe that our cash flow from operations, availability under our revolving credit facility, and available cash and equivalents 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. 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.

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 49% 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 on average approximately 51% 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.

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.

	Year Ended December 31,	
	2020	2019
	(Dollars in millions)	
Net cash flows		
Net cash (used in) provided by operating activities, excluding customer trust funds	\$ (41.4)	\$ 61.8
Net cash used in investing activities, excluding customer trust funds	(130.4)	(85.4)
Net cash provided by financing activities, excluding customer trust funds	81.7	79.8
Effect of exchange rate on cash and equivalents	(3.0)	7.3
Net (decrease) increase in cash and equivalents	(93.1)	63.5
Cash and equivalents at beginning of period	281.3	217.8
Cash and equivalents at end of period	188.2	281.3
Net customer trust funds restricted cash provided by (used in)		
operating activities	11.2	(11.2)
Net customer trust funds restricted cash provided by (used in)		
investing activities	169.2	(33.9)
Net customer trust funds restricted cash provided by financing activities	483.6	529.9
Effect of exchange rate changes on restricted cash and equivalents	(1.0)	4.0
Net increase in restricted cash and equivalents	663.0	488.8
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	2,040.3	1,377.3
Net increase in cash, restricted cash, and equivalents	569.9	552.3
Cash, restricted cash, and equivalents at beginning of period	1,658.6	1,106.3
Cash, restricted cash, and equivalents at end of period	\$ 2,228.5	\$ 1,658.6

Operating Activities

Net cash used in operating activities, excluding customer trust fund activity, was \$41.4 million during the year ended December 31, 2020, primarily attributed to a \$161.1 million reduction in cash as a result of net changes in working capital and a net loss of \$4.0 million, partially offset by the net impact of adjustments for certain non-cash items of \$134.9 million, including \$65.8 million of non-cash share-based compensation expense, \$51.8 million of depreciation and amortization, and \$16.8 million of lease abandonment costs. Net changes in working capital were primarily attributable to a \$104.0 million reduction in liabilities for employee compensation and benefits, primarily due to \$106.9 million in pension contributions, \$32.0 million decrease in working capital related to other assets and liabilities, a \$12.0 million increase in trade and other receivables, and a \$6.8 million increase in prepaid expenses and other current assets.

Net cash provided by operating activities, excluding customer trust fund activity, was \$61.8 million during the year ended December 31, 2019, primarily attributed to net income of \$78.7 million and the net impact of adjustments for certain non-cash items of \$33.4 million, partially offset by a \$61.5 million reduction in cash as a result of net changes in working capital. Adjustments for certain non-cash items primarily related to \$57.1 million of depreciation and amortization and \$36.5

million of non-cash share-based compensation expense, partially offset by a \$69.4 million of deferred income tax benefit. Net changes in working capital were primarily attributable to a \$19.5 million decrease in working capital related to other assets and liabilities, a \$16.4 million increase in trade and other receivables, an \$11.1 million reduction in accrued taxes, and an \$11.1 million reduction in liabilities for employee compensation and benefits, primarily due to pension contributions. Included within net cash flows provided by operating activities for the year ended December 31, 2019, was \$37.4 million in cash interest payments on our long-term debt, \$35.9 million in cash taxes, net of refunds received, and \$18.0 million in pension contributions.

Investing Activities

During the year ended December 31, 2020, net cash used in investing activities, excluding customer trust fund activity, was \$130.4 million, related to capital expenditures of \$59.8 million and acquisition costs, net of cash acquired, of \$58.3 million. Our capital expenditures included \$41.7 million for software and technology and \$18.1 million in capital expenditures for property and equipment.

During the year ended December 31, 2019, net cash used in investing activities, excluding customer trust fund activity, was \$85.4 million, related to capital expenditures of \$55.2 million and acquisition costs, net of cash acquired, of \$30.2 million. Our capital expenditures included \$38.9 million for software and technology and \$16.3 million in capital expenditures for property and equipment.

Financing Activities

Net cash provided by financing activities, excluding the change in customer trust fund obligations, was \$81.7 million during the year ended December 31, 2020. This cash inflow was primarily attributable to proceeds from the issuance of common stock under share-based compensation plans of \$91.7 million, partially offset by payments on our long-term debt obligations of \$10.0 million. The payments on our long-term financing obligations included \$6.8 million in payments towards our Senior Term Loan and \$3.2 million in payments towards our financing lease obligations.

Net cash provided by financing activities, excluding the change in customer trust fund obligations, was \$79.8 million during the year ended December 31, 2019. This cash inflow was primarily attributable to proceeds from the issuance of common stock under share-based compensation plans of \$87.0 million, partially offset by payments on our long-term debt obligations of \$7.2 million. The payments on our long-term financing obligations included \$6.8 million in payments towards our Senior Term Loan and \$0.4 million in payments towards our financing lease obligations.

Backlog and Seasonality

For a discussion of backlog and seasonality, please refer to Part 1, Item I, “Business” of this Form 10-K.

Off-Balance Sheet Arrangements

As of December 31, 2020, we did not have any “off-balance sheet arrangements” (as such term is defined in Item 303 of Regulation S-K).

Our Indebtedness

On April 30, 2018, Ceridian entered into a credit agreement pursuant to which the lenders agreed to provide Senior Credit Facilities, consisting of the Senior Term Loan in the original principal amount of \$680.0 million and a \$300.0 million Revolving Facility. The Revolving Facility may, at our option, be made available in United States Dollars, Canadian Dollars, Euros and/or Pounds Sterling; up to \$70.0 million may, at our option, be made available for letters of credit and \$100.0 million may, at our option, be made available for swingline loans (denominated in Canadian Dollars and/or United States Dollars).

The Senior Term Loan will mature on April 30, 2025. We are required to make annual amortization payments in respect of the Senior Term Loan in an amount equal to 1.00% of the original principal amount thereof, payable in equal quarterly installments of 0.25% of the original principal amount of the first lien term loan. The Revolving Facility matures on April 30, 2023 and does not require amortization payments.

The obligations of Ceridian under the Senior Credit Facilities are secured by first priority security interests in substantially all of the assets of Ceridian and the guarantors, subject to permitted liens and other exceptions. All of our domestic subsidiaries are guarantors under the Senior Credit Facilities, subject to certain exceptions. The Senior Credit Facilities contain financial covenants and certain business covenants, including restrictions on dividend payments, which Ceridian must comply with during the term of the agreement. As of December 31, 2020, Ceridian was in full compliance with the terms of the Senior Credit Facilities.

Borrowings under the Senior Credit Facilities bear interest at a rate per annum equal to:

1. in the case of borrowings denominated in U.S. dollars on any day (a) at Ceridian’s election, either (i) an amount (not less than 1.00%) equal to the greater of (A) a base rate determined by reference to the rate of interest per annum announced by Deutsche Bank AG New York Branch (“DBNY”) as its prime rate on such day, (B) the federal funds effective rate on such date plus 1/2 of 1.00% and (C) LIBOR plus 1.00% or (ii) if available, LIBOR for U.S. dollars determined by reference to the applicable Reuters screen page two business days prior to the commencement of the interest period relevant to the subject borrowing, adjusted for certain additional costs, which may not be less than 0.00% plus (b) an applicable margin;
2. in the case of borrowings under the Revolving Facility denominated in Canadian Dollars on any day (a) at Ceridian’s election, either (i) the rate of interest per annum quoted or established as the “prime rate” of Deutsche Bank AG Canada Branch plus an applicable margin or (ii) CDOR for Canadian dollars determined by reference to the applicable Reuters screen page on date of the commencement of the interest period relevant to the subject borrowing, adjusted for certain additional costs, which may not be less than 0.00% plus (b) an applicable margin;
3. in the case of borrowings under the Revolving Facility denominated in Euros on any day, (a) The London interbank offered rate in Euros (“EURIBOR”) determined by reference to the applicable Reuters screen page two business days prior to the commencement of the interest period relevant to the subject borrowing, which may not be less than 0.00% plus (b) an applicable margin; or
4. in the case of borrowings under the Revolving Facility denominated in Pounds Sterling, (a) Sterling LIBOR determined by reference to the applicable Reuters screen page one business day prior to the commencement of the interest period relevant to the subject borrowing, which may not be less than 0.00% plus (b) an applicable margin.

As of December 31, 2020, the applicable margin for the Senior Term Loan is (i) 2.50% per annum, in the case of LIBOR loans and (ii) 1.50% per annum, in the case of base rate loans. On March 26, 2019, Moody’s Investor Service upgraded the rating of our senior secured credit facilities from B3 to B2, which reduced the floating rate term debt interest rate from LIBOR plus 3.25% to LIBOR plus 3.00%, so long as the rating is maintained. On February 19, 2020, Ceridian completed the first amendment to the Senior Credit Facilities in which the Senior 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 applicable margin for loans under the Revolving Facility is determined in accordance with the table set forth below:

Consolidated First Lien Leverage Ratio	Applicable Margin for LIBOR, CDOR, EURIBOR and Sterling LIBOR Rate Loans	Applicable Margin for Base Rate and Canadian Prime Rate Loans
Category 1		
Greater than 4.50:1.00	2.75%	1.75%
Category 2		
Less than or equal to 4.50:1.00 and greater than 4.00:1.00	2.50%	1.50%
Category 3		
Less than or equal to 4.00:1.00	2.25%	1.25%

We are also required to pay a customary annual administration fee to the administrative agent under the Senior Credit Facilities.

For an additional description of the Senior Credit Facilities, please refer to Note 10, “Debt,” to our consolidated financial statements.

Contractual Obligations

The following table sets forth our contractual obligations and other commercial commitments as of December 31, 2020, whether or not they appear on our consolidated balance sheet. Variable interest payments are projected based on an interest rate forecast in effect at the end of 2020. All amounts in the table may reflect rounding.

	Payments due by period				Total
	(Dollars in millions)				
	Less than one year	1-3 Years	3-5 Years	More than 5 Years	
Long-term debt, excluding financing lease obligations	\$ 6.8	\$ 13.6	\$ 644.3	\$ —	\$ 664.7
Interest payable on long-term debt, excluding financing lease obligations	17.8	38.6	25.6	—	82.0
Operating leases	8.6	17.0	11.8	4.8	42.2
Financing leases	0.1	1.3	1.5	5.8	8.7
Postretirement plan obligations (a)	2.0	3.3	2.7	4.3	12.3
Total	<u>\$ 35.3</u>	<u>\$ 73.8</u>	<u>\$ 685.9</u>	<u>\$ 14.9</u>	<u>\$ 809.9</u>

(a) We have not estimated our benefit plan funding obligations beyond 2029, and thus, any potential future contributions have been excluded from the table.

Our long-term debt obligations are described in Note 10, “Debt,” to our consolidated financial statements, and the “Our Indebtedness” section above.

The lease payments represent scheduled payments under the terms of the lease agreements. We conduct substantially all of our operations in leased facilities. Most of these leases contain renewal options and require payments for taxes, insurance, and maintenance. We also lease equipment for use in our business. We ceased use of certain leased facilities during the fourth quarter of 2020 and recognized lease abandonment charges within our consolidated statements of operations; however, we are still required to make future payments under the existing lease terms. These required future lease payments are included in the table above.

Payments of retirement plan obligations include employer commitments to fund our defined benefit and postretirement plans and do not include estimated future benefit payments to participants expected to be made from liquidation of the assets in our defined benefit plan trusts. During the year ended December 31, 2020, we contributed \$105.0 million to our largest U.S. pension plan, satisfying all expected contributions for the foreseeable future for this defined benefit plan. At December 31, 2020, our defined benefit pension plans had a fair value of the plans’ assets that exceeded the projected benefit obligation by \$3.5 million and our postretirement benefit plan had a projected benefit obligation that exceeded the fair value of the plans’ assets by \$14.1 million. We expect to satisfy these remaining obligations through investment income from and appreciation in the fair value of plan assets held in trust and from future employer contributions.

The amount of our obligation to vendors for capital expenditures at December 31, 2020 was not material, and no such amount is included in the table above.

Critical Accounting Policies and Estimates

Our discussion and analysis of our financial condition and results of operations is based upon our consolidated financial statements and related notes, which have been prepared in accordance with GAAP. The preparation of these financial statements and related notes requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenue, and expenses. Certain of our accounting policies require the application of significant judgment by

management in selecting the appropriate assumptions for calculating financial estimates. By their nature, these judgments are subject to an inherent degree of uncertainty. These judgments are based on our historical experience, terms of existing contracts, our evaluation of trends in the industry, information provided by our customers, and information available from other outside sources, as appropriate. We evaluate our estimates and judgments on an on-going basis. Our actual results may differ from these estimates.

The accounting policy that we believe to be the most critical to an understanding of our financial condition and results of operations and that requires the most complex and subjective management judgments is our revenue recognition policy. Please refer to Note 2, “Summary of Significant Accounting Policies,” for a description of our revenue recognition policy and our significant accounting policies.

Recently Issued Accounting Pronouncements

Please refer to Note 2, “Summary of Significant Accounting Policies,” for a full discussion of recent accounting pronouncements.

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 or loss before interest, taxes, depreciation, and amortization, as adjusted to exclude gains or losses 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 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 (loss), 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 similar items to those eliminated in this presentation. 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 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 (loss) income to Adjusted EBITDA for the periods presented:

	<u>Year Ended December 31,</u>	
	<u>2020</u>	<u>2019</u>
	(Dollars in millions)	
Net (loss) income	\$ (4.0)	\$ 78.7
Interest expense, net	25.1	32.4
Income tax benefit	(16.0)	(44.4)
Depreciation and amortization	51.8	57.1
EBITDA (a)	<u>56.9</u>	<u>123.8</u>
Intercompany foreign exchange (gain) loss	(1.0)	0.4
Share-based compensation (b)	68.9	37.7
Severance charges (c)	9.7	6.2
Restructuring consulting fees (d)	8.1	5.3
Other non-recurring charges (e)	16.4	11.2
Adjusted EBITDA	<u>\$ 159.0</u>	<u>\$ 184.6</u>
Adjusted EBITDA margin	18.9%	22.4%

- (a) We define EBITDA as net income (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) Comprised of (1) (recovery) loss on unrecovered duplicate payments associated with our isolated service incident, and (2) charges of \$16.8 million during 2020 related to the abandonment of certain leased facilities. Please refer to Note 16, "Leases" and Note 17, "Commitments and Contingencies" for further discussion of these items.

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

	Year Ended December 31, 2020				
	As reported	Share-based compensation	Severance charges	Other operating expenses (a)	Adjusted
	(Dollars in millions)				
Cost of revenue:					
Recurring services	\$ 213.3	\$ 6.1	\$ 1.8	\$ —	\$ 205.4
Professional services and other	163.7	3.8	0.9	—	159.0
Product development and management	83.7	8.7	1.5	—	73.5
Depreciation and amortization	40.5	—	—	—	40.5
Total cost of revenue	501.2	18.6	4.2	—	478.4
Sales and marketing	165.6	8.0	3.3	—	154.3
General and administrative	167.9	42.3	2.2	24.5	98.9
Operating profit	7.8	68.9	9.7	24.5	110.9
Other expense (income), net	2.7	—	—	(1.0)	3.7
Depreciation and amortization	51.8	—	—	—	51.8
EBITDA	\$ 56.9	\$ 68.9	\$ 9.7	\$ 23.5	\$ 159.0

(a) Other operating expenses includes intercompany foreign exchange loss, restructuring consulting fees, recovery of duplicate payments and lease abandonment charges.

	Year Ended December 31, 2019				
	As reported	Share-based compensation	Severance charges	Other operating expenses (a)	Adjusted
	(Dollars in millions)				
Cost of revenue:					
Recurring services	\$ 201.8	\$ 3.0	\$ 1.8	\$ —	\$ 197.0
Professional services and other	149.8	1.8	0.6	—	147.4
Product development and management	67.9	3.1	0.3	—	64.5
Depreciation and amortization	36.4	—	0.0	—	36.4
Total cost of revenue	455.9	7.9	2.7	—	445.3
Sales and marketing	150.0	5.0	2.3	—	142.7
General and administrative	145.9	24.8	1.2	16.5	103.4
Operating profit	72.3	37.7	6.2	16.5	132.7
Other expense, net	5.6	—	—	0.4	5.2
Depreciation and amortization	57.1	—	—	—	57.1
EBITDA	\$ 123.8	\$ 37.7	\$ 6.2	\$ 16.9	\$ 184.6

(a) Other operating expenses includes intercompany foreign exchange loss, restructuring consulting fees, loss on unrecovered duplicate payments, and a tax benefit of \$62.6 million related to the release of our valuation allowance.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk.

We are exposed to market risks related to foreign currency exchange rates, interest rates, and pension obligations. We seek to minimize or manage these market risks through normal operating and financing activities. We do not trade or use instruments with the objective of earning financial gains on the market fluctuations, nor do we use instruments where there are not underlying exposures.

Foreign Currency Risk. Our results of operations and cash flows are subject to fluctuations due to changes in foreign currency exchange rates, particularly changes in the Canadian Dollar. Due to the relative size of our international operations to date, we have not instituted an active hedging program. We expect our international operations to continue to grow in the near term, and we are monitoring the foreign currency exposure to determine if we should begin a hedging program.

Interest Rate Risk. In connection with our U.S. and Canadian payroll and tax filing services, we collect funds for payment of payroll and taxes; temporarily hold such funds in trust until payment is due; remit the funds to the customers' employees and appropriate taxing authority; file federal, state and local tax returns; and handle related regulatory correspondence and amendments. We invest the U.S. customer trust funds primarily in high-quality bank deposits, money market mutual funds, or collateralized short-term investments. We may also invest these funds in U.S. Treasury and agency securities, as well as highly rated asset-backed, mortgage-backed, municipal, and corporate securities. Our Canadian customer trust funds are invested in securities issued by the government and provinces of Canada, highly rated Canadian banks and corporations, asset-backed trusts, and mortgages.

Based on current market conditions, portfolio composition, and investment practices, a 100 basis point increase in market investment rates would result in approximately \$18 million of increase in float revenue over the ensuing twelve month period. In addition, we also have exposure to risks associated with changes in laws and regulations that may affect customer fund balances. For example, a change in regulations, either reducing the amount of taxes to be withheld or allowing less time to remit taxes to government authorities, would reduce our average customer trust fund balances and float revenue. There are no incremental costs of revenue associated with changes in float revenue.

We do not enter into investments for trading or speculative purposes. Our cash equivalents and our portfolio of marketable securities are subject to market risk due to changes in interest rates. Fixed rate securities may have their market value adversely affected due to a rise in interest rates, while floating rate securities may produce less income than expected if interest rates fall. Due in part to these factors, our future investment income may fall short of expectation due to changes in interest rates or we may suffer losses in principal if we are forced to sell securities that decline in market value due to changes in interest rates. However, because we classify our securities as "available for sale," no gains or losses are recognized due to changes in interest rates unless such securities are sold prior to maturity or declines in fair value are determined to be unrecoverable.

We do not believe that an increase or decrease in interest rates of 100 basis points would have a material effect on our operating results or financial condition. Fluctuations in the value of our investment securities caused by a change in interest rates (gains or losses on the carrying value) are recorded in other comprehensive income and are realized only if we sell the underlying securities.

A 100 basis point increase in the LIBOR rates would result in an approximately \$7 million increase in our interest expense, net over the ensuing twelve-month period. Please refer to Note 10, "Debt," for additional information.

