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

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FORM 10-K

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☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended June 30, 2019

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 001-36486

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CDK Global, Inc.

(Exact name of registrant as specified in its charter)

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Delaware	**46-5743146**
(State or other jurisdiction of incorporation or organization)	(IRS Employer Identification No.)

1950 Hassell Road, Hoffman Estates
IL, 60169
(Address of principal executive offices)

Registrant’s telephone number, including area code: (847) 397-1700

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

Title of class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, $0.01 Par Value	CDK	NASDAQ Global Select Market

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

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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 and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☒ No ☐

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

Large accelerated filer	☒	Accelerated filer	☐
Non-accelerated filer	☐	Smaller reporting company	☐
Emerging growth company	☐		

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

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

The aggregate market value of common stock held by non-affiliates of the registrant, as of December 31, 2018, the last business day of the registrant's most recently completed second fiscal quarter, was approximately $6.1 billion.

The number of shares outstanding of the registrant’s common stock as of August 9, 2019 was 121,199,032.

DOCUMENTS INCORPORATED BY REFERENCE

Part III incorporates information by reference to the registrant's definitive proxy statement, to be filed with the Securities and Exchange Commission within 120 days after the fiscal year end of June 30, 2019.

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Part I

Item 1. Business

This Annual Report on Form 10-K and the documents incorporated herein by reference contain forward-looking statements based on management's expectations and assumptions as of the date of this filing. Actual results may differ materially from those expressed in forward-looking statements. See Item 1A of Part I–"Risk Factors."

CDK Global, Inc. is the former Dealer Services division of Automatic Data Processing, Inc. ("ADP"). We were incorporated in Delaware as a wholly-owned subsidiary of ADP on September 29, 2014 and began operating as an independent public company on September 30, 2014. Our principal corporate offices are located in Hoffman Estates, Illinois. Our common stock is listed on the NASDAQ Global Select Market under the symbol "CDK."

As used herein, "CDK Global," "CDK," the "Company," "we," "our," and similar terms include CDK Global, Inc. and its consolidated subsidiaries, unless the context indicates otherwise.

Overview

Our purpose is to enable end-to-end automotive commerce across the globe. For over 40 years, CDK Global has served automotive retailers and original equipment manufacturers ("OEMs") by providing innovative solutions that allow them to better connect, manage, analyze, and grow their businesses. Our solutions automate and integrate all parts of the buying process, including the acquisition, sale, financing, insuring, parts supply, repair, and maintenance of vehicles, in more than 100 countries around the world, for approximately 30,000 retail