Pension Obligation Risk. We provide a pension plan for certain U.S. current and former employees that closed to new participants on January 2, 1995. In 2007, the U.S. pension plan was amended (1) to exclude from further participation any participant or former participant who was not employed by the company or another participating employer on January 1, 2008, (2) to discontinue participant contributions, and (3) to freeze the accrual of additional benefits as of December 31, 2007. In applying relevant accounting policies, we have made critical estimates related to actuarial assumptions, including assumptions of expected returns on plan assets, discount rates, and health care cost trends. The cost of pension benefits in future periods will depend on actual returns on plan assets, assumptions for future periods, contributions, and benefit experience. In 2020, we contributed \$105.0 million to our U.S. pension plan, which represented \$17.0 million of required minimum contributions and \$88.0 million of voluntary contributions.

The effective discount rate used in accounting for pension and other benefit obligations in 2020 ranged from 1.42% to 1.87%. The expected rate of return on plan assets for qualified pension benefits in 2020 was 5.7%. The following table

reflects the estimated sensitivity associated with a change in certain significant actuarial assumptions (each assumption change is presented mutually exclusive of other assumption changes):

	Change in Assumption	Impact on 2020 Pension Expense Increase (Decrease)	
		Pension Benefits	Post Retirement
		(Dollars in millions)	
Increase in discount rate	50 basis points	\$ 0.3	\$ —
Decrease in discount rate	50 basis points	\$ (0.3)	\$ —
Increase in return on plan asset	50 basis points	\$ (2.0)	N/A
Decrease in return on plan asset	50 basis points	\$ 2.0	N/A

Item 8. Financial Statements and Supplementary Data.

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Report of Independent Registered Public Accounting Firm

To the Stockholders and Board of Directors
Ceridian HCM Holding Inc.:

Opinions on the Consolidated Financial Statements and Internal Control Over Financial Reporting

We have audited the accompanying consolidated balance sheets of Ceridian HCM Holding Inc. and subsidiaries (the Company) as of December 31, 2020 and 2019, the related consolidated statements of operations, comprehensive income (loss), stockholders' equity, and cash flows for each of the years in the three-year period ended December 31, 2020, and the related notes (collectively, the consolidated financial statements). We also have audited the Company's internal control over financial reporting as of December 31, 2020, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2020 and 2019, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2020, in conformity with U.S. generally accepted accounting principles. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2020 based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

Change in Accounting Principle

As discussed in Note 2 to the consolidated financial statements, the Company has changed its method of accounting for leases in 2019 due to the adoption of FASB Accounting Standard Codification (Topic 842) *Leases*.

Basis for Opinions

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's consolidated financial statements and an opinion on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

Definition and Limitations of Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process designed 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. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current period audit of the consolidated financial statements that was communicated or required to be communicated to the audit committee and that: (1) relates to accounts or disclosures that are material to the consolidated financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of a critical audit matter does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Stand-alone selling price of cloud professional services

The Company recognized \$149.7 million of cloud professional services revenue for the year ended December 31, 2020, and the related contract assets were \$55.2 million as of December 31, 2020. As discussed in Note 2 to the consolidated financial statements, the Company's cloud service arrangements include professional services revenue for the implementation of new customers or customer migrations, followed by access to the Company's hosted payroll processing solution. Revenue recognized for the professional services and payroll processing performance obligations is based on an allocation of the total transaction price to each performance obligation using their respective stand-alone selling prices. This results in revenue being recognized in an amount that exceeds the amount the Company is contractually allowed to bill their customer, resulting in the recognition of a contract asset. The determination of the stand-alone selling price for the performance obligations requires the Company to make assumptions based on market conditions and observable inputs, as well as an estimate of the total professional service hours expected to be incurred in connection with the implementation.

We identified the assessment of the Company's total estimated professional services hours expected to be incurred when determining the stand-alone selling price of the cloud professional services performance obligation for implementation as a critical audit matter. The testing of the professional services hours assumption required a higher degree of auditor subjectivity as the assumption is internally-developed and there is no observable market information.

The following are the primary procedures we performed to address this critical audit matter. We evaluated the design and tested the operating effectiveness of certain internal controls related to the critical audit matter. This included a control related to the Company's process for estimating the total professional services hours expected to be incurred in determining the estimated selling price of the cloud professional services performance obligation, as well as internal controls related to the ongoing monitoring and accounting for changes to the total estimated professional services hours during the implementation phase. For a sample of contracts, we evaluated the Company's ability to accurately estimate the total hours expected to be incurred for the professional services performance obligation by comparing the estimated hours to the actual hours incurred. For a sample of contracts, we inquired of the project manager regarding the estimation of the total hours to be incurred and compared the project manager's estimate to the Company's revenue model used to determine the estimated selling price of the cloud professional services performance obligation for implementation.

/s/ KPMG LLP

We have served as the Company's auditor since 1958.

Minneapolis, Minnesota
February 26, 2021

Ceridian HCM Holding Inc.
Consolidated Balance Sheets

	December 31,	
	2020	2019
	(Dollars in millions, except share data)	
ASSETS		
Current assets:		
Cash and equivalents	\$ 188.2	\$ 281.3
Trade and other receivables, net	101.1	80.4
Prepaid expenses and other current assets	73.9	57.9
Total current assets before customer trust funds	363.2	419.6
Customer trust funds	3,759.4	3,204.1
Total current assets	4,122.6	3,623.7
Right of use lease asset	27.9	32.0
Property, plant, and equipment, net	136.4	128.3
Goodwill	2,031.8	1,973.5
Other intangible assets, net	195.0	177.9
Other assets	187.6	150.3
Total assets	\$ 6,701.3	\$ 6,085.7
LIABILITIES AND EQUITY		
Current liabilities:		
Current portion of long-term debt	\$ 7.2	\$ 10.8
Current portion of long-term lease liabilities	10.5	8.8
Accounts payable	38.9	43.2
Deferred revenue	24.4	25.5
Employee compensation and benefits	64.6	75.9
Other accrued expenses	20.5	13.9
Total current liabilities before customer trust funds obligations	166.1	178.1
Customer trust funds obligations	3,697.8	3,193.6
Total current liabilities	3,863.9	3,371.7
Long-term debt, less current portion	660.6	666.3
Employee benefit plans	24.4	117.2
Long-term lease liabilities, less current portion	33.6	30.1
Other liabilities	20.6	18.1
Total liabilities	4,603.1	4,203.4
Commitments and contingencies (Note 17)		
Stockholders' equity:		
Common stock, \$0.01 par, 500,000,000 shares authorized, 148,571,412 and 144,386,618 shares issued and outstanding, respectively	1.5	1.4
Additional paid in capital	2,606.5	2,449.1
Accumulated deficit	(233.8)	(229.8)
Accumulated other comprehensive loss	(276.0)	(338.4)
Total stockholders' equity	2,098.2	1,882.3
Total liabilities and equity	\$ 6,701.3	\$ 6,085.7

See accompanying notes to consolidated financial statements.

Ceridian HCM Holding Inc.
Consolidated Statements of Operations

	Year Ended December 31,		
	2020	2019	2018
(Dollars in millions, except share and per share data)			
Revenue:			
Recurring services	\$ 690.2	\$ 680.1	\$ 625.0
Professional services and other	152.3	144.0	115.7
Total revenue	842.5	824.1	740.7
Cost of revenue:			
Recurring services	213.3	201.8	200.3
Professional services and other	163.7	149.8	132.2
Product development and management	83.7	67.9	59.0
Depreciation and amortization	40.5	36.4	34.3
Total cost of revenue	501.2	455.9	425.8
Gross profit	341.3	368.2	314.9
Selling, general and administrative	333.5	295.9	258.8
Operating profit	7.8	72.3	56.1
Interest expense, net	25.1	32.4	83.2
Other expense (income), net	2.7	5.6	(0.2)
(Loss) income from continuing operations before income taxes	(20.0)	34.3	(26.9)
Income tax (benefit) expense	(16.0)	(44.4)	8.4
(Loss) income from continuing operations	(4.0)	78.7	(35.3)
Loss from discontinued operations	—	—	(25.8)
Net (loss) income	(4.0)	78.7	(61.1)
Net loss attributable to noncontrolling interest	—	—	(0.5)
Net (loss) income attributable to Ceridian	\$ (4.0)	\$ 78.7	\$ (60.6)
Net (loss) income per share attributable to Ceridian:			
Basic	\$ (0.03)	\$ 0.55	\$ (0.60)
Diluted	\$ (0.03)	\$ 0.53	\$ (0.60)
Weighted-average shares outstanding:			
Basic	146,774,471	142,049,112	114,049,682
Diluted	146,774,471	148,756,592	114,049,682

See accompanying notes to consolidated financial statements.

Ceridian HCM Holding Inc.
Consolidated Statements of Comprehensive Income (Loss)

	Year Ended December 31,		
	2020	2019	2018
	(Dollars in millions)		
Net (loss) income	\$ (4.0)	\$ 78.7	\$ (61.1)
Items of other comprehensive income (loss) before income taxes:			
Change in foreign currency translation adjustment	18.7	29.1	(48.7)
Change in unrealized gain from invested customer trust funds	38.4	37.7	(10.5)
Change in pension liability adjustment (1)	21.2	9.8	(7.6)
Other comprehensive income (loss) before income taxes	78.3	76.6	(66.8)
Income tax (benefit) expense, net	15.9	12.0	(1.2)
Other comprehensive income (loss) after income taxes	62.4	64.6	(65.6)
Comprehensive income (loss)	58.4	143.3	(126.7)
Comprehensive loss attributable to noncontrolling interest	—	—	(0.5)
Comprehensive income (loss) attributable to Ceridian	<u>\$ 58.4</u>	<u>\$ 143.3</u>	<u>\$ (126.2)</u>

- (1) The amount of the pension liability adjustment recognized in the Consolidated Statements of Operations within other expense (income), net was \$13.2 million, \$10.1 million, and \$11.7 million during the years ended December 31, 2020, 2019, and 2018, respectively.

See accompanying notes to consolidated financial statements.

Ceridian HCM Holding Inc.
Consolidated Statements of Stockholders' Equity

	Senior Preferred Stock		Junior Preferred Stock		Common Stock		Additional Paid In Capital		Accumulated Deficit		Accumulated Other Comprehensive Loss		Total Stockholders' Equity		Non-controlling Interest		Total Equity			
	Shares	\$	Shares	\$	Shares	\$	Shares	\$	Shares	\$	Shares	\$	Shares	\$	Shares	\$	Shares	\$	Shares	\$
Balance as of December 31, 2017	16,802,144	\$ 184.8	58,244,308	\$ 0.6	65,285,962	\$ 0.7	1,565.4	\$ —	(267.3)	\$ (311.0)	1,173.2	\$ (60.6)	—	—	1,173.2	\$ (60.6)	—	—	1,173.2	\$ (60.6)
Net loss	—	—	—	—	—	—	—	—	(60.6)	—	—	—	—	—	—	—	—	—	—	—
Issuance of common stock	—	—	—	—	28,695,455	0.3	594.7	—	—	—	—	—	—	—	595.0	—	—	—	595.0	—
Issuance of common stock under share-based compensation plans	—	—	—	—	3,225,643	—	45.0	—	—	—	—	—	—	—	45.0	—	—	—	45.0	—
Senior preferred dividends declared	—	7.7	—	—	—	—	—	—	(7.7)	—	—	—	—	—	—	—	—	—	—	—
Conversion of senior and junior preferred shares	(16,802,144)	(192.5)	(58,244,308)	(0.6)	42,246,650	0.4	192.7	—	—	—	—	—	—	—	—	—	—	—	—	—
LifeWorks Disposition	—	—	—	—	—	—	(95.7)	—	—	0.7	(95.0)	—	—	—	(95.0)	—	—	—	(95.0)	—
Share-based compensation	—	—	—	—	—	—	23.5	—	—	—	23.5	—	—	—	23.5	—	—	—	23.5	—
Foreign currency translation	—	—	—	—	—	—	—	—	—	(48.7)	(48.7)	—	—	—	(48.7)	—	—	—	(48.7)	—
Change in unrealized loss, net of tax (\$1.2)	—	—	—	—	—	—	—	—	—	(9.3)	(9.3)	—	—	—	(9.3)	—	—	—	(9.3)	—
Change in minimum pension & postretirement liability, net of tax of \$0.0	—	—	—	—	—	—	—	—	—	(7.6)	(7.6)	—	—	—	(7.6)	—	—	—	(7.6)	—
Balance as of December 31, 2018	—	\$ —	—	\$ —	139,453,710	\$ 1.4	2,325.6	\$ (335.6)	27.1	\$ (375.9)	1,615.5	\$ (27.1)	—	—	1,615.5	\$ (27.1)	—	—	1,615.5	\$ (27.1)
Cumulative-effect adjustments to accumulated deficit related to the adoption of ASU 2018-02	—	—	—	—	—	—	—	—	78.7	—	—	—	—	—	78.7	—	—	—	78.7	—
Net income	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Issuance of common stock under share-based compensation plans	—	—	—	—	4,932,908	—	87.0	—	—	—	87.0	—	—	—	87.0	—	—	—	87.0	—
Share-based compensation	—	—	—	—	—	—	36.5	—	—	—	36.5	—	—	—	36.5	—	—	—	36.5	—
Foreign currency translation	—	—	—	—	—	—	—	—	—	29.1	29.1	—	—	—	29.1	—	—	—	29.1	—
Change in unrealized gain, net of tax \$9.6	—	—	—	—	—	—	—	—	—	28.1	28.1	—	—	—	28.1	—	—	—	28.1	—
Change in minimum pension & postretirement liability, net of tax of \$2.4	—	—	—	—	—	—	—	—	—	7.4	7.4	—	—	—	7.4	—	—	—	7.4	—
Balance as of December 31, 2019	—	\$ —	—	\$ —	144,386,618	\$ 1.4	2,449.1	\$ (229.8)	27.1	\$ (338.4)	1,882.3	\$ (4.0)	—	—	1,882.3	\$ (4.0)	—	—	1,882.3	\$ (4.0)
Net loss	—	—	—	—	—	—	—	—	(4.0)	—	—	—	—	—	(4.0)	—	—	—	(4.0)	—
Issuance of common stock under share-based compensation plans	—	—	—	—	4,184,794	0.1	91.6	—	—	—	91.7	—	—	—	91.7	—	—	—	91.7	—
Share-based compensation	—	—	—	—	—	—	65.8	—	—	—	65.8	—	—	—	65.8	—	—	—	65.8	—
Foreign currency translation	—	—	—	—	—	—	—	—	—	18.7	18.7	—	—	—	18.7	—	—	—	18.7	—
Change in unrealized gain, net of tax \$10.2	—	—	—	—	—	—	—	—	—	28.2	28.2	—	—	—	28.2	—	—	—	28.2	—
Change in minimum pension & postretirement liability, net of tax of \$5.7	—	—	—	—	—	—	—	—	—	15.5	15.5	—	—	—	15.5	—	—	—	15.5	—
Balance as of December 31, 2020	—	\$ —	—	\$ —	148,571,412	\$ 1.5	2,606.5	\$ (233.8)	27.1	\$ (276.0)	2,098.2	\$ (4.0)	—	—	2,098.2	\$ (4.0)	—	—	2,098.2	\$ (4.0)

See accompanying notes to consolidated financial statements.

Ceridian HCM Holding Inc.
Consolidated Statements of Cash Flows

	Year Ended December 31,		
	2020	2019	2018
	(Dollars in millions)		
Net (loss) income	\$ (4.0)	\$ 78.7	\$ (61.1)
Loss from discontinued operations	—	—	25.8
Adjustments to reconcile net (loss) income to net cash (used in) provided by operating activities:			
Deferred income tax benefit	(7.0)	(69.4)	(16.1)
Depreciation and amortization	51.8	57.1	56.6
Amortization of debt issuance costs and debt discount	1.2	1.2	2.1
Loss on debt extinguishment	—	—	25.7
Lease abandonment costs	16.8	—	—
Net periodic pension and postretirement cost	3.3	5.2	2.7
Provision for doubtful accounts	2.0	3.2	0.7
Share-based compensation	65.8	36.5	23.2
Other	1.0	(0.4)	(0.4)
Changes in operating assets and liabilities excluding effects of acquisitions and divestitures:			
Trade and other receivables	(12.0)	(16.4)	(3.6)
Prepaid expenses and other current assets	(6.8)	(8.0)	0.6
Accounts payable and other accrued expenses	(1.4)	3.8	(6.4)
Deferred revenue	(1.2)	0.8	7.0
Employee compensation and benefits	(104.0)	(11.1)	(22.1)
Accrued interest	—	—	(15.7)
Accrued taxes	(3.7)	(11.1)	8.4
Other assets and liabilities	(32.0)	(19.5)	(16.7)
Net cash (used in) provided by operating activities—continuing operations	(30.2)	50.6	10.7
Net cash used in operating activities—discontinued operations	—	—	(1.2)
Net cash (used in) provided by operating activities	(30.2)	50.6	9.5
Cash Flows from Investing Activities			
Purchase of customer trust funds marketable securities	(212.4)	(408.4)	(855.2)
Proceeds from sale and maturity of customer trust funds marketable securities	369.3	374.5	844.3
Expenditures for property, plant, and equipment	(18.1)	(16.3)	(8.0)
Expenditures for software and technology	(41.7)	(38.9)	(32.2)
Acquisition costs, net of cash acquired	(58.3)	(30.2)	—
Net cash provided by (used in) investing activities	38.8	(119.3)	(51.1)
Cash Flows from Financing Activities			
Increase (decrease) in customer trust funds obligations, net	483.6	529.9	(1,415.1)
Net proceeds from issuance of stock	—	—	595.0
Repayment of long-term debt obligations	(10.0)	(7.2)	(1,134.0)
Proceeds from revolving credit facility	295.0	—	—
Repayment of revolving credit facility	(295.0)	—	—
Proceeds from issuance of common stock under share-based compensation plans	91.7	87.0	45.8
Proceeds from debt issuance	—	—	680.0
Payment of debt refinancing costs	—	—	(23.3)
Net cash provided by (used in) financing activities	565.3	609.7	(1,251.6)
Effect of Exchange Rate Changes on Cash	(4.0)	11.3	(12.8)
Net increase (decrease) in cash and equivalents	569.9	552.3	(1,306.0)
Elimination of cash from discontinued operations	—	—	0.5
Cash, restricted cash, and equivalents at beginning of year	1,658.6	1,106.3	2,411.8
Cash, restricted cash, and equivalents at end of year	\$ 2,228.5	\$ 1,658.6	\$ 1,106.3
Reconciliation of cash, restricted cash, and equivalents to the consolidated balance sheets			
Cash and equivalents	\$ 188.2	\$ 281.3	\$ 217.8
Restricted cash and equivalents included in customer trust funds	\$ 2,040.3	\$ 1,377.3	\$ 888.5
Total cash, restricted cash, and equivalents	\$ 2,228.5	\$ 1,658.6	\$ 1,106.3
Supplemental Cash Flow Information:			
Cash paid for interest	\$ 26.7	\$ 37.4	\$ 74.5
Cash paid for income taxes	\$ 4.2	\$ 36.2	\$ 21.1
Cash received from income tax refunds	\$ 9.6	\$ 0.3	\$ 4.4

See accompanying notes to consolidated financial statements.

Ceridian HCM Holding Inc.
Notes to Consolidated Financial Statements

1. Organization

Ceridian HCM Holding Inc. and its subsidiaries (also referred to in this report as “Ceridian,” “we,” “our,” and “us”) offer a broad range of services and software designed to help employers more effectively manage employment processes, such as payroll, payroll-related tax filing, human resource information systems, employee self-service, time and labor management, and recruitment and applicant screening. Our technology-based services are typically provided through long-term customer relationships that result in a high level of recurring revenue. While we operate in 14 countries globally, our operations are primarily located in the United States and Canada.

Since our initial public offering (“IPO”) on April 30, 2018, we have completed multiple secondary offerings, in which certain of our stockholders (the “Selling Stockholders”) have sold common stock in underwritten public offerings. All proceeds from the sale of this common stock went to the Selling Stockholders. Our secondary offerings were as follows:

Date	Shares of Common Stock Sold	Public Offering Price (per share)
March 22, 2019 (including 1,222,142 shares purchased pursuant to the underwriters' option to purchase additional shares on April 3, 2019)	14,222,142	\$ 50.50
May 23, 2019	8,000,000	50.50
August 8, 2019	10,000,000	49.75
September 6, 2019	9,000,000	56.30
November 15, 2019	10,000,000	53.08
August 28, 2020	7,717,347	72.18

We incurred \$0.4 million, \$2.9 million, and \$1.3 million of expenses related to our secondary offerings during the years ended December 31, 2020, 2019, and 2018 respectively. Expenses associated with our secondary offerings are recorded within selling, general, and administrative expense in our consolidated statements of operations.

2. Summary of Significant Accounting Policies

Basis of Presentation

The accompanying consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States (“GAAP”). The accompanying consolidated financial statements include the operations and accounts of Ceridian and all subsidiaries, as well as any variable interest entity (“VIE”) in which we have controlling financial interest. All intercompany balances and transactions have been eliminated from our consolidated financial statements.

We consolidate the grantor trusts that hold funds provided by our payroll and tax filing customers pending remittance to employees of those customers or tax authorities in the United States and Canada, although Ceridian does not own the grantor trusts. Under consolidation accounting, the enterprise with a controlling financial interest consolidates a VIE. A controlling financial interest in an entity is determined through analysis that identifies the primary beneficiary which has (1) the power to direct the activities of a VIE that most significantly impact the entity’s economic performance and (2) the obligation to absorb losses of the entity that could potentially be significant to the VIE or the right to receive benefits from the entity that could potentially be significant to the VIE. In addition, ongoing reassessments must be performed to confirm whether an enterprise is the primary beneficiary of a VIE. The grantor trusts are VIEs, and we are deemed to have a controlling financial interest as the primary beneficiary. Please refer to Note 6, “Customer Trust Funds,” for further information on our accounting for these funds.

Use of Estimates

The preparation of consolidated financial statements in conformity with GAAP requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of our financial statements and our reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates. Estimates that could significantly affect our results of operations or financial

condition include the assignment of fair values to goodwill and other intangible assets and testing for impairment; the testing of impairment of long-lived assets; the determination of our liability for pensions and postretirement benefits; the determination of fair value of equity awards granted; and the resolution of tax matters and legal contingencies. Further discussion on these estimates can be found in related disclosures elsewhere in our notes to the consolidated financial statements.

Cash and Equivalents

As of December 31, 2020 and 2019, cash and equivalents were comprised of cash held in bank accounts and investments with an original maturity of three months or less.

Concentrations

Cash deposits of client and corporate funds are maintained primarily in large credit-worthy financial institutions in the countries in which we operate. These deposits may exceed the amount of any deposit insurance that may be available through government agencies. All deliverable securities are held in custody with large credit-worthy financial institutions, which bear the risk of custodial loss. Non-deliverable securities, primarily money market securities, are held in custody by large, credit-worthy broker-dealers and financial institutions.

Trade and Other Receivables, Net

Trade and other receivables balances are presented on the consolidated balance sheets net of the allowance for doubtful accounts of \$3.1 million and \$2.4 million and the reserve for sales adjustments of \$4.4 million and \$3.7 million as of December 31, 2020, and 2019, respectively. We experience credit losses on accounts receivable and, accordingly, must make estimates related to the ultimate collection of the receivables. Specifically, management analyzes accounts receivable, historical bad debt experience, customer concentrations, customer creditworthiness, and current economic trends when evaluating the adequacy of the allowance for doubtful accounts. We estimate the reserve for sales adjustment based on historical sales adjustment experience. We write off accounts receivable when we determine that the accounts are uncollectible, generally upon customer bankruptcy or the customer's nonresponse to continued collection efforts.

Property, Plant, and Equipment, Net

Our property, plant, and equipment assets are stated at cost less accumulated depreciation. Depreciation is calculated on a straight-line basis over the shorter of the remaining lease term or estimated useful life of the related assets, which are generally as follows:

Buildings	40 years
Building improvements	5 years
Machinery and equipment	4-6 years
Computer equipment	3-4 years

Repairs and maintenance costs are expensed as incurred. We capitalized interest of \$0.5 million and \$0.8 million in property, plant, and equipment, net during the years ended December 31, 2020 and 2019, respectively. Property, plant, and equipment assets are assessed for impairment as described under the heading "Impairment of Long-Lived Assets" below.

Assignment of Fair Values Upon Acquisition of Goodwill and Other Intangible Assets

In the event of a business combination where we are the acquiring party, we are required to assign fair values to all identifiable assets and liabilities acquired, including intangible assets, such as customer lists, identifiable intangible trade names, technology, and non-compete agreements. We are also required to determine the useful life for definite-lived identifiable intangible assets acquired. These determinations require significant judgments, estimates, and assumptions; and, when appropriate, we utilize the assistance of third-party valuation consultants. The remainder of the purchase price of the acquired business not assigned to identifiable assets or liabilities is then recorded as goodwill.

Goodwill and Intangible Assets

Goodwill, which represents the excess purchase price over the fair value of net assets of businesses acquired, is assigned to reporting units based on the benefits derived from the acquisition. Goodwill and indefinite-lived intangibles are not amortized against earnings, but instead are subject to impairment review on at least an annual basis. We perform our annual assessment of goodwill and indefinite-lived intangible balances as of October 1 of each year.

We assess goodwill impairment risk by comparing the fair value of the net assets with the carrying amount of the reporting unit. We determine the fair value of the reporting unit based on our market capitalization at the testing date. If the carrying amount of the goodwill exceeds the fair value of the reporting unit, goodwill may be impaired. To the extent that the carrying amount of goodwill of the reporting unit exceeds the fair value of the reporting unit, an impairment loss is recognized.

Intangible assets represent amounts assigned to specifically identifiable intangible assets at the time of an acquisition. Definite-lived assets are amortized on a straight-line basis generally over the following periods:

Customer lists and relationships	5-15 years
Trade name	3-5 years
Technology	3-4 years

Indefinite-lived intangible assets, which consist of trade names, are tested for impairment on an annual basis, or more frequently if certain events or circumstances occur that could indicate impairment. When evaluating whether the indefinite-lived intangible assets are impaired, we first perform a qualitative review. If the qualitative assessment indicates it is more likely than not the fair value of an indefinite-lived intangible asset is less than the carrying amount, a quantitative test is applied and, the carrying amount is compared to its estimated fair value. The estimate of fair value is based on a relief from royalty method which calculates the cost savings associated with owning rather than licensing the trade name. An estimated royalty rate is applied to forecasted revenue and the resulting cash flows are discounted. Definite-lived assets are assessed for impairment as described under the heading “Impairment of Long-Lived Assets” below.

Internally Developed Software Costs

In accordance with Accounting Standards Codification (“ASC”) Topic 350, we capitalize costs associated with software developed or obtained for internal use when both the preliminary project stage is completed and our management has authorized further funding for the project, which it deems probable of completion. Capitalized software costs include only: (1) external direct costs of materials and services consumed in developing or obtaining the software; (2) payroll and payroll-related costs for employees who are directly associated with and who devote time to the project; and (3) interest costs incurred while developing the software. Capitalization of these costs ceases no later than the point at which the project is substantially complete and ready for its intended purpose. We do not include general and administrative costs and overhead costs in capitalizable costs. Research and development costs, product management, and other software maintenance costs related to software development are expensed as incurred.

We had capitalized software costs, net of accumulated amortization, of \$78.7 million and \$70.4 million as of December 31, 2020, and 2019, respectively, included in property, plant, and equipment, net in the accompanying consolidated balance sheets. We amortize software costs on a straight-line basis over the expected life of the software, generally a range of two to seven years. Amortization of software costs totaled \$30.6 million, \$28.3 million, and \$26.2 million for the years ended December 31, 2020, 2019, and 2018, respectively.

Impairment of Long-Lived Assets

Long-lived assets, such as property, plant, and equipment, net, capitalized software, net, and definite-lived intangible assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset group may not be recoverable. Recoverability of asset groups to be held and used is measured by a comparison of the carrying amount of an asset group to the estimated undiscounted future cash flows expected to be generated by the asset group. If the carrying amount of an asset group exceeds its estimated future cash flows, an impairment charge is recognized for the amount by which the carrying amount of the asset group exceeds the fair value of the asset group. Please refer to Note 16, “Leases” for further information on our impairment of long-lived assets.

Deferred Costs

Deferred costs primarily consist of deferred sales commissions. Sales commissions paid based on the annual contract value of a signed customer contract are considered incremental and recoverable costs of obtaining a contract with a customer. Sales commission paid based on the annual contract value are deferred and then amortized on a straight-line basis over a period of benefit that we have determined to be five years.

Deferred costs included within Other assets on our consolidated balance sheets were \$132.9 million and \$106.4 million as of December 31, 2020 and 2019, respectively. Amortization expense for the deferred costs was \$38.8 million, \$32.2 million, and \$26.2 million for the years ended December 31, 2020, 2019, and 2018, respectively.

Revenue Recognition

The core principle of ASC Topic 606 is that revenue is recognized upon transfer of control of promised products or services to customers in an amount that reflects the consideration we expect to receive in exchange for those products or services. In accordance with ASC Topic 606, we perform the following steps to determine revenue to be recognized:

- 1) Identify the contract(s) with a customer;
- 2) Identify the performance obligations in the contract;
- 3) Determine the transaction price;
- 4) Allocate the transaction price to the performance obligations in the contract; and
- 5) Recognize revenue when (or as) we satisfy a performance obligation.

The significant majority of our two major revenue sources (recurring and professional services and other) are derived from contracts with customers. Recurring revenues are primarily related to our cloud subscription performance obligations. Professional services and other revenues are primarily related to professional services for our cloud customers (including implementation services to activate new accounts, as well as post go-live professional services typically billed on a time and materials basis) and, to a much lesser extent, fees for other non-recurring services, including sales of time clocks and certain client reimbursable out-of-pocket expenses. Fees charged to cloud subscription performance obligations are generally priced either on a per-employee, per-month (“PEPM”) basis for a given month or on a per-employee, per-process basis for a given process; and fees charged for professional services are typically priced on a fixed fee basis for activating new accounts and on a time and materials basis for post go-live professional services. There is typically no variable consideration related to our recurring cloud subscriptions or our activation services, nor do they include a significant financing component, non-cash consideration, or consideration payable to a customer. Our recurring cloud subscriptions are typically billed one month in advance while our professional services are billed over the implementation period for activation of new accounts and as work is performed for post go-live professional services.

Our cloud services arrangements include multiple performance obligations, and transaction price allocations are based on the stand-alone selling price (“SSP”) for each performance obligation. Our contract renewal rates serve as an observable input to establish SSP for our recurring cloud subscription performance obligations. The SSP for professional services performance obligations is estimated based on market conditions and observable inputs, including rates charged by third parties to perform implementation services.

For our performance obligations, the consideration allocated to cloud subscription revenues is recognized as recurring revenues, typically commencing when subscription fees begin to be charged to the customer. The consideration allocated to professional services to activate a new account is recognized as professional services revenues based on the proportion of total work performed, using reasonably dependable estimates (in relation to progression through the implementation phase), by solution.

Recurring Services Revenues

Revenues are presented within the consolidated statements of operations in two categories: recurring services and professional services and other. Recurring services revenues consist of monthly fees that we charge for our Cloud and Bureau solutions. For our Dayforce solutions, we primarily charge monthly recurring fees on a per employee, per month (“PEPM”) basis, generally one-month in advance of service, based on the number and type of solutions provided to the customer and the number of employees at the customer. We charge Powerpay customers monthly recurring fees on a per-employee, per-

process basis. For our Bureau solutions, we typically charge monthly recurring fees on a per-process basis. The typical recurring services customer contract has an initial term of three years. Any credits related to service level commitments are recognized as incurred, as service level failures are not anticipated at contract signing. Should a customer cancel the initial contract, an early termination fee may be applicable, and revenue is recognized upon collection. We also generate recurring services revenue from investment income on our Cloud and Bureau customer funds held in trust before such funds are remitted to taxing authorities, customer employees, or other third parties. We refer to this investment income as float revenue. Please refer to Note 13, "Revenue," for a full description of our sources of revenue.

Professional Services and Other Revenues

Professional services and other revenues consist primarily of charges relating to the work performed to assist customers with the planning, design, and implementation of their solutions. Also included in professional services are any related training services, post-implementation professional services, and purchased time clocks. We also generate professional services and other revenues from custom professional services and consulting services that we provide and for certain third-party services that we arrange for our Bureau customers. Professional services revenue is primarily recognized as hours are incurred.

Costs and Expenses

Cost of Revenue

Cost of revenue consists of costs to deliver our revenue-producing services. Most of these costs are recognized as incurred, that is, as we become obligated to pay for them. Some costs of revenue are recognized in the period that a service is sold and delivered. Other costs of revenue are recognized over the period of use or in proportion to the related revenue.

The costs recognized as incurred consist primarily of customer service staff costs, customer technical support costs, implementation personnel costs, costs of hosting applications, consulting and purchased services, delivery services, and royalties. The costs of revenue recognized over the period of use are depreciation and amortization, rentals of facilities and equipment, and direct and incremental costs associated with deferred implementation service revenue.

Cost of recurring services revenues primarily consists of costs to provide maintenance and technical support to our customers, and the costs of hosting our applications. The cost of recurring services revenues includes compensation and other employee-related expenses for data center staff, payments to outside service providers, data center, and networking expenses.

Cost of professional services and other revenues primarily consists of costs to provide implementation consulting services and training to our customers, as well as the cost of time clocks. Costs to provide implementation consulting services include compensation and other employee-related expenses for professional services staff, costs of subcontractors, and travel.

Product development and management expense includes costs related to software development activities that do not qualify for capitalization, such as development, quality assurance, testing of new technologies, and enhancements to our existing solutions that do not result in additional functionality. Product development and management expense also includes costs related to the management of our service offerings. Research and development expense, which is included within product development and management expense, was \$39.6 million, \$34.1 million, and \$29.6 million for the years ended December 31, 2020, 2019, and 2018, respectively.

Depreciation and amortization related to cost of revenue primarily consists of amortization of capitalized software.

Selling, General, and Administrative Expense

Selling expense includes costs related to maintaining a direct marketing infrastructure and sales force and other direct marketing efforts, such as marketing events, advertising, telemarketing, direct mail, and trade shows. Advertising costs are expensed as incurred. Advertising expense was \$5.5 million, \$5.4 million, and \$5.8 million for the years ended December 31, 2020, 2019, and 2018, respectively.

General and administrative expense includes costs that are not directly related to delivery of services, selling efforts, or product development, primarily consisting of corporate-level costs, such as administration, finance, legal, and human resources. Also included in this category are depreciation, and amortization of other intangible assets not reflected in cost of revenue, and the provision for doubtful accounts receivable.

Other Expense (Income), Net

Other expense (income), net includes the results of transactions that are not appropriately classified in another category. These items are primarily foreign currency translation gains and losses resulting mainly from intercompany receivables and payables denominated in currencies other than the subsidiary's functional currency and net periodic pension costs.

Income Taxes

Income taxes have been provided for using the asset and liability method. Deferred tax assets and liabilities are recorded for temporary differences between the financial reporting basis and the tax basis of assets and liabilities as adjusted for the expected benefits of utilizing net operating loss carryforwards. The impact on deferred taxes of changes in tax rates and laws, if any, applied to the years during which temporary differences are expected to be settled, is reflected in the consolidated financial statements in the period of enactment.

We classify interest and penalties related to income taxes as a component of income tax expense (benefit).

Fair Value of Financial Instruments

The carrying amounts of cash and equivalents, trade and other receivables, net, customer trust funds obligations, customer advance payments, and accounts payable approximate fair value because of the short-term nature of these items.

Share-Based Compensation

Our employees participate in share-based compensation plans. Under the fair value recognition provisions of share-based compensation accounting, we measure share-based compensation cost at the grant date based on the fair value of the award and recognize the compensation expense over the requisite service period, which is the period during which an employee is required to provide services in exchange for the award.

We use the Black-Scholes standard option pricing model ("Black-Scholes model") to determine the fair value of stock awards with term-based vesting conditions. The determination of the fair value of the awards on the date of grant using the Black-Scholes model is affected by the value of our common stock as well as other inputs and assumptions described below.

If factors change and we employ different assumptions for estimating share-based compensation expense in future periods or if we adopt a different valuation model, future periods may differ significantly from what we have recorded in the current period and could materially affect our operating results.

To determine the fair value of both term- and certain performance-based stock awards, the risk-free interest rate used was based on the implied yield currently available on U.S. Treasury zero coupon issues with remaining term equal to the contractual term of the performance-based options and the expected term of the term-based awards. Given our limited history as a public company, the estimated volatility of our common stock is based on volatility data for selected comparable public companies over the expected term of our stock awards. Because we do not anticipate paying any cash dividends in the foreseeable future, we use an expected dividend yield of zero. The amount of share-based compensation expense we recognize during a period is based on the portion of the awards that are ultimately expected to vest.

For performance-based stock options with a market condition, a Monte Carlo simulation model is used to determine the fair value. The Monte Carlo model utilizes multiple input variables that determine the probability of satisfying the market conditions stipulated in the award.

We estimate option forfeitures at the time of grant and revise those estimates in subsequent periods if actual forfeitures differ from those estimates. We analyze historical data to estimate pre-vesting forfeitures and record share-based compensation expense for those awards expected to vest. We recognize term-based stock compensation expense using the straight-line method.

Pension and Other Postretirement Benefits Liability

We present information about our pension and postretirement benefit plans in Note 11, “Employee Benefit Plans” to our consolidated financial statements. Liabilities and expenses for pensions and other postretirement benefits are determined with the assistance of third-party actuaries, using actuarial methodologies and incorporating significant assumptions, including the rate used to discount the future estimated liability, the long-term rate of return on plan assets, and several assumptions relating to the employee workforce (medical costs, retirement age, and mortality). The discount rate assumption utilizes a full yield curve approach by applying the specific spot rates along the yield curve used in the determination of the benefit obligation to the relevant projected cash flows. The impact of a change in the discount rate of 25 basis points would be approximately \$13 million on the liabilities and \$0.3 million on pre-tax earnings in the following year. The long-term rate of return is estimated by considering historical returns and expected returns on current and projected asset allocations and is generally applied to a five-year average market value of assets. A change in the assumption for the long-term rate of return on plan assets of 25 basis points would impact pre-tax earnings by approximately \$1 million.

Foreign Currency Translation

We have international operations whereby the local currencies serve as functional currencies. We translate foreign currency denominated assets and liabilities at the end-of-period exchange rates and foreign currency denominated statements of operations at the average exchange rates for each period. We report the effect of changes in the U.S. dollar carrying values of assets and liabilities of our international subsidiaries that are due to changes in exchange rates between the U.S. dollar and the subsidiaries’ functional currency as foreign currency translation within accumulated other comprehensive income (loss) in the accompanying consolidated statements of stockholders’ equity and comprehensive income (loss). Gains and losses from transactions and translation of assets and liabilities denominated in currencies other than the functional currency of the subsidiaries are recorded in the consolidated statements of operations within other expense (income), net.

Recently Issued and Adopted Accounting Pronouncements

Standard	Issuance Date	Description	Adoption Date	Effect on the Financial Statements
ASU 2018-14 , Compensation - Retirement Benefits - Defined Benefit Plans - General (Subtopic 715-20), Disclosure Framework - Changes to the Disclosure Requirements for Defined Benefit Plans	August 2018	This amendment modifies the disclosure requirements for employers that sponsor defined benefit pension or other postretirement plans. Additionally, it removes disclosures that are no longer considered cost beneficial, adds disclosures identified as relevant, and clarifies certain specific requirements of disclosures to improve the effectiveness of disclosures in the notes to the financial statements.	January 2020	The adoption of this standard did not have a significant impact on our annual defined benefit plan and other postretirement plan disclosures.
ASU 2016-13 , Financial Instruments - Credit Losses (Topic 326), Measurement of Credit Losses on Financial Statements	June 2016	This amendment replaces the incurred loss impairment methodology in current GAAP with a methodology that reflects expected credit losses on instruments within its scope, including trade receivables. This is intended to provide financial statement users with more decision-useful information about the expected credit losses.	January 2020	The adoption of this standard did not have a significant impact on our financial statements.
ASU 2016-02 , Leases (Topic 842) and all related amendments	February 2016	This standard requires balance sheet recognition for both financing and operating leases.	January 2019	Please refer to Note 16, "Leases," for additional information about our leasing arrangements.
ASU 2020-04 , Reference Rate Reform (Topic 848): Facilitation of the Effects of Reference Rate Reform on Financial Reporting	March 2020	This amendment provides optional expedients and exceptions for applying GAAP to contracts, hedging relationships, and other transactions affected by reference rate reform if certain criteria are met. The amendments apply only to contracts, hedging relationships, and other transactions that reference LIBOR or another reference rate expected to be discontinued because of reference rate reform.	Not yet adopted	This amendment may be elected over time through December 31, 2022 as reference rate reform activities occur. We do not expect the adoption of this guidance to have a significant impact on our financial statements.

3. Discontinued Operations

Life Works Disposition

In the second quarter of 2018, contemporaneously with our IPO and concurrent private placement, we distributed our controlling financial interest in LifeWorks to our stockholders of record prior to the IPO on a pro rata basis in accordance with their pro rata interest in us (the “LifeWorks Disposition”).

The amounts in the table below reflect the operating results of LifeWorks reported as discontinued operations, as well as supplemental disclosures of the discontinued operations:

(Dollars in millions)	Year Ended December 31, 2018
Net revenues	\$ 28.3
Loss from operations before income taxes	(0.9)
Income tax expense	(24.9)
Loss from discontinued operations, net of income taxes	(25.8)
Loss attributable to noncontrolling interest	(0.5)
Depreciation and amortization	1.4

4. Business Combinations

Excelity

On May 29, 2020, we completed the purchase of 100% of the outstanding shares of Excelity Global Solutions Pte. Ltd. (“Excelity”) for \$77.2 million in cash consideration. Excelity is a human capital management service provider in the Asia-Pacific region.

The financial results of Excelity have been included within our consolidated financial statements from the acquisition date forward and are classified as a Bureau solution. The acquisition of Excelity was recorded using the acquisition method of accounting, in which the assets and liabilities assumed are recognized at their fair value. Intangible assets recorded for this acquisition are related to customer relationships, trade name, and developed technology. The purchase accounting was complete as of December 31, 2020. Of the goodwill associated with this acquisition, \$5.1 million is deductible for income tax purposes.

After consideration of the Excelity acquisition, management has concluded that we continue to have one operating and reportable segment. This conclusion aligns with how management monitors operating performance, allocates resources, and deploys capital.

The major classes of assets and liabilities to which we allocated the purchase price were as follows:

	(Dollars in millions)	
Cash and equivalents	\$	6.6
Trade receivables, prepaid expenses, and other current assets		13.0
Customer trust funds		12.3
Property, plant, and equipment and other assets		4.2
Goodwill		42.7
Other intangible assets, net		20.7
Accounts payable and other current liabilities		(2.2)
Customer trust funds obligations		(13.1)
Other non-current liabilities		(7.0)
Total purchase price	\$	<u>77.2</u>

RITEQ

On September 6, 2019, we entered into a purchase agreement with the shareholders of Lusworth Holding Pty Ltd. (“RITEQ”), an Australian-based corporation, to acquire 100% of the issued and outstanding shares of RITEQ for approximately \$20.1 million, subject to certain purchase price adjustments. RITEQ is a provider of workforce management solutions and operates within Australia, New Zealand, and the United Kingdom. The share purchase transaction was completed on September 13, 2019.

The financial results of RITEQ have been included within our consolidated financial statements as of the acquisition date. The acquisition of RITEQ was recorded using the acquisition method of accounting and recognized the assets and liabilities assumed at their fair value. The allocation of the purchase price to goodwill was completed as of December 31, 2019. The major classes of assets and liabilities to which we allocated the purchase price were as follows:

	(Dollars in millions)	
Cash and equivalents	\$	0.7
Trade and other receivables, net		1.3
Goodwill		16.7
Other intangible assets, net		4.8
Other assets		1.0
Accounts payable		(0.6)
Deferred revenue		(1.3)
Employee compensation and benefits		(1.1)
Other liabilities		(1.4)
Total purchase price	\$	<u>20.1</u>

5. Fair Value Measurements

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date (an exit price). GAAP outlines a valuation framework and creates a fair value hierarchy intended to increase the consistency and comparability of fair value measurements and the related disclosures. Certain assets and liabilities must be measured at fair value, and disclosures are required for items measured at fair value.

We measure our financial instruments using inputs from the following three levels of the fair value hierarchy. The three levels are as follows:

- Level 1 inputs are unadjusted quoted prices in active markets for identical assets or liabilities.
- Level 2 inputs include quoted prices for similar assets and liabilities in active markets, quoted prices for identical or similar assets or liabilities in markets that are not active, inputs other than quoted prices that are observable for the asset or liability (that is, interest rates, yield curves, etc.), and inputs that are derived principally from or corroborated by observable market data by correlation or other means (market corroborated inputs).

- Level 3 inputs include unobservable inputs that reflect our assumptions about the assumptions that market participants would use in pricing the asset or liability. These inputs are developed based on the best information available, including internal data.

Financial Assets and Liabilities Measured at Fair Value on a Recurring Basis

Our financial assets and liabilities measured at fair value on a recurring basis were categorized as follows:

	December 31, 2020			Total
	Level 1	Level 2	Level 3	
(Dollars in millions)				
Assets				
Available for sale customer trust funds assets	\$ —	\$ 1,719.1 (a)	\$ —	\$ 1,719.1
Total assets measured at fair value	<u>\$ —</u>	<u>\$ 1,719.1</u>	<u>\$ —</u>	<u>\$ 1,719.1</u>

	December 31, 2019			Total
	Level 1	Level 2	Level 3	
(Dollars in millions)				
Assets				
Available for sale customer trust funds assets	\$ —	\$ 1,826.8 (a)	\$ —	\$ 1,826.8
Total assets measured at fair value	<u>\$ —</u>	<u>\$ 1,826.8</u>	<u>\$ —</u>	<u>\$ 1,826.8</u>

(a) Fair value is based on inputs that are observable for the asset or liability, other than quoted prices.

Assets and Liabilities Measured at Fair Value on a Nonrecurring Basis

Assets acquired and liabilities assumed as part of a business combination are measured at fair value. Please refer to Note 4, “Business Combinations,” for additional information on our business combinations. During the years ended December 31, 2020 and 2019, we did not re-measure any financial assets or liabilities at fair value on a nonrecurring basis.

6. Customer Trust Funds

Overview

In connection with our U.S., Canadian, and Indian payroll and tax filing services, we collect funds for payment of payroll and taxes; temporarily hold such funds, in trust for the U.S. and Canadian funds, until payment is due; remit the funds to the clients’ employees and appropriate taxing authorities; file federal, state, and local tax returns; and handle related regulatory correspondence and amendments. The assets held are intended for the specific purpose of satisfying client fund obligations and therefore are not freely available for our general business use.

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. Accordingly, we maintain on average approximately 49% 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 on average approximately 51% 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.

Financial Statement Presentation

Investment income from invested customer trust funds, also referred to as float revenue or float, is a component of our compensation for providing services under agreements with our customers. Investment income from invested customer trust funds included in revenue amounted to \$52.3 million, \$80.2 million, and \$67.0 million for the years ended December 31,

2020, 2019, and 2018, respectively. Investment income includes interest income, realized gains and losses from sales of customer trust funds' investments, and unrealized credit losses determined to be unrecoverable.

The amortized cost of customer trust funds as of December 31, 2020, and 2019, is comprised of the original cost of assets acquired. The amortized cost and fair values of investments of customer trust funds available for sale were as follows:

	Amortized Cost	December 31, 2020		Fair Value
		Gross Unrealized		
		Gain	Loss	
(Dollars in millions)				
Money market securities, investments carried at cost and other cash equivalents	\$ 2,027.1	\$ —	\$ —	\$ 2,027.1
Available for sale investments:				
U.S. government and agency securities	494.0	21.6	(0.1)	515.5
Canadian and provincial government securities	396.4	15.5	—	411.9
Corporate debt securities	548.5	19.4	—	567.9
Asset-backed securities	192.2	4.9	—	197.1
Mortgage-backed securities	9.9	0.2	—	10.1
Other securities	16.5	0.1	—	16.6
Total available for sale investments	1,657.5	61.7	(0.1)	1,719.1
Invested customer trust funds	3,684.6	\$ 61.7	\$ (0.1)	3,746.2
Trust receivables	13.2			13.2
Total customer trust funds	\$ 3,697.8			\$ 3,759.4

	Amortized Cost	December 31, 2019		Fair Value
		Gross Unrealized		
		Gain	Loss	
(Dollars in millions)				
Money market securities, investments carried at cost and other cash equivalents	\$ 1,348.1	\$ —	\$ —	\$ 1,348.1
Available for sale investments:				
U.S. government and agency securities	542.4	7.1	(0.3)	549.2
Canadian and provincial government securities	406.7	5.4	(0.7)	411.4
Corporate debt securities	562.2	9.0	(0.3)	570.9
Asset-backed securities	270.0	1.7	(0.3)	271.4
Mortgage-backed securities	19.8	0.2	(0.1)	19.9
Other securities	4.0	—	—	4.0
Total available for sale investments	1,805.1	23.4	(1.7)	1,826.8
Invested customer trust funds	3,153.2	\$ 23.4	\$ (1.7)	3,174.9
Trust receivables (a)	40.4			29.2
Total customer trust funds	\$ 3,193.6			\$ 3,204.1

- (a) The fair value of trust receivable as of December 31, 2019, includes a loss of \$11.2 million related to unrecovered duplicate payments resulting from the September 26, 2019, isolated service incident. Ceridian was liable for these unrecovered duplicate payments and reimbursed the customer trust for the resulting losses in the first quarter of 2020. Please refer to Note 17, "Commitments and Contingencies," for further discussion of the September 26, 2019, isolated service incident.

The following represents the gross unrealized losses and the related fair value of the investments of customer trust funds available for sale, aggregated by investment category and length of time that individual securities have been in a continuous unrealized loss position.

	December 31, 2020					
	Less than 12 months		12 months or more		Total	
	Unrealized Losses	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses	Fair Value
	(Dollars in millions)					
U.S. government and agency securities	\$ (0.1)	\$ 42.1	\$ —	\$ —	\$ (0.1)	\$ 42.1
Total available for sale investments	<u>\$ (0.1)</u>	<u>\$ 42.1</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ (0.1)</u>	<u>\$ 42.1</u>

Management does not believe that any individual unrealized loss was unrecoverable as of December 31, 2020. The unrealized losses are primarily attributable to changes in interest rates and not to credit deterioration. We currently do not intend to sell or expect to be required to sell the securities before the time required to recover the amortized cost.

The amortized cost and fair value of investment securities available for sale at December 31, 2020, by contractual maturity are shown below. Expected maturities will differ from contractual maturities because borrowers may have the right to call or to prepay obligations with or without call or prepayment penalties.

	December 31, 2020	
	Cost	Fair Value
	(Dollars in millions)	
Due in one year or less	\$ 2,487.7	\$ 2,491.2
Due in one to three years	753.4	785.8
Due in three to five years	335.1	349.1
Due after five years	108.4	120.1
Invested customer trust funds	<u>\$ 3,684.6</u>	<u>\$ 3,746.2</u>

7. Trade and Other Receivables, Net

Trade and other receivables, net, consist of the following:

	December 31,	
	2020	2019
	(Dollars in millions)	
Trade receivables from customers	\$ 95.1	\$ 75.7
Interest receivable from invested customer trust funds	1.8	1.3
Other	11.7	9.5
Total gross receivables	108.6	86.5
Less: reserve for sales adjustments	(4.4)	(3.7)
Less: allowance for doubtful accounts	(3.1)	(2.4)
Trade and other receivables, net	<u>\$ 101.1</u>	<u>\$ 80.4</u>

The activity related to the allowance for doubtful accounts was as follows:

	Year Ended December 31,		
	2020	2019	2018
	(Dollars in millions)		
Balance at beginning of year	\$ 2.4	\$ 1.3	\$ 1.3
Provision for doubtful accounts	2.0	3.2	0.7
Charge-offs, net of recoveries	(1.3)	(2.1)	(0.7)
Balance at end of year	<u>\$ 3.1</u>	<u>\$ 2.4</u>	<u>\$ 1.3</u>

8. Property, Plant, and Equipment, Net

Property, plant, and equipment, net consist of the following:

	December 31,	
	2020	2019
	(Dollars in millions)	
Land	\$ 7.5	\$ 7.5
Software	306.3	265.0
Machinery and equipment	120.2	116.1
Buildings and improvements	48.9	59.2
Total property, plant, and equipment	482.9	447.8
Accumulated depreciation	(346.5)	(319.5)
Property, plant, and equipment, net	<u>\$ 136.4</u>	<u>\$ 128.3</u>

Depreciation expense related to property, plant, and equipment, net was \$48.0 million, \$40.9 million, and \$38.1 million for the years ended December 31, 2020, 2019, and 2018, respectively.

9. Goodwill and Intangible Assets

Goodwill

Goodwill and changes therein were as follows:

	(Dollars in millions)
Balance at December 31, 2018	\$ 1,927.4
Acquisitions	25.7
Translation	20.4
Balance at December 31, 2019	1,973.5
Acquisition	42.7
Translation	15.6
Balance at December 31, 2020	<u>\$ 2,031.8</u>
Tax-deductible goodwill at December 31, 2020	\$ 23.0

Please refer to Note 4, "Business Combinations," for further discussion of our RITEQ and Excelity acquisitions.

We perform an impairment assessment of our goodwill balances as of October 1 of each year. Goodwill impairment testing is performed at the reporting unit level, which is the operating segment level or one level below. We performed a qualitative assessment as of October 1, 2020 and concluded that it is not more likely than not that the fair value of our reporting unit is less than its carrying amount.

Intangible Assets

Other intangible assets, net consist of the following:

	December 31, 2020			Estimated Life Range (Years)
	Gross Carrying Amount	Accumulated Amortization	Net	
	(Dollars in millions)			
Customer lists and relationships	\$ 229.0	\$ (212.1)	\$ 16.9	5-15
Trade name	177.7	(2.5)	175.2	3-5 and Indefinite
Technology	159.5	(156.6)	2.9	3-4
Total other intangible assets	<u>\$ 566.2</u>	<u>\$ (371.2)</u>	<u>\$ 195.0</u>	

	December 31, 2019			Estimated Life Range (Years)
	Gross Carrying Amount	Accumulated Amortization	Net	
	(Dollars in millions)			
Customer lists and relationships	\$ 212.5	\$ (208.2)	\$ 4.3	5-15
Trade name	174.0	(2.1)	171.9	3 and Indefinite
Technology	156.1	(154.4)	1.7	3-4
Total other intangible assets	<u>\$ 542.6</u>	<u>\$ (364.7)</u>	<u>\$ 177.9</u>	

We perform an impairment assessment of our indefinite-lived intangible assets as of October 1 of each year. We performed a qualitative assessment as of October 1, 2020 and concluded that it is not more likely than not that the fair value of our trade name intangible assets with indefinite lives exceeded their respective carrying amounts. We continue to evaluate the use of our trade names and branding in our sales and marketing efforts. If there is a fundamental shift in the method of our branding in the future, we will assess the impact on the carrying amount of our trade name intangible assets to determine whether an impairment exists. If it is determined that an impairment has occurred, it would be recognized during the period in which the decision was made to make the fundamental shift.

Amortization expense related to definite-lived intangible assets was \$3.8 million, \$16.2 million, and \$18.5 million for the years ended December 31, 2020, 2019, and 2018, respectively. We estimate the future amortization of other intangible assets is as follows:

Years Ending December 31,	Amount
	(Dollars in millions)
2021	\$ 6.2
2022	5.8
2023	5.0
2024	4.3
2025	1.8

Long-Lived Assets by Geographic Area

Long-lived assets consist of right of use lease asset, property, plant and equipment, net, goodwill, and other intangible assets, net. Long-lived assets by country consist of the following:

	December 31,	
	2020	2019
	(Dollars in millions)	
United States	\$ 1,796.9	\$ 1,800.5
Canada	488.6	481.2
Other	105.6	30.0
Total long-lived assets	\$ 2,391.1	\$ 2,311.7

10. Debt

Overview

Our debt obligations consist of the following:

	December 31,	
	2020	2019
	(Dollars in millions)	
Term Debt, interest rate of 2.6% and 4.8%, respectively	\$ 664.7	\$ 671.5
Revolving Credit Facility (\$300.0 million available capacity less amounts reserved for letters of credit, which were \$0.4 million and \$1.9 million, respectively)	—	—
Canada Line of Credit (CDN \$7.0 million available capacity, which was fully utilized; USD \$5.4 million and USD \$5.4 million, respectively)	—	—
Financing lease liabilities (Please refer to Note 16)	8.8	12.4
Total debt	673.5	683.9
Less unamortized discount on Term Debt	1.2	1.4
Less unamortized debt issuance costs on Term Debt	4.5	5.4
Less current portion of long-term debt	7.2	10.8
Long-term debt, less current portion	\$ 660.6	\$ 666.3

Senior Secured Credit Facilities

Principal Amounts and Maturity Dates

On April 30, 2018, we completed the refinancing of our debt by entering into a new credit agreement. Pursuant to the new credit agreement, we became borrower of (i) a \$680.0 million term loan debt facility (the “Term Debt”) and (ii) a \$300.0 million revolving credit facility (the “Revolving Credit Facility”) (collectively, the “Senior Secured Credit Facility”). The obligations of Ceridian under the Senior Credit Facilities are secured by first priority security interests in substantially all of the assets of Ceridian and the domestic subsidiary guarantors, subject to permitted liens and certain exceptions.

In connection with the refinancing of our debt, we recognized a loss on debt extinguishment of \$7.1 million within interest expense, net on our consolidated statement of operations during the year ended December 31, 2018.

Interest

The effective interest rate on the Term Debt at December 31, 2020, and 2019, was 2.6% and 4.8%, respectively. The Term Debt was initially subject to an interest rate of LIBOR plus 3.25%. As a result of a ratings upgrade on March 26, 2019, of our Senior Secured Credit Facility by Moody’s Investor Service, from B3 to B2, the Company’s floating rate Term Debt interest rate was reduced from LIBOR plus 3.25% to LIBOR plus 3.00%, so long as the rating is maintained. On February 19, 2020, we completed the first amendment to the Senior Secured Credit Facility in which the interest rate was reduced from LIBOR plus 3.00% to LIBOR plus 2.5%. Further, the interest rate trigger under the applicable rating by Moody’s Investor Service was removed by the first amendment. Accrued interest related to the Senior Secured Credit Facility was \$0.1 million and \$0.1 million as of December 31, 2020, and 2019, respectively, and is included within Other accrued expenses in our consolidated balance sheets.

Financing Costs and Issuance Discounts

In connection with our debt refinancing, we capitalized \$3.6 million of additional financing costs and wrote off \$0.5 million of existing unamortized deferred financing costs, which was included in the loss on extinguishment of debt. The Term Debt had associated unamortized deferred financing costs of \$5.7 million and \$6.8 million at December 31, 2020, and 2019, respectively, which are being amortized at an effective interest rate of 5.3%.

Collateral and Guarantees

The Senior Secured Credit Facility names us as the sole borrower and is unconditionally guaranteed by our domestic, wholly-owned financially material restricted subsidiaries, subject to certain customary exceptions. The 2018 Senior Secured Credit Facility is secured by a perfected first priority security interest, subject to certain exceptions (including customer trust funds), in substantially all of our and the subsidiary guarantors' tangible and intangible assets. The security interest includes a pledge of the capital stock of certain of our direct and indirect material restricted subsidiaries.

Representations, Warranties and Covenants

The documents governing the Senior Secured Credit Facility contain certain customary representations and warranties. In addition, those documents contain customary covenants restricting our ability and certain of our subsidiaries' ability to, among other things: incur additional indebtedness, issue disqualified stock and preferred stock; create liens; declare dividends; redeem capital stock; make investments; engage in a materially different line of business; engage in certain mergers, consolidations, acquisitions, asset sales, or other fundamental changes; engage in certain transactions with affiliates; enter into certain restrictive agreements; make prepayments on any subordinated indebtedness; modify junior financing documentation; and make changes to our fiscal year.

The Senior Secured Credit Facility documents contain a requirement that we maintain a ratio of adjusted first lien debt to Credit Facility EBITDA below specified levels on a quarterly basis; however, such requirement is applicable only if more than 35% of the Revolving Credit Facility is drawn. On April 2, 2020, in light of the uncertainty and volatility in the global financial markets resulting from the COVID-19 pandemic, we 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. In December 2020, we repaid the amount drawn on the revolving credit facility and as of December 31, 2020, no portion of the Revolving Credit Facility was drawn.

Events of Default

Events of default under the 2018 Senior Secured Credit Facility documents include, but are not limited to: failure to pay interest, principal and fees, or other amounts when due; material breach of any representation or warranty; covenant defaults; cross defaults to other material indebtedness; events of bankruptcy, invalidity of security interests; a change of control; material judgments for payment of money; involuntary acceleration of any debt; and other customary events of default. There were no events of default as of December 31, 2020.

Senior Notes

General Description

On October 1, 2013, we issued the Senior Notes due in 2021 in the principal amount of \$475.0 million.

Using the net proceeds received from the IPO and concurrent private placement, we satisfied and discharged the indenture governing the Senior Notes on April 30, 2018, and the Senior Notes were redeemed on May 30, 2018. In connection with the redemption of the Senior Notes, we recognized a loss on extinguishment of debt of \$18.6 million within interest expense, net on our consolidated statement of operations during the year ended December 31, 2018.

Financing Costs and Issuance Discounts

On May 30, 2018, the redemption date, the Senior Notes had unamortized deferred financing costs of \$5.5 million, which were included in the loss on extinguishment of debt.

Other Information Relating to Indebtedness

Future Payments and Maturities of Debt

The future principal payments and maturities of our indebtedness, excluding financing lease obligations, are as follows:

<u>Years Ending December 31,</u>	<u>Amount</u>
	<u>(Dollars in millions)</u>
2021	\$ 6.8
2022	6.8
2023	6.8
2024	6.8
2025	637.5
	<u>\$ 664.7</u>

We may be required to make additional payments on the Term Debt from various sources, including proceeds of certain indebtedness which may be incurred from time to time, certain asset sales, and a certain percentage of cash flow. There is an excess cash flow calculation associated with the Term Debt, and based on this calculation, we are not required to make a prepayment on the 2018 Term Debt in 2021.

Fair Value of Debt

Our debt does not trade in active markets. Based on the borrowing rates currently available to us for bank loans with similar terms and average maturities and the limited trades of our debt, the fair value of our indebtedness was estimated to be \$657.6 million and \$675.1 million as of December 31, 2020, and 2019, respectively.

Other Debt Financing

Ceridian Canada had available a committed bank credit facility that provides up to CDN \$7.0 million, for issuance of letters of credit as of December 31, 2020 and 2019. The credit facility is a discretionary line at the option of the bank. The amount of letters of credit outstanding under this facility were CDN \$7.0 million (USD \$5.4 million) and CDN \$7.0 million (USD \$5.4 million) at December 31, 2020, and 2019, respectively.

11. Employee Benefit Plans

Ceridian maintains numerous benefit plans for current and former employees. As of December 31, 2020, our current active benefit plans include defined contribution plans for substantially all employees. The majority of our defined benefit plans have been frozen.

Defined Contribution Plans

Ceridian maintains defined contribution plans that provide retirement benefits to substantially all of our employees. Contributions are based upon the contractual obligations of each respective plan. We recognized expense of \$11.1 million, \$9.8 million, and \$8.4 million for the years ended December 31, 2020, 2019, and 2018, respectively, related to employer contributions to these plans.

Defined Benefit Plans

Ceridian maintains defined benefit pension plans covering certain of our current and former U.S. employees (the U.S. pension plan and nonqualified defined benefit plan, collectively referred to as our “defined benefit plans”), as well as other postretirement benefit plans for certain U.S. retired employees that include health care and life insurance benefits.

Pension Benefits

The largest defined benefit pension plan (the “U.S. pension plan”) is a defined benefit plan for certain current and former U.S. employees that closed to new participants on January 2, 1995. In 2007, the U.S. pension plan was amended (1) to exclude from further participation any participant or former participant who was not employed by Ceridian or another participating employer on January 1, 2008, (2) to discontinue participant contributions, and (3) to freeze the accrual of additional benefits as of December 31, 2007. The measurement date for pension benefit plans is December 31.

Assets of the U.S. pension plan are held in an irrevocable trust and do not include any Ceridian securities. Benefits under this plan are generally calculated on final or career average earnings and years of participation in the plan. Most participating employees were required to permit salary reduction contributions to the plan on their behalf by the employer as a condition of active participation. Retirees and other former employees are inactive participants in this plan and constitute approximately 99% of the plan participants. This plan is funded in accordance with funding requirements under the Employee Retirement Income Security Act of 1974, based on determinations of a third-party consulting actuary. Investment of the U.S. pension plan assets in Ceridian securities is prohibited by the investment policy. In 2020, we contributed \$105.0 million to the U.S. defined benefit plan, which represented \$17.0 million of required minimum contributions and \$88.0 million of voluntary contributions.

Ceridian also sponsors a nonqualified supplemental defined benefit plan (the “nonqualified defined benefit plan”), which is unfunded and provides benefits to selected U.S. employees in addition to the U.S. defined benefit plan. We made contributions to the nonqualified defined benefit plan amounting to \$1.9 million in 2020 and expect to make contributions of \$1.6 million during 2021.

We account for our defined benefit plans using actuarial models. These models use an attribution approach that generally spreads the effect of individual events over the estimated life expectancy of the employees in such plans. These events include plan amendments and changes in actuarial assumptions such as the expected long-term rate of return on plan assets, discount rate related to the benefit obligation, and mortality rates.

One of the principal components of the net periodic pension calculation is the expected long-term rate of return on plan assets. The required use of expected long-term rate of return on plan assets may result in recognized pension income that is greater or less than the actual returns of those plan assets in any given year. Over time, however, the expected long-term returns are designed to approximate the actual long-term returns that contribute to the settlement of the liability. Differences between actual and expected returns are recognized in the net periodic pension calculation over three years. We use long-term historical actual return information, the mix of investments that comprise plan assets, and future estimates of long-term investment returns by reference to external sources to develop our expected return on plan assets.

The discount rate assumption is used to determine the benefit obligation and the interest portion of the net periodic pension cost (credit) for the following year. We utilize a full yield curve approach for our discount rate assumption by applying the specific spot rates along the yield curve used in the determination of the benefit obligation to the relevant projected cash flows. As of December 31, 2020, a 25 basis point decrease in the discount rate would result in a \$0.3 million decrease to expense for all pension plans.

At December 31, 2020, we updated our mortality assumptions utilizing a new improvement scale issued by the Society of Actuaries in October 2020, which resulted in a \$6.0 million reduction in the projected benefit obligation. At December 31, 2019, we updated our mortality assumptions utilizing an improvement scale issued by the Society of Actuaries in October 2019, which resulted in a \$8.5 million reduction in the projected benefit obligation.

The funded status of defined benefit plans represents the difference between the projected benefit obligation (“PBO”) and the plan assets at fair value. The fair value of plan assets exceeded the PBO of defined benefit plans by \$3.5 million at December 31, 2020; whereas the PBO exceeded the fair value of plan assets by \$121.6 million at December 31, 2019. We are required to record the funded status as an asset or liability in our consolidated balance sheets and recognize the change in the funded status in comprehensive income, net of deferred income taxes.

The projected future payments to participants from defined benefit plans are as follows:

Years Ending December 31,	Amount (Dollars in millions)
2021	\$ 46.4
2022	44.4
2023	42.8
2024	41.2
2025	39.0
Next five years	\$ 166.9

The accompanying tables reflect the combined funded status and net periodic pension cost and combined supporting assumptions for the defined benefit elements of our defined benefit plans.

	Year Ended December 31,	
	2020	2019
	(Dollars in millions)	
Funded Status of Defined Benefit Retirement Plans at Measurement Date		
Change in Projected Benefit Obligation During the Year:		
Projected benefit obligation at beginning of year	\$ 547.2	\$ 527.4
Service cost	—	—
Interest cost	12.7	18.2
Actuarial loss	42.4	49.4
Benefits paid and plan expenses	(47.1)	(47.8)
Projected benefit obligation at end of year	\$ 555.2	\$ 547.2
Change in Fair Value of Plan Assets During the Year:		
Plan assets at fair value at beginning of year	425.6	381.6
Actual return on plan assets	73.3	72.0
Employer contributions	106.9	19.8
Benefits paid and plan expenses	(47.1)	(47.8)
Plan assets at fair value at end of year	558.7	425.6
Funded status of plans	\$ 3.5	\$ (121.6)

	December 31,	
	2020	2019
	(Dollars in millions)	
Amounts recognized in Consolidated Balance Sheets		
Noncurrent asset	\$ 15.8	\$ —
Current liability	1.5	18.7
Noncurrent liability	10.8	102.9
Amounts recognized in Accumulated Other Comprehensive Loss		
Accumulated other comprehensive loss, net of tax of \$51.4 million and \$57.8 million, respectively (a)	\$ 163.3	\$ 180.6

- (a) A cumulative effect adjustment of \$30.8 million related to the adoption of ASC 2018-02 was recorded within accumulated other comprehensive loss, net of tax during the year ended December 31, 2019.

A significant component of the overall increase in the Company's benefit obligation for the year ended December 31, 2020 was primarily due to the change in discount rates, which decreased from 2.81% at December 31, 2019 to 1.87% at December 31, 2020.

The other comprehensive (income) loss related to pension benefit plans was as follows:

	Year Ended December 31,		
	2020	2019	2018
	(Dollars in millions)		
Net actuarial (gain) loss	\$ (8.0)	\$ 1.0	\$ 21.4
Amortization of net actuarial loss	(15.7)	(12.7)	(14.2)
Tax expense	6.4	2.9	—
Other comprehensive loss (income), net of tax	<u>\$ (17.3)</u>	<u>\$ (8.8)</u>	<u>\$ 7.2</u>

	Year Ended December 31,		
	2020	2019	2018
Assumptions Used in Calculations			
Discount rate used to determine net benefit cost	2.81%	3.92%	3.25%
Expected return on plan assets	5.70%	6.00%	6.30%
Discount rate used to determine benefit obligations	1.87%	2.81%	3.92%

	Year Ended December 31,		
	2020	2019	2018
Net Periodic Pension Cost			
Interest cost	\$ 12.7	\$ 18.2	\$ 16.3
Actuarial loss amortization	15.7	12.7	14.2
Less: Expected return on plan assets	(22.9)	(23.6)	(25.8)
Net periodic pension cost	<u>\$ 5.5</u>	<u>\$ 7.3</u>	<u>\$ 4.7</u>

The accumulated benefit obligation of defined benefit plans was \$555.2 million and \$547.2 million as of December 31, 2020, and 2019, respectively.

Our overall investment strategy for the U.S. pension plan is to achieve a mix of approximately 83% for liability hedging purposes, 15% of investments for long term growth, and 2% for near-term benefit payments. Target asset allocations are based upon actuarial and capital market studies performed by experienced outside consultants. The target allocations for the long term growth assets are 62% public equity, 25% fixed income, and 13% alternative investments. Specifically, the target allocation is managed through investments in fixed income securities, equity funds, collective investment funds, partnerships and other investment types. The underlying equity securities include exposure to large/mid-cap companies and small-cap companies. Fixed income securities include corporate debt, mortgage-backed securities, U.S. Treasury and U.S. agency debt, emerging market debt, and high yield debt securities. The alternative investment strategy is allocated to investments in hedge funds. The liability hedging portfolio fair value is intended to move in a direction that partially offsets the increase or decrease in the liabilities resulting from changes in interest rates. To achieve this objective, the portfolio will invest in corporate debt securities, U.S. Treasury strips and various interest rate derivatives contracts. We hire outside managers to manage all assets of the U.S. defined benefit plan.

In determining the fair values of the defined benefit plan's assets, we calculate the fair value of certain investments using net asset value ("NAV") per share. Collective investment funds are valued at the NAV, which is based on the readily determinable fair value of the underlying securities owned by the fund. The NAV unit price is quoted on a private market or one that is not active. Partnerships consist primarily of a bond fund partnership valued at the NAV as reported by the fund manager and an investment in a venture capital fund valued by an independent appraisal. The NAV represents the value at which the defined benefit plan initiates a transaction. These investments do not have any significant unfunded commitments, conditions or restrictions on redemption, or any other significant restriction on their sale. The hedge fund of funds investment has a quarterly redemption restriction with a 65 day notice period.

The fair values of our defined benefit plan's assets by asset category were as follows:

	December 31, 2020			
	Level 1	Level 2	Level 3	Total
	(Dollars in millions)			
Investments, at fair value:				
Short-term investments	\$ 83.5	\$ —	\$ —	\$ 83.5
Government securities	—	46.7	—	46.7
Corporate debt securities	—	322.4	—	322.4
Collective investment funds	—	106.1	—	106.1
Total investments, at fair value	<u>\$ 83.5</u>	<u>\$ 475.2</u>	<u>\$ —</u>	<u>\$ 558.7</u>

	December 31, 2019			
	Level 1	Level 2	Level 3	Total
	(Dollars in millions)			
Investments, at fair value:				
Short-term investments	\$ 17.5	\$ —	\$ —	\$ 17.5
Government securities	—	137.2	—	137.2
Corporate debt securities	—	19.7	—	19.7
Collective investment funds	—	251.2	—	251.2
Total investments, at fair value	<u>\$ 17.5</u>	<u>\$ 408.1</u>	<u>\$ —</u>	<u>\$ 425.6</u>

Postretirement Benefits

Ceridian provides health care and life insurance benefits for eligible retired employees, including individuals who retired from operations we subsequently sold or discontinued. Ceridian sponsors several health care plans in the United States for both pre- and post-age 65 retirees. The contributions to these plans differ for various groups of retirees and future retirees. Most retirees outside of the United States are covered by governmental health care programs, and our cost is not significant. The measurement date for postretirement benefit plans is December 31.

The discount rate assumption is used to determine the benefit obligation and the interest portion of the net periodic postretirement cost (credit) for the following year. We utilize a full yield curve approach for our discount rate assumption by applying the specific spot rates along the yield curve used in the determination of the benefit obligation to the relevant projected cash flows. As of December 31, 2020, a 25 basis point decrease in the discount rate would result in an immaterial impact on expense for the postretirement plan.

The accompanying tables present the amounts and changes in the aggregate benefit obligation and the components of net periodic postretirement benefit cost for U.S. plans. We fund these costs as they become due.

	Year Ended December 31,	
	2020	2019
(Dollars in millions)		
Funded Status of Postretirement Health Care and Life Insurance Plans		
Change in Benefit Obligation:		
At beginning of year	\$ 15.4	\$ 16.8
Interest cost	0.3	0.5
Participant contributions	0.3	0.4
Actuarial gain	—	(0.7)
Benefits paid	(1.9)	(1.6)
At end of year	\$ 14.1	\$ 15.4
Change in Plan Assets:		
At beginning of year	\$ —	\$ —
Company contributions	1.6	1.2
Participant contributions	0.3	0.4
Benefits paid	(1.9)	(1.6)
At end of year	—	—
Funded Status	\$ (14.1)	\$ (15.4)

	December 31,	
	2020	2019
(Dollars in millions)		
Amounts recognized in Consolidated Balance Sheets		
Current liability	\$ 1.9	\$ 2.1
Noncurrent liability	12.2	13.3
Amounts recognized in Accumulated Other Comprehensive Loss		
Accumulated other comprehensive income, net of tax of \$(5.4) million and \$(6.1) million, respectively (a)	\$ (8.6)	\$ (10.4)

- (a) A cumulative effect adjustment of \$3.3 million related to the adoption of ASU 2018-02 was recorded within accumulated other comprehensive income, net of tax during the year ended December 31, 2019.

The other comprehensive (income) loss related to postretirement benefits was as follows:

	Year Ended December 31,		
	2020	2019	2018
(Dollars in millions)			
Net actuarial gain	\$ —	\$ (0.7)	\$ (2.1)
Amortization of net actuarial gain	2.5	2.6	2.5
Tax benefit	(0.7)	(0.5)	—
Other comprehensive loss, net of tax	\$ 1.8	\$ 1.4	\$ 0.4

	Year Ended December 31,		
	2020	2019	2018
	(Dollars in millions)		
Net Periodic Postretirement Benefit			
Interest cost	\$ 0.3	\$ 0.5	\$ 0.5
Actuarial gain amortization	(2.2)	(2.3)	(2.2)
Prior service credit amortization	(0.3)	(0.3)	(0.3)
Net periodic postretirement benefit gain	<u>\$ (2.2)</u>	<u>\$ (2.1)</u>	<u>\$ (2.0)</u>

The assumed health care cost trend rate represents the rate at which health care costs are assumed to increase. The assumed health care cost trend rate used in measuring the benefit obligation in 2020 is 6.4% for pre-age 65 retirees and 7.1% for post-age 65 retirees. These rates are assumed to decrease gradually to the ultimate health care cost trend rate of 4.5% in 2028 for both groups.

	Year Ended December 31,		
	2020	2019	2018
Assumptions Used in Calculations			
Weighted average discount rate used to determine net periodic postretirement cost (credit)	2.52%	3.70%	3.01%
Weighted average discount rate used to determine benefit obligation at measurement date	1.42%	2.52%	3.70%

The projected future postretirement benefit payments and future receipts from the federal subsidy for each of the next five years and the five-year period following are as follows:

Years Ending December 31,	Payments		Receipts	
	(Dollars in millions)			
2021	\$	2.0	\$	—
2022		1.7		—
2023		1.5		—
2024		1.4		—
2025		1.3		—
Next five years	\$	4.4	\$	0.1

12. Share-Based Compensation

Our share-based compensation consists of performance-based stock options, term-based stock options, restricted stock units (“RSUs”), and performance-based stock units (“PSUs”). We also offer an employee stock purchase plan.

Prior to November 1, 2013, Ceridian employees participated in a share-based compensation plan of the former ultimate parent of Ceridian, the 2007 Stock Incentive Plan (“2007 SIP”). Effective November 1, 2013, although most participants who held stock options under the 2007 SIP converted their options to a newly created option plan, the 2013 Ceridian HCM Holding Inc. Stock Incentive Plan, as amended (“2013 SIP”), a small number of participants maintained their stock options in the 2007 SIP. Concurrent with the IPO and legal reorganization, all outstanding stock options under the 2007 SIP were converted into options to purchase common stock of Ceridian. As of December 31, 2020, there were 2,500 stock options outstanding under the 2007 SIP.

Stock options awarded under the 2013 SIP vest either annually on a pro rata basis over a four- or five-year period or on a specific date if certain performance criteria are satisfied and certain equity values are attained. In addition, upon termination of service, all vested options must be exercised generally within 90 days after termination, or these awards will be forfeited. The stock option awards have a 10-year contractual term and have an exercise price that is not less than the fair market value of the underlying stock on the date of grant. As of December 31, 2020, there were 2,219,243 stock options and RSUs outstanding under the 2013 SIP. We do not intend to grant any additional awards under the 2007 SIP or the 2013 SIP.

As part of the 2013 SIP, the Board of Directors approved a stock appreciation rights program that authorized the issuance of up to 600,000 stock appreciation rights. The performance criteria for all stock appreciation rights was met on April 30, 2018, resulting in the vesting and cash settlement of all outstanding stock appreciation rights. We recognized \$1.5 million of share-based compensation expense related to the vesting of these stock appreciation rights during the year ended December 31, 2018. As of December 31, 2020 and 2019, there were no remaining outstanding stock appreciation rights.

On April 24, 2018, in connection with the IPO, the Board of Directors approved the Ceridian HCM Holding Inc. 2018 Equity Incentive Plan (“2018 EIP”), which authorized the issuance of up to 13,500,000 shares of common stock to eligible participants through equity awards (the “Share Reserve”). The Share Reserve may be increased on March 31 of each of the first ten calendar years during the term of the 2018 EIP, by the lesser of (i) three percent of the number of shares of our common stock outstanding on each January 31 immediately prior to the date of increase or (ii) such number of shares of our common stock determined by the Board of Directors. As of March 31, 2020, the Share Reserve was increased by 4,199,089 shares, pursuant to the terms of the 2018 EIP.

Equity awards under the 2018 EIP vest either annually or quarterly on a pro rata basis, generally over a one-, three-, or four-year period. In addition, upon termination of service, all vested awards must be exercised within 90 days after termination, or these awards will be forfeited. The equity awards have a 10-year contractual term and awards with an exercise price have such that is not less than the fair market value of the underlying stock on the date of the grant. As of December 31, 2020, there were 12,130,215 stock options, RSUs, and PSUs outstanding and 9,765,067 shares available for future grants of equity awards under the 2018 EIP.

Share-based compensation expense was \$65.8 million, \$36.5 million, and \$24.7 million for the years ended December 31, 2020, 2019, and 2018, respectively.

Performance-Based Stock Options

Performance-based option activity under the 2007 SIP, the 2013 SIP, and the 2018 EIP was as follows:

	Shares	Weighted Average Exercise Price (per share)	Weighted Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value (in millions)
Performance-based options outstanding at December 31, 2017	1,038,147	\$ 13.46	3.5	\$ —
Granted	—	—	—	—
Exercised	(663,412)	(13.46)	—	—
Forfeited or expired	(8,358)	(13.46)	—	—
Performance-based options outstanding at December 31, 2018	366,377	\$ 13.50	3.1	\$ 7.7
Granted	—	—	—	—
Exercised	(298,096)	(13.48)	—	—
Forfeited or expired	—	—	—	—
Performance-based options outstanding at December 31, 2019	68,281	\$ 13.58	2.6	\$ 3.7
Granted	1,818,728	65.27	—	—
Exercised	(42,730)	(13.46)	—	—
Forfeited or expired	—	—	—	—
Performance-based options outstanding at December 31, 2020	1,844,279	\$ 64.55	9.2	\$ 77.5
Performance-based options exercisable at December 31, 2020	25,551	\$ 13.78	1.7	\$ 2.4

The performance criteria for all outstanding performance-based stock options granted prior to 2018 was met on June 7, 2018, resulting in vesting on this date. We recognized \$4.8 million of share-based compensation expense related to the vesting of these performance-based stock options during the year ended December 31, 2018.

In 2020, 1,500,000 performance-based stock options (“the Performance Option Award”) were granted under the 2018 EIP with an exercise price of \$65.26. The vesting conditions for the Performance Option Award are based on the Company’s performance on the New York Stock Exchange (“NYSE”) with 750,000 shares available to vest when the Company’s per share closing price on the NYSE meets or exceeds \$110.94, or 1.7 times the exercise price, for ten consecutive trading days, and the remaining 750,000 shares are available to vest when the Company’s per share closing price on the NYSE meets or exceeds \$130.52, or 2.0 times the exercise price, for ten consecutive trading days. The Performance Option Award has a minimum time-based vesting period of 3 years. The vesting conditions must be achieved prior to May 8, 2025, or any unvested portion of the Performance Option Award will terminate. A Monte Carlo simulation model was used to determine the fair value of these performance-based stock options. The Monte Carlo model utilizes multiple input variables that determine the probability of satisfying the market conditions stipulated in the award. We have estimated an expected term of 5.3 years, based on the vesting period and contractual term.

The remaining performance-based stock options granted during the twelve months ended December 31, 2020, under the 2018 EIP primarily include vesting conditions based on migrations of customers to Dayforce. There are two tranches of stock options, in which the vesting conditions must be met either prior to September 13, 2021, or September 13, 2022.

As of December 31, 2020, there was \$24.3 million of share-based compensation expense related to unvested performance-based stock option awards not yet recognized, which is expected to be recognized over a weighted average period of 3.2 years.

Term-Based Stock Options

Term-based stock option activity under the 2007 SIP, the 2013 SIP, and the 2018 EIP, was as follows:

	Shares	Weighted Average Exercise Price (per share)	Weighted Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value (in millions)
Term-based options outstanding at December 31, 2017	10,994,181	\$ 16.52	6.9	\$ 48.8
Granted	5,236,037	23.07	—	—
Exercised	(2,501,983)	(15.26)	—	—
Forfeited or expired	(178,466)	(17.30)	—	—
Term-based options outstanding at December 31, 2018	13,549,769	\$ 19.28	7.5	\$ 206.8
Granted	4,297,472	49.74	—	—
Exercised	(4,358,867)	(17.37)	—	—
Forfeited or expired	(343,437)	(24.14)	—	—
Term-based options outstanding at December 31, 2019	13,144,937	\$ 29.74	7.8	\$ 501.3
Granted	2,282,334	66.06	—	—
Exercised	(3,889,096)	(20.42)	—	—
Forfeited or expired	(555,101)	(32.09)	—	—
Term-based options outstanding at December 31, 2020	10,983,074	\$ 40.47	7.8	\$ 725.9
Term-based options exercisable at December 31, 2020	3,085,305	\$ 28.50	6.8	\$ 240.9

Other information pertaining to term-based options was as follows:

	Year Ended December 31,		
	2020	2019	2018
Weighted average grant date fair value per share	\$ 21.15	\$ 16.12	\$ 7.80

The fair value of the term-based stock options was estimated at the date of grant using the Black-Scholes option pricing model with the following weighted-average assumptions:

	Year Ended December 31,		
	2020	2019	2018
Expected volatility	29.8%	24.9%	25.0%
Expected dividend rate	—	—	—
Risk-free interest rate	0.6%	2.5%	2.9%

For stock options granted under the 2013 SIP and 2018 EIP, we estimated an expected term of 7.0 years, based on the vesting period and contractual life. As of December 31, 2020, there was \$85.4 million of share-based compensation expense related to unvested term-based awards not yet recognized, which is expected to be recognized over a weighted average period of 1.7 years. As of December 31, 2020, there were 3,085,305 vested term-based stock options.

Restricted Stock Units

RSU activity under the 2013 SIP and the 2018 EIP, was as follows:

	Shares
RSUs outstanding at December 31, 2017	605,990
Granted	164,073
Shares issued upon vesting of RSUs	(105,990)
Forfeited or canceled	—
RSUs outstanding at December 31, 2018	664,073
Granted	193,033
Shares issued upon vesting of RSUs	(17,288)
Forfeited or canceled	(20,000)
RSUs outstanding at December 31, 2019	819,818
Granted	685,997
Shares issued upon vesting of RSUs	(73,475)
Forfeited or canceled	(42,955)
RSUs outstanding at December 31, 2020	1,389,385
RSUs releasable at December 31, 2020	423,479

Other information pertaining to RSUs was as follows:

	Year Ended December 31,		
	2020	2019	2018
Weighted average grant date fair value per share	\$ 69.57	\$ 50.00	\$ 35.55

During the year ended December 31, 2020, 226,616 RSUs vested, of which 73,475 shares of common stock were issued. As of December 31, 2020, there were 423,479 RSUs vested and releasable. RSUs generally vest annually over a one-, three-, or four-year period. As of December 31, 2020, there was \$44.2 million of share-based compensation expense related to unvested RSUs not yet recognized, which is expected to be recognized over a weighted average period of 1.5 years.

Performance Stock Units

In 2020, 145,017 PSUs were granted under the 2018 EIP and 9,797 PSUs were forfeited and cancelled. The vesting conditions for the PSUs were based on the Company's performance against Cloud revenue and adjusted EBITDA margin goals under Ceridian HCM Holding Inc. 2020 Management Incentive Plan (the "2020 MIP") for the incentive period of January 1, 2020 through December 31, 2020. The vesting conditions for the PSUs were not met for the incentive period and as a result, the PSUs did not vest and no share-based compensation expense was recognized for these awards during the year ended December 31, 2020.

Global Employee Stock Purchase Plan

On November 9, 2018, the Compensation Committee of the Board of Directors approved the Ceridian HCM Holding Inc. Global Employee Stock Purchase Plan (the “GESPP”), which authorizes the issuance of up to 2,500,000 shares of common stock to eligible participants through purchases via payroll deductions. The purchase price is the lower of (i) 85% of the fair market value of a share of common stock on the offering date (the first trading day of the offering period commencing on January 1 and concluding on December 31) or (ii) 85% of the fair market value of a share of common stock on the purchase date. The GESPP shall continue for ten years, unless terminated sooner as provided under the GESPP. In 2020, quarterly purchase periods commenced on January 1, April 1, July 1, and October 1. Shares were purchased on the last trading day of the respective purchase periods. During 2020, shares were purchased on March 31, June 30, September 30, and December 31.

Our GESPP activity was as follows:

	Year Ended December 31,	
	2020	2019
Shares issued	182,899	261,895
Purchase price (per share)	\$ 54.90	\$ 28.70

The fair value of the stock purchase rights granted under the GESPP was estimated using the following weighted-average assumptions:

	Year Ended December 31, 2020	Year Ended December 31, 2019
Expected volatility	46.4%	34.8%
Expected dividend rate	—	—
Risk-free interest rate	1.1%	2.2%
Expected term (in years)	0.3	0.4
Grant date fair value per share	\$ 17.11	\$ 9.32

13. Revenue

Our Solutions

We categorize our solutions into two categories: Cloud and Bureau offerings.

- Cloud revenue is generated from solutions that are delivered via two cloud offerings, Dayforce and Powerpay. The Dayforce offering is a single application with continuous calculation that offers a comprehensive range of functionality, including global HR, payroll, benefits, workforce management, and talent management on web and native iOS and Android platforms. Dayforce recurring revenue is primarily generated from monthly recurring fees charged on a per-employee, per-month (“PEPM”) basis and the allocation of investment income generated from holding Dayforce customer funds in trust before funds are remitted to taxing authorities, Dayforce customer employees, or other third parties. Dayforce professional services and other revenue is primarily generated from implementation and post go-live professional services revenue. Other sources of Dayforce revenues include revenue from the sale, rental and maintenance of time clocks; revenue from the sale of third-party services; and billable travel expenses for Dayforce customers. The Powerpay offering is our solution designed primarily for small market Canadian customers, which typically have fewer than 20 employees. Powerpay recurring revenue is primarily generated from recurring fees charged on a per-employee, per-process basis and the allocation of investment income generated from holding Powerpay customer funds in trust before funds are remitted to taxing authorities, Powerpay customer employees, or other third parties. Typical processes include the customer’s payroll runs, year-end tax packages, and delivery of customers’ remittance advices or checks. Powerpay professional services revenue is primarily generated from the setup of the Powerpay customer on their platform.

- Bureau revenue is generated primarily from solutions delivered via a service-bureau model. These solutions are delivered via three primary service lines: payroll, payroll-related tax filing services, and outsourced human resource solutions. Revenue from payroll services is generated from recurring fees charged on a per-process basis. Typical processes include the customer's payroll runs, year-end tax packages, and delivery of customers' remittance advices or checks. In addition to customers who use our payroll services, certain customers use our tax filing services on a stand-alone basis. Our outsourced human resource solutions are tailored to meet the needs of individual customers, and entail our contracting to perform many of the duties of a customer's human resources department, including payroll processing, time and labor management, performance management, and recruiting. We also perform individual services for customers, such as check printing, wage attachment and disbursement, and Affordable Care Act ("ACA") management. Additional items included in Bureau revenue are fees for custom professional services to Bureau customers; the allocation of investment income generated from holding Bureau customer funds in trust before funds are remitted to taxing authorities, Bureau customer employees, or other third parties; consulting services related to Bureau offerings; revenue from the sale of third party services to Bureau customers; and Excelity revenue.

Customer Information

No single customer accounts for 1% or more of our consolidated revenue for any of the periods presented.

Disaggregation of Revenue

Revenue by solution and category was as follows:

	Year Ended December 31,		
	2020	2019	2018
(Dollars in millions)			
Revenue:			
Cloud			
Dayforce			
Recurring services	\$ 500.2	\$ 429.0	\$ 325.7
Professional services and other	148.6	140.7	111.8
Total Dayforce revenue	648.8	569.7	437.5
Powerpay			
Recurring services	79.5	89.0	90.0
Professional services and other	1.1	1.3	1.3
Total Powerpay revenue	80.6	90.3	91.3
Total Cloud revenue	729.4	660.0	528.8
Bureau			
Recurring services	110.5	162.1	209.3
Professional services and other	2.6	2.0	2.6
Total Bureau revenue	113.1	164.1	211.9
Total revenue	\$ 842.5	\$ 824.1	\$ 740.7

Recurring services revenue includes float revenue of \$52.3 million, \$80.2 million, and \$67.0 million for the year ended December 31, 2020, 2019, and 2018, respectively.

Revenue by Geographic Area

The country in which the revenue is recorded is determined by the legal entity with which the customer has contracted. Revenue by country was as follows:

	Year Ended December 31,		
	2020	2019	2018
	(Dollars in millions)		
United States	\$ 579.3	\$ 578.1	\$ 513.8
Canada	223.5	237.0	224.0
Other	39.7	9.0	2.9
Total revenue	\$ 842.5	\$ 824.1	\$ 740.7

Contract Balances

The Company records a contract asset when revenue recognized for professional services performance obligations exceed the contractual amount of billings for implementation related professional services. Contract assets were \$55.2 million and \$43.2 million as of December 31, 2020, and 2019, respectively. Contract assets expected to be recognized in revenue within twelve months are included within Prepaid expenses and other current assets, with the remaining contract assets included within Other assets on our consolidated balance sheets.

Deferred Revenue

Deferred revenue primarily consists of payments received in advance of revenue recognition. The changes in deferred revenue were as follows:

	December 31,	
	2020	2019
	(Dollars in millions)	
Deferred revenue, beginning of period	\$ 25.5	\$ 23.2
New and acquired billings	432.6	365.5
Revenue recognized	(433.9)	(363.5)
Effect of exchange rate	0.2	0.3
Deferred revenue, end of period	\$ 24.4	\$ 25.5

Transaction Price for Remaining Performance Obligations

In accordance with ASC Topic 606, the following represents the aggregate amount of transaction price allocated to the remaining performance obligations that are unsatisfied as of the end of the reporting period. As of December 31, 2020, approximately \$917.1 million of revenue is expected to be recognized over the next three years from 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. In accordance with the practical expedient provided in ASC Topic 606, performance obligations that are billed and recognized as they are delivered, primarily professional services contracts that are on a time and materials basis, are excluded from the transaction price for remaining performance obligations disclosed above.

14. Accumulated Other Comprehensive Income (Loss)

The components of accumulated other comprehensive income (loss) were as follows:

	Foreign Currency Translation Adjustment	Unrealized Gain (Loss) from Invested Customer Trust Funds	Pension Liability Adjustment	Total
	(Dollars in millions)			
Balance as of December 31, 2018	\$ (207.5)	\$ (18.3)	\$ (150.1)	\$ (375.9)
Other comprehensive loss before income taxes and reclassifications	29.1	37.7	(0.3)	66.5
Income tax benefit	—	(9.6)	(2.4)	(12.0)
Reclassifications to earnings	—	—	10.1	10.1
Other comprehensive income	29.1	28.1	7.4	64.6
Cumulative-effect adjustment related to the adoption of ASU 2018-02	—	0.4	(27.5)	(27.1)
Balance as of December 31, 2019	(178.4)	10.2	(170.2)	(338.4)
Other comprehensive loss before income taxes and reclassifications	18.7	38.4	8.0	65.1
Income tax benefit	—	(10.2)	(5.7)	(15.9)
Reclassifications to earnings	—	—	13.2	13.2
Other comprehensive income	18.7	28.2	15.5	62.4
Balance as of December 31, 2020	<u>\$ (159.7)</u>	<u>\$ 38.4</u>	<u>\$ (154.7)</u>	<u>\$ (276.0)</u>

15. Income Taxes

	Year Ended December 31,		
	2020	2019	2018
	(Dollars in millions)		
Components of Earnings and Taxes from Operations			
Income (Loss) Before Income Taxes:			
U.S.	\$ 41.5	\$ 25.9	\$ (71.4)
International	(61.6)	8.4	44.5
Total	<u>\$ (20.0)</u>	<u>\$ 34.3</u>	<u>\$ (26.9)</u>
Income Tax Expense (Benefit):			
Current:			
U.S.	\$ (6.5)	\$ 7.1	\$ 3.8
State and local	0.1	0.4	0.3
International	(2.6)	17.5	20.4
Total current income tax expense	(9.0)	25.0	24.5
Deferred:			
U.S.	(1.1)	(42.6)	(14.1)
State and local	0.1	(19.3)	(2.2)
International	(6.0)	(7.5)	0.2
Total deferred income tax benefit	(7.0)	(69.4)	(16.1)
Total income tax (benefit) expense	<u>\$ (16.0)</u>	<u>\$ (44.4)</u>	<u>\$ 8.4</u>

	Year Ended December 31,		
	2020	2019	2018
Effective Rate Reconciliation			
U.S. statutory rate%	21.0%	21.0%	(21.0)%
Change in valuation allowance	(0.3)	(176.1)	10.8
State income taxes, net of federal benefit	2.2	3.9	(31.2)
Share-based compensation	3.9	(5.8)	(10.0)
International tax rate differential	8.9	3.8	13.4
Foreign dividend income	—	—	20.1
Foreign capital gain income	(7.5)	3.2	7.1
Unremitted foreign earnings	14.5	(2.0)	4.1
Global intangible low-taxed income	—	—	23.0
Base erosion tax	33.9	19.9	14.1
Reserve for tax contingencies	1.2	(0.3)	0.4
Change in tax rate	—	(1.0)	(5.9)
Other	2.2	4.0	6.3
Income tax provision%	<u>80.0%</u>	<u>(129.4)%</u>	<u>31.2%</u>

Our income tax provision represents federal, state, and international taxes on our income recognized for financial statement purposes and includes the effects of temporary differences between financial statement income and income recognized for tax return purposes. Deferred tax assets and liabilities are recorded for temporary differences between the financial reporting basis and the tax basis of assets and liabilities. We record a valuation allowance to reduce our deferred tax assets to reflect the net deferred tax assets that we believe will be realized. In assessing the likelihood that we will be able to recover our deferred tax assets and the need for a valuation allowance, we consider all available evidence, both positive and negative, including historical levels of pre-tax book income, expiration of net operating losses, changes in our debt and equity structure, expectations and risks associated with estimates of future taxable income, ongoing prudent and feasible tax planning strategies, as well as current tax laws. As of December 31, 2020, we continue to record a valuation allowance of \$16.3 million against certain deferred tax assets primarily attributable to state net operating loss carryovers.

	December 31,	
	2020	2019
(Dollars in millions)		
Tax Effect of Items That Comprise a Significant Portion of the Net Deferred Tax Asset and Deferred Tax Liability		
Deferred Tax Asset:		
Employment related accruals	\$ 9.8	\$ 41.6
Other	7.5	—
Foreign tax credit carryover and other credit carryovers	0.2	0.3
Net operating loss carryforwards	125.9	82.7
Total gross deferred tax asset	143.4	124.6
Valuation allowance	(16.3)	(15.1)
Total deferred tax asset	<u>\$ 127.1</u>	<u>\$ 109.5</u>
Deferred Tax Liability:		
Intangibles	\$ (61.7)	\$ (57.3)
Other	(55.2)	(32.0)
Total deferred tax liability	<u>(116.9)</u>	<u>(89.3)</u>
Net deferred tax asset (liability)	<u>\$ 10.2</u>	<u>\$ 20.2</u>

	December 31,	
	2020	2019
(Dollars in millions)		
Net Deferred Tax by Geography		
U.S.	\$ 22.0	\$ 32.2
International	(11.8)	(12.0)
Total	<u>\$ 10.2</u>	<u>\$ 20.2</u>

As of December 31, 2020, we had federal, state, and foreign net operating loss carryovers, which will reduce future taxable income when utilized. Approximately \$83.2 million in net federal tax benefit is available from the loss carryovers and an additional \$0.2 million is available in federal tax credit carryovers. \$53.6 million of the federal net operating loss tax benefit will expire from 2031 to 2037. The remaining \$29.6 million has an indefinite carryover period. The state loss carryovers and foreign loss carryovers will result in a tax benefit of approximately \$34.2 million and \$8.5 million, respectively, when utilized. The state net operating loss carryovers will begin to expire in 2021. The majority of the foreign operating loss carryovers have an indefinite carryover period. The federal credit carryovers are composed of foreign tax credits, which will begin to expire in 2021; research credits, which will begin to expire in 2027; and alternative minimum tax credits, which have no expiration date.

We file income tax returns in the U.S. federal jurisdiction, and various states and foreign jurisdictions. With a few exceptions, we are no longer subject to U.S. federal, state and local, or non-U.S. income tax examinations by tax authorities for years before 2016.

The following table summarizes the activity for unrecognized tax benefits:

	Year Ended December 31,	
	2020	2019
(Dollars in millions)		
Federal, State and Foreign Tax		
Beginning unrecognized tax balance	\$ 1.5	\$ 1.3
Increase prior period positions	0.1	0.1
Increase current period positions	0.2	0.2
Decrease prior period positions	—	(0.1)
Ending unrecognized tax benefits	<u>\$ 1.8</u>	<u>\$ 1.5</u>

The total amount of unrecognized tax benefits as of December 31, 2020, was \$1.8 million including \$0.3 million of accrued interest and penalties. Of the total amount of unrecognized tax benefits, \$1.8 million represents the amount that, if recognized, would impact our effective income tax rate as of December 31, 2020. It is expected that the amount of unrecognized tax benefits will change in the next 12 months; however, we cannot reasonably estimate the amount of the change. We do not expect the change to have a significant impact on our results of operations or financial condition.

The Tax Cut and Jobs Act legislation of 2017 imposed a mandatory transition tax on the unremitted earnings of our international subsidiaries and generally eliminated US taxes on foreign subsidiary distributions for years beginning after December 31, 2017. As of December 31, 2020, we have \$288.7 million of unremitted foreign earnings. We consider \$236.0 million of the unremitted earnings to be indefinitely reinvested. For the portion of the unremitted earnings not considered indefinitely reinvested, \$52.7 million, we have provided a deferred tax liability of \$2.6 million, which represents the expected withholding tax cost of repatriating such earnings. In the event the portion of the unremitted earnings considered to be indefinitely reinvested were repatriated, we would incur a withholding tax expense of approximately \$11.0 million.

16. Leases

Our leases primarily consist of office space. Leases with an initial term of 12 months or less are not recorded on the balance sheet; we recognize lease expense for these leases on a straight-line basis over the lease term. For leases beginning 2019 and later, we account for lease components separately from the non-lease components.

Most leases include options to renew, and the lease renewal is at our sole discretion. Therefore, the depreciable life of assets and leasehold improvements is limited by the expected lease term unless there is a transfer of title or purchase option reasonably certain of exercise. Our lease agreements do not contain any material residual value guarantees or material restrictive covenants.

We rent or sublease certain real estate to third parties. Our sublease portfolio mainly consists of operating leases for space within our office facilities.

Supplemental balance sheet information related to leases was as follows:

Lease Type	Balance Sheet Classification	December 31, 2020	December 31, 2019
(Dollars in millions)			
ASSETS			
Operating lease assets	Trade and other receivables, net	\$ 5.4	\$ 5.5
Operating lease assets	Prepaid expenses and other current assets	2.2	1.2
Operating lease assets	Right of use lease asset	27.9	32.0
Financing lease assets	Property, plant, and equipment, net	8.0	8.8
Total lease assets		\$ 43.5	\$ 47.5
LIABILITIES			
Current			
Financing lease liabilities	Current portion of long-term debt	\$ 0.4	\$ 4.0
Operating lease liabilities	Current portion of long-term lease liabilities	10.5	8.8
Noncurrent			
Financing lease liabilities	Long-term debt, less current portion	8.4	8.4
Operating lease liabilities	Long-term lease liabilities, less current portion	33.6	30.1
Total lease liabilities		\$ 52.9	\$ 51.3

The components of lease expense were as follows:

Lease Cost	Year Ended December 31,		
	2020	2019	2018
	ASC Topic 842	ASC Topic 842	ASC Topic 840
(Dollars in millions)			
Operating lease cost	\$ 9.1	\$ 12.8	\$ 17.6
Financing lease cost:			
Depreciation of lease assets	0.8	0.1	—
Interest on lease liabilities (a)	0.4	—	—
Sublease income	(4.1)	(4.4)	(4.9)
Net lease cost	\$ 6.2	\$ 8.5	\$ 12.7

(a) Interest on lease liabilities was less than \$0.1 million for the year ended December 31, 2019.

As a result of COVID-19 and our pivot to a virtual working environment, we evaluated our lease portfolio resulting in the decision to close certain office locations and transition the impacted employees to fully virtual work by the end of fiscal 2020. We recognized \$16.8 million of charges, which was comprised of \$14.7 million of accelerated amortization of the right of use assets and \$2.1 million of accelerated depreciation of leasehold improvements, related to the abandonment of the leases associated with these office locations within selling, general and administrative expense in the consolidated statements of operations during the year ended December 31, 2020.

Supplemental cash flow information related to leases was as follows:

	Year Ended December 31,	
	2020	2019
(Dollars in millions)		
Cash paid for amounts included in the measurement of lease liabilities:		
Operating cash flows from operating leases	\$ 1.5	\$ 11.2
Operating cash flows from finance leases	0.4	—
Financing cash flows from finance leases	3.3	0.4
Lease assets obtained in exchange for new lease liabilities:		
Operating leases	4.4	3.7
Financing leases	—	8.8

The future minimum lease payments under our operating and financing leases were as follows:

Years Ending December 31,	Amount
	(Dollars in millions)
2021	\$ 11.2
2022	11.3
2023	10.0
2024	8.6
2025	6.7
Thereafter	11.9
Total lease payments (a)	\$ 59.7
Less: Interest	6.8
Total	\$ 52.9

- (a) Future minimum lease payments have not been reduced by minimum sublease rentals of \$6.5 million due in the future under noncancellable subleases.

Weighted average remaining lease term and weighted average discount rate were as follows:

	December 31,	
	2020	2019
Weighted average remaining lease term (in years)		
Operating leases	9.0	5.8
Financing leases	10.6	11.6
Weighted average discount rate		
Operating leases	10.18%	5.02%
Financing leases	3.91%	3.91%

17. Commitments and Contingencies

Legal Matters

We are subject to claims and a number of judicial and administrative proceedings considered normal in the course of our current and past operations, including employment-related disputes, contract disputes, disputes with our competitors, intellectual property disputes, government audits and proceedings, customer disputes, and tort claims. In some proceedings, the claimant seeks damages as well as other relief, which, if granted, would require substantial expenditures on our part.

Our general terms and conditions in customer contracts frequently include a provision indicating we will indemnify and hold our customers harmless from and against any and all claims alleging that the services and materials furnished by us violate any third party's patent, trade secret, copyright or other intellectual property right. We are not aware of any material pending litigation concerning these indemnifications.

Some of these matters raise difficult and complex factual and legal issues and are subject to many uncertainties, including the facts and circumstances of each particular action, and the jurisdiction, forum, and law under which each action is proceeding. Because of these complexities, final disposition of some of these proceedings may not occur for several years. As such, we are not always able to estimate the amount of our possible future liabilities, if any.

There can be no certainty that we may not ultimately incur charges in excess of presently established or future financial accruals or insurance coverage. Although occasional adverse decisions or settlements may occur, it is management's opinion that the final disposition of these proceedings will not, considering the merits of the claims and available resources or reserves and insurance, and based upon the facts and circumstances currently known, have a material adverse effect on our financial position or results of operations.

Unrecovered Duplicate Payments

We identified an isolated service incident on September 26, 2019, that resulted in duplicate payments for certain of our U.S. payroll customers totaling \$18.8 million. Through December 31, 2019, \$11.2 million remained unrecovered, and we recorded a loss for the amount unrecovered within selling, general, and administrative expense in our consolidated statement of operations for the period ended December 31, 2019. Our recovery efforts continued through the second quarter of 2020, resulting in collections of \$0.4 million during the year ended December 31, 2020, which was recognized as a reduction to selling, general, and administrative expense. We are no longer pursuing collection efforts of the remaining amount unrecovered.

Environmental Matters

We accrue for losses associated with environmental remediation obligations when such losses are probable and reasonably estimable. Accruals for estimated losses from environmental remediation obligations generally are recognized no later than completion of the remedial feasibility study. Such accruals are adjusted as further information develops or circumstances change. Costs of future expenditures for environmental remediation obligations are not discounted to their present value.

In February 1988, our predecessor entered into an arrangement with Northern Engraving Corporation ("NEC") and the Minnesota Pollution Control Agency ("MPCA") in relation to groundwater contamination on a parcel of real estate sold by our predecessor to NEC. Ceridian is now responsible for the arrangement with NEC and the MPCA. The arrangement requires expense sharing between Ceridian and NEC for the remediation of groundwater contamination.

In September 1989, our predecessor entered into an EMA with Seagate related to groundwater contamination on a parcel of real estate sold by our predecessor to Seagate. Ceridian is now responsible for the EMA. The EMA requires expense sharing between Ceridian and Seagate for the remediation of groundwater contamination up to a certain limit. We have recognized an environmental reserve liability equal to the EMA limit.

We have recognized an undiscounted liability of approximately \$4.8 million and \$5.0 million as of December 31, 2020, and 2019, respectively, in our consolidated balance sheets to comply with the NEC arrangement and EMA described above. The ultimate cost, however, will depend on the extent of continued monitoring activities as these projects progress.

18. Related Party Transactions

Management Agreements

Prior to our IPO, Ceridian was party to management agreements with affiliates of THL and Cannae, Fidelity National Financial, Inc. ("FNF") and THL Managers VI, LLC ("THLM"). FNF assigned its management agreement to Cannae in November 2017. In April 2018, the management agreements terminated upon consummation of our IPO. Upon termination, the management agreements provided that we pay a termination fee equal to the net present value of the management fee for a seven-year period, which was \$11.3 million. We recorded a management fee expense in selling, general, and administrative expense of \$12.0 million for the year ended December 31, 2018, related to these management agreements.

Indebtedness

FNF, a related party due to certain shared board members, and its subsidiaries owned a portion of our Senior Notes, which were redeemed on May 30, 2018. Based on this ownership, \$1.3 million in interest payments were made to affiliates of FNF during the year ended December 31, 2018. The affiliates of FNF conducted the debt transactions through third parties in the ordinary course of their business and not directly with us.

Service and Vendor Related Agreements

Ceridian is a party to a service agreement with CompuCom Systems, Inc. (“CompuCom”), an investment portfolio company of THL Partners. Pursuant to the service agreement, CompuCom agrees to provide us with service desk and desk side support services. Pursuant to this arrangement, we made payments to CompuCom totaling \$1.7 million, and \$1.8 million during the years ended December 31, 2019, and 2018, respectively.

We provide services to FleetCor Technologies Inc. (“FleetCor Technologies”), a related party due to a shared board member, through certain commercial arrangements entered into in the ordinary course of business, which include provision of Dayforce services and other administrative services. For these services, we recorded revenue of \$0.9 million, \$0.8 million, and \$2.3 million for the years ended December 31, 2020, 2019, and 2018, respectively.

We are a party to a service agreement with The Dun and Bradstreet Corporation (“Dun and Bradstreet”), a related party due to certain shared board members. Pursuant to the service agreement, we made payments to Dun and Bradstreet totaling \$0.4 million for the year ended December 31, 2020.

We provide Dayforce and related services to The Stronach Group, for which we recorded revenue of \$0.1 million, \$0.2 million, and \$0.3 million for the years ended December 31, 2020, 2019, and 2018, respectively. The brother of our chief executive officer was the chief executive officer, and is currently a minority shareholder, of The Stronach Group.

We provide Dayforce and related services to Verve Senior Living, for which we recorded revenue of \$0.5 million for the year ended December 31, 2020. Our chief executive officer and the brother of our chief executive officer are currently minority shareholders of Verve Senior Living.

We provide payroll-related tax filing services to FNF, for which we recorded revenue of \$0.4 million, \$0.4 million, and \$0.4 million for the years ended December 31, 2020, 2019, and 2018, respectively. We provide Dayforce and related services to Cannae Holdings, Inc. and related entities, for which we recorded revenue of \$0.2 million, and \$0.2 million for the years ended December 31, 2019, and 2018, respectively.

We provide Dayforce and related services to certain investment portfolio companies of THL and Cannae. Revenue from these portfolio companies was as follows:

	Year Ended December 31,		
	2020	2019	2018
	(Dollars in millions)		
American Blue Ribbon Holdings, LLC	\$ 1.3	\$ 1.6	\$ 1.8
Black Knight Sports and Entertainment, LLC	—	0.2	—
Essex Technology Group, LLC	0.5	0.5	0.5
Guaranteed Rate, Inc.	0.9	0.8	0.5
Hightower Holding, LLC	0.2	0.2	0.1
Philips Feed Services, Inc.	0.3	0.3	0.3
System One Holdings LLC	—	—	0.3
Ten-X, LLC	0.2	0.4	—

19. Capital Stock

As of October 1, 2013, Ceridian was authorized to issue 100,000,000 shares of common stock with a par value of \$0.01 per share and 70,000,000 shares of junior convertible participating preferred stock with a par value of \$0.01 per share. On March 30, 2016, the Board of Directors increased the number of authorized shares of common stock to 150,000,000 and authorized 70,000,000 shares of senior convertible participating preferred stock with a par value of \$0.01 per share. In April

2018, the Board of Directors increased the number of authorized shares of common stock to 500,000,000 and decreased the number of authorized shares of preferred stock to 10,000,000.

On April 30, 2018, we completed our IPO, in which we issued a total of 24,150,000 shares of common stock at a public offering price of \$22.00. Concurrently with our IPO, we issued an additional 4,545,455 shares of our common stock in a private placement at \$22.00 per share. Concurrent with the IPO and private placement, all outstanding preferred stock was automatically converted into common shares pursuant to its terms.

As of December 31, 2020 and 2019, there were 148,571,412 and 144,386,618 shares of common stock issued and outstanding, respectively.

Holders of our common stock are entitled to the rights set forth as follows. Directors are elected by a plurality of the votes entitled to be cast except as set forth below with respect to directors to be elected by the holders of common stock. Our stockholders do not have cumulative voting rights. Except as otherwise provided in our third amended and restated certificate of incorporation or as required by law, all matters to be voted on by our stockholders other than matters relating to the elections and removal of directors must be approved by a majority of the shares present in person or by proxy at the meeting and entitled to vote on the subject matter or by a written resolution of the stockholders representing the number of affirmative votes required for such matter at a meeting.

Our stockholders have no preemptive or other rights to subscribe for additional shares. All holders of our common stock are entitled to share equally on a share-for-share basis in any assets available for distribution to common stockholders upon our liquidation, dissolution or winding up. All outstanding shares are validly issued, fully paid and nonassessable.

20. Net (Loss) Income per Share

We compute net (loss) income per share of common stock using the treasury stock method.

Basic net (loss) income per share is computed by dividing net (loss) income attributable to Ceridian available to common stockholders by the weighted-average number of shares of common stock outstanding during the period.

For the calculation of diluted net (loss) income per share, net (loss) income per share is adjusted by the effect of dilutive securities, including awards under our share-based compensation plans. Diluted net (loss) income per share is computed by dividing the resulting net (loss) income attributable to Ceridian available to common stockholders by the weighted-average number of fully diluted common shares outstanding. In the years ended December 31, 2020 and 2018, our potential dilutive shares, such as stock options, RSUs, and shares of senior and junior convertible preferred stock were not included in the computation of diluted net loss per share as the effect of including these shares in the calculation would have been anti-dilutive.

The basic and diluted net (loss) income per share computations were calculated as follows:

	Year Ended December 31,		
	2020	2019	2018
(Dollars in millions, except share and per share data)			
Numerator:			
Net (loss) income attributable to Ceridian	\$ (4.0)	\$ 78.7	\$ (60.6)
Less: Loss from discontinued operations	—	—	(25.8)
Net (loss) income from continuing operations attributable to Ceridian	(4.0)	78.7	(34.8)
Less: Senior Preferred Stock dividends declared	—	—	7.7
Net (loss) income from continuing operations attributable to Ceridian available to common stockholders	<u>\$ (4.0)</u>	<u>\$ 78.7</u>	<u>\$ (42.5)</u>
Denominator:			
Weighted-average shares outstanding—basic	146,774,471	142,049,112	114,049,682
Effect of dilutive equity instruments	—	6,707,480	—
Weighted-average shares outstanding—diluted	146,774,471	148,756,592	114,049,682
Net (loss) income per share from continuing operations attributable to Ceridian—basic	<u>\$ (0.03)</u>	<u>\$ 0.55</u>	<u>\$ (0.37)</u>
Net loss per share from discontinued operations—basic	<u>\$ —</u>	<u>\$ —</u>	<u>\$ (0.23)</u>
Net (loss) income per share attributable to Ceridian—basic	<u>\$ (0.03)</u>	<u>\$ 0.55</u>	<u>\$ (0.60)</u>
Net (loss) income per share from continuing operations attributable to Ceridian—diluted	<u>\$ (0.03)</u>	<u>\$ 0.53</u>	<u>\$ (0.37)</u>
Net loss per share from discontinued operations—diluted	<u>\$ —</u>	<u>\$ —</u>	<u>\$ (0.23)</u>
Net (loss) income per share attributable to Ceridian—diluted	<u>\$ (0.03)</u>	<u>\$ 0.53</u>	<u>\$ (0.60)</u>

The following potentially dilutive shares were excluded from the calculation of diluted net (loss) income per share because their effect would have been anti-dilutive:

	Year Ended December 31,		
	2020	2019	2018
Senior convertible preferred stock	—	—	5,523,993
Junior convertible preferred stock	—	—	19,148,814
Term-based stock options	7,135,159	3,307,719	14,227,487
Restricted stock units	745,955	18,980	587,283
Performance stock units	229,433	—	—

21. Subsequent Events

On February 1, 2021, we entered into a definitive share sale agreement to acquire all of the issued and outstanding shares of Ascender HCM Pty Ltd, a payroll and HR solutions provider in the Asia Pacific Japan region.

Item 9. Changes in and Disagreements With Accountants on Accounting and Financial Disclosure.

None.

Item 9A. Controls and Procedures.

Evaluation of Disclosure Controls and Procedures

Disclosure controls and procedures, as defined in Rule 13a-15(e) and Rule 15d-15(e) under the Exchange Act, are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to our management, including our principal executive and principal financial officers, as appropriate to allow timely decisions regarding required disclosure.

Our management, with the participation of our Chief Executive Officer and our Chief Financial Officer, evaluated the effectiveness of our disclosure controls and procedures as of December 31, 2020. Based on the evaluation of our disclosure controls and procedures as of December 31, 2020, our Chief Executive Officer and Chief Financial Officer concluded that, as of such date, our disclosure controls and procedures were effective at the reasonable assurance level.

Management's Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting (as defined in Rule 13a-15(f) under the Exchange Act). Management conducted an assessment of the effectiveness of our internal control over financial reporting based on the criteria set forth in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework). Based on the assessment, management has concluded that its internal control over financial reporting was effective as of December 31, 2020, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements in accordance with GAAP. Our independent registered public accounting firm, KPMG LLP, has issued an audit report with respect to our internal control over financial reporting, which appears in Part II, Item 8 of this Annual Report on Form 10-K.

Changes in Internal Control Over Financial Reporting

During the fourth quarter of 2020, we implemented a new general ledger system. In connection with this implementation, we made modifications to certain processes that comprise our internal control over financial reporting, as necessary, to accommodate related changes in our systems and business processes. To date, this implementation has not had, and we do not expect that it will have, a material adverse effect on our internal control over financial reporting.

Except as discussed above, there have been no other changes in our internal control over financial reporting identified in connection with the evaluation required by Rule 13a-15(d) and 15d-15(d) of the Exchange Act that occurred during the fiscal quarter ended December 31, 2020, that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Inherent Limitations on Effectiveness of Controls

Our management, including our Chief Executive Officer and Chief Financial Officer, believes that our disclosure controls and procedures and internal control over financial reporting are designed to provide reasonable assurance of achieving their objectives and are effective at the reasonable assurance level. However, our management does not expect that our disclosure controls and procedures or our internal control over financial reporting will prevent all errors and all fraud. A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, have been detected. These inherent limitations include the realities that judgments in decision making can be faulty, and that breakdowns can occur because of a simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people or by management override of the controls. The design of any system of

controls also is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions; over time, controls may become inadequate because of changes in conditions, or the degree of compliance with policies or procedures may deteriorate. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected.

Item 9B. Other Information.

None.

PART III

Item 10. Directors, Executive Officers and Corporate Governance.

Directors

The information provided under the headings “Election of Directors” under Proposal One and “Board of Directors” in the Proxy Statement for Ceridian’s 2021 Annual Meeting of Stockholders (“Proxy Statement”), is incorporated herein by reference.

Executive Officers

Information regarding our executive officers is set forth in Item 1 in Part I of this Form 10-K captioned “Executive Officers”.

Certain Relationships and Related Party Transactions

The nature of certain relationships and related party transactions between any director, executive officer or person nominated to become a director is stated under the headings “Election of Directors” under Proposal One, “Board of Directors”, and “Certain Relationships and Related Party Transactions” in the Proxy Statement and is incorporated herein by reference.

Code of Ethics

We have adopted a code of ethics known as the “Code of Conduct” that applies to all employees, contractors, officers and directors of Ceridian. The Code of Conduct may be viewed online on Ceridian’s website www.ceridian.com. We intend to satisfy the disclosure requirement under Item 5.05 of Form 8-K regarding an amendment to, or waiver from, a provision of our Code of Conduct that applies to our principal executive officer, principal financial officer or principal accounting officer by posting such information on our website within four business days following the date of such amendment or waiver.

Director Nomination Process

The information provided under the headings “Election of Directors” under Proposal One, “Committees of the Board of Directors” under the Board of Directors heading, and “Corporate Governance Guidelines” under the Corporate Governance heading in the Proxy Statement is incorporated herein by reference. There have been no material changes to the procedures by which shareholders may recommend nominees to our Board.

Audit Committee; Audit Committee Financial Expert

The information provided under the subheadings “Committees of the Board of Directors” under the Board of Directors heading and “Report of the Audit Committee of the Board of Directors” under Proposal Four in the Proxy Statement is incorporated herein by reference.

Item 11. Executive Compensation.

The information required by this item is incorporated herein by reference to the information set forth in Ceridian’s Proxy Statement under the headings “Director Compensation”, “Executive Compensation”, “Equity Compensation Plan Information”, and “Corporate Governance”.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.

Securities Authorized for Issuance Under Equity Compensation Plans

The information required by this item is incorporated herein by reference to the information set forth in the Proxy Statement under the heading “Equity Compensation Plan Information”.

Security Ownership of Certain Beneficial Owners and Management

The information required by this item is incorporated herein by reference to the information set forth in the Proxy Statement under the heading “Security Ownership of Certain Beneficial Owners and Management”.

Item 13. Certain Relationships and Related Transactions, and Director Independence.

The information required by this item is incorporated herein by reference to the information set forth in the Proxy Statement under the headings “Certain Relationships and Related Party Transactions”, “Election of Directors”, under Proposal One, “Board of Directors” and “Corporate Governance”.

Item 14. Principal Accounting Fees and Services.

The information required by this item is incorporated herein by reference to the information set forth in the Proxy Statement under the heading “Ratification of the Appointment of KPMG LLP as our Independent Registered Public Accounting Firm for Fiscal Year 2021” under Proposal Four.

PART IV

Item 15. Exhibits, Financial Statement Schedules.

(1) Consolidated Financial Statements

See Index to Consolidated Financial Statements at Item 8 herein.

(2) Financial Statement Schedules

All schedules are omitted because they are not applicable or the required information is shown in the consolidated financial statements or notes thereto.

(3) Exhibits

The following is a list of exhibits filed as part of this Annual Report on Form 10-K.

Exhibit Number	Description
3.1	Third Amended and Restated Certificate of Incorporation of Ceridian HCM Holding Inc. (incorporated by reference to Exhibit 3.1 to the Quarterly Report on Form 10-Q filed by the Company on May 24, 2018).
3.2	Amended and Restated Bylaws of Ceridian HCM Holding Inc. (incorporated by reference to Exhibit 3.2 to the Quarterly Report on Form 10-Q filed by the Company on May 24, 2018).
4.1	Certificate of Common Stock (incorporated by reference to Exhibit 4.1 to the Quarterly Report on Form 10-Q filed by the Company on May 24, 2018).
4.2	Registration Rights Agreement, dated April 30, 2018, by and among Ceridian HCM Holding Inc. and the other parties thereto (incorporated by reference to Exhibit 4.4 to the Quarterly Report on Form 10-Q filed by the Company on May 24, 2018).
4.3**	Description of the Registrant's Securities Registered Pursuant to Section 12 of the Securities Exchange Act of 1934.
10.1	Credit Agreement, dated April 30, 2018, between Ceridian HCM Holding Inc., as borrowers, the lenders party thereto, and Deutsche Bank AG New York Branch (as administrative agent and collateral agent) (incorporated by reference to Exhibit 10.1 to the Quarterly Report on Form 10-Q filed by the Company on August 9, 2018).
10.2	First Amendment to Credit Agreement, dated February 19, 2020, between Ceridian HCM Holding Inc., as borrowers, the lenders party thereto, Deutsche Bank AG New York Branch (as administrative agent and collateral agent) (incorporated by reference to Exhibit 10.4 to the Quarterly Report on Form 10-Q filed by the Company on May 6, 2020).
10.3*	Employment Agreement, dated April 2, 2012, by and between Ceridian Dayforce Corporation and David D. Ossip (incorporated by reference to Exhibit 10.2 to the Registration on Form S-1 filed by the Company on March 26, 2018).
10.4*	Performance-Based Stock Option Award Agreement dated May 8, 2020 by and between Ceridian HCM Holding Inc. and David Ossip (incorporated by reference to Exhibit 10.2 to the Quarterly Report on Form 10-Q filed by the Company on August 5, 2020).
10.5*	Amended and Restated Restrictive Covenant Agreement, effective as of March 20, 2017, by and among Ceridian Holding LLC, Ceridian LLC, Ceridian Canada Ltd., Ceridian Dayforce Corporation and David D. Ossip (incorporated by reference to Exhibit 10.3 to the Registration on Form S-1 filed by the Company on March 26, 2018).
10.6*	Employment Agreement, dated August 7, 2018, between Ceridian Canada Ltd. and Leigh E. Turner (incorporated by reference to Exhibit 10.4 to the Registration on Form S-1 filed by the Company on November 9, 2018.)
10.7*	Amendment to Employment Agreement, effective February 3, 2020, between Leigh R. Turner and Ceridian Canada Ltd. (incorporated by reference to Exhibit 10.2 to the Current Report on Form 8-K filed by the Company on February 5, 2020).
10.8*	Employment Agreement, dated May 1, 2019, by and between Chris R. Armstrong and Ceridian HCM, Inc. (incorporated by reference to Exhibit 10.1 to the Quarterly Report on Form 10-Q filed by the Company on July 30, 2019).

Exhibit Number	Description
10.9*	Amendment to Employment Agreement, dated November 5, 2019, by and between Christopher R. Armstrong and Ceridian HCM, Inc. (incorporated by reference to Exhibit 10.6 to the Annual Report on Form 10-K filed by the Company on February 28, 2020).
10.10*	Second Amendment to Employment Agreement, effective February 3, 2020, between Christopher R. Armstrong and Ceridian HCM, Inc. (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed by the Company on February 5, 2020).
10.11*	Employment Agreement, dated December 7, 2017, by and between Ceridian Canada Ltd. and Scott A. Kitching (incorporated by reference to Exhibit 10.6 to the Registration on Form S-1 filed by the Company on March 26, 2018).
10.12*	Employment Agreement, dated September 15, 2020, by and between Noémie C. Heuland and Ceridian HCM, Inc. (incorporated by reference to Exhibit 10.2 to the Quarterly Report on Form 10-Q filed by the Company on November 5, 2020).
10.13*	Separation and Consulting Agreement, dated November 6, 2019, by and among Ceridian HCM Holding Inc., Ceridian Canada Ltd., and Arthur Gitajn (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed by the Company on November 7, 2019).
10.14*	Separation Agreement, Release and Consulting Agreement, dated July 2, 2020, by and among Ceridian Dayforce Inc., Ceridian HCM Holding Inc., and Ozzie Goldschmied (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed by the Company on July 2, 2020).
10.15*	Ceridian Holding Corp. 2007 Stock Incentive Plan, dated November 9, 2007 (incorporated by reference to Exhibit 4.3 to the Registration on Form S-8 filed by the Company on April 25, 2018).
10.16*	2013 Ceridian HCM Holding Inc. Stock Incentive Plan, dated October 1, 2013, and as amended on March 30, 2016, August 11, 2016, December 30, 2016, and March 20, 2017 (incorporated by reference to Exhibit 10.10 to the Registration on Form S-1 filed by the Company on March 26, 2018).
10.17*	Form of Director Indemnification Agreement for Ceridian HCM Holding Inc. (incorporated by reference to Exhibit 10.11 to the Registration on Form S-1 filed by the Company on April 12, 2018).
10.18*	Ceridian HCM Holding Inc. 2018 Equity Incentive Plan (incorporated by reference to Exhibit 4.1 to the Registration Statement on Form S-1 filed by the Company on April 25, 2018).
10.19*	Form of Director Restricted Stock Unit Award Agreement (incorporated by reference to Exhibit 10.13 to the Registration on Form S-1 filed by the Company on April 12, 2018).
10.20*	Form of Director Restricted Stock Unit Award Agreement (for awards made after May 1, 2019) (incorporated by reference to Exhibit 10.2 to the Quarterly Report on Form 10-Q filed by the Company on July 30, 2019).
10.21*	Form of Director Restricted Stock Unit Award Agreement (for annual compensation awards made after May 1, 2020) (incorporated by reference to Exhibit 10.3 to the Quarterly Reported on Form 10-Q filed by the Company on August 5, 2020).
10.22*	Form of Director Stock Option Award Agreement (for annual compensation awards made after May 1, 2020) (incorporated by reference to Exhibit 10.4 to the Quarterly Reported on Form 10-Q filed by the Company on August 5, 2020).
10.23*	Form of Employee Restricted Stock Unit Award Agreement (incorporated by reference to Exhibit 10.14 to the Registration on Form S-1 filed by the Company on April 12, 2018).
10.24*	Form of Employee Stock Option Award Agreement (incorporated by reference to Exhibit 10.15 to the Registration on Form S-1 filed by the Company on April 12, 2018).
10.25*	Form of Employee Performance-Based Stock Option Award Agreement (incorporated by reference to Exhibit 10.1 to the Quarterly Reported on Form 10-Q filed by the Company on August 5, 2020).
10.26*	Form of Restricted Stock Unit Award Agreement (February 9, 2020) (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed by the Company on February 10, 2020).
10.27*	Form of Performance Stock Unit Award Agreement (incorporated by reference to Exhibit 10.2 to the Current Report on Form 8-K filed by the Company on March 2, 2020).
10.28*	Ceridian HCM Holding Inc. Global Employee Stock Purchase Plan (incorporated by reference to Exhibit 99.1 to the Registration Statement on Form S-8 filed by the Company on November 28, 2018).
10.29*	Ceridian HCM Holding Inc. 2020 Management Incentive Plan (incorporated by reference to Exhibit 10.3 to the Current Report on Form 8-K filed by the Company on March 2, 2020).
10.30	Common Stock Purchase Agreement, dated April 16, 2018, by and between Ceridian HCM Holding Inc. and THL / Cannae Investors LLC (incorporated by reference to Exhibit 10.17 to the Registration on Form S-1 filed

Exhibit Number	Description
	by the Company on April 20, 2018).
10.31	Voting Agreement, dated April 30, 2018, by and among Ceridian HCM Holding Inc. and the other parties thereto (incorporated by reference to Exhibit 10.2 to the Quarterly Report on Form 10-Q filed by the Company on August 9, 2018).
10.32	Waiver of Certain Provisions of Voting Agreement, dated September 6, 2019, by and among Ceridian HCM Holding Inc., Cannae Holdings, LLC and certain funds affiliated with Thomas H. Lee Partners, L.P. (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed by the Company on September 6, 2019).
10.33	Waiver Agreement, dated February 27, 2020, by and among Ceridian HCM Holding Inc., Cannae Holdings, LLC and certain funds affiliated with Thomas H. Lee Partners, L.P. (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed by the Company on March 2, 2020).
10.34	Letter Agreement by and among Ceridian HCM Holding Inc. and Cannae Holdings, Inc. (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed by the Company on April 3, 2020).
21.1**	List of subsidiaries of Ceridian HCM Holding Inc.
23.1**	Consent of KPMG LLP, Independent Registered Public Accounting Firm.
24.1	Power of Attorney (included on signature page).
31.1**	Certification of Principal Executive Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2**	Certification of Principal Financial Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1**	Certification of Principal Executive Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2**	Certification of Principal Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS**	Inline 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**	Inline XBRL Taxonomy Extension Schema Document
101.CAL**	Inline XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF**	Inline XBRL Taxonomy Extension Definition Linkbase Document
101.LAB**	Inline XBRL Taxonomy Extension Label Linkbase Document
101.PRE**	Inline XBRL Taxonomy Extension Presentation Linkbase Document
104**	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)

* Management compensatory plan or arrangement.

** Filed herewith.

Item 16. Form 10-K Summary.

Not applicable.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended, the Registrant has duly caused this Report to be signed on its behalf by the undersigned, thereunto duly authorized.

CERIDIAN HCM HOLDING INC.

Date: February 26, 2021

By: /s/ David D. Ossip

Name: David D. Ossip

Title: Chief Executive Officer

KNOW ALL MEN BY THESE PRESENTS, that each of the undersigned constitutes and appoints each of Noémie C. Heuland, Scott A. Kitching and William E. McDonald, or any of them, each acting alone, his true and lawful attorney-in-fact and agent, with full power of substitution and resubstitution, for such person and in his name, place and stead, in any and all capacities, to sign this Annual Report on Form 10-K, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, each acting alone, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming that any such attorney-in-fact and agent, or his substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, this Report has been signed below by the following persons on behalf of the Registrant in the capacities and on the dates indicated.

Name	Title	Date
<u>/s/ David D. Ossip</u> David D. Ossip	Chair and Chief Executive Officer (Principal Executive Officer)	February 26, 2021
<u>/s/ Noémie C. Heuland</u> Noémie C. Heuland	Executive Vice President and Chief Financial Officer (Principal Financial Officer)	February 26, 2021
<u>/s/ Jeffrey S. Jacobs</u> Jeffrey S. Jacobs	Head of Accounting and Financial Reporting (Principal Accounting Officer)	February 26, 2021
<u>/s/ Brent B. Bickett</u> Brent B. Bickett	Director	February 26, 2021
<u>/s/ Ronald F. Clarke</u> Ronald F. Clarke	Director	February 26, 2021
<u>/s/ Deborah A. Farrington</u> Deborah A. Farrington	Director	February 26, 2021
<u>/s/ Thomas M. Hagerty</u> Thomas M. Hagerty	Director	February 26, 2021
<u>/s/ Linda P. Mantia</u> Linda P. Mantia	Director	February 26, 2021
<u>/s/ Ganesh B. Rao</u> Ganesh B. Rao	Director	February 26, 2021
<u>/s/ Andrea S. Rosen</u> Andrea S. Rosen	Director	February 26, 2021
<u>/s/ Gerald C. Throop</u> Gerald C. Throop	Director	February 26, 2021

EXECUTIVE OFFICERS

David D. Ossip
Chair of the Board
Chief Executive Officer

Leagh E. Turner
President
Chief Operating Officer

Christopher R. Armstrong
Executive Vice President
Chief Customer Officer

Noémie C. Heuland
Executive Vice President
Chief Financial Officer

Jeffrey S. Jacobs
Head of Accounting &
Financial Reporting

Scott A. Kitching
Executive Vice President
General Counsel and Assistant Secretary

Joseph B. Korngiebel,
Executive Vice President
Chief Product & Technology Officer

BOARD OF DIRECTORS

David D. Ossip
Chair of the Board

Brent B. Bickett

Ronald F. Clarke

Deborah A. Farrington

Thomas M. Hagerty

Linda P. Mantia

Ganesh B. Rao

Andrea S. Rosen

Gerald C. Throop
Lead Director

CERIDIAN GLOBAL HEADQUARTERS

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INVESTOR RELATIONS

investors@ceridian.com

STOCKHOLDER QUESTIONS

stockholders@ceridian.com

TRANSFER AGENT

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Brooklyn, NY 11219
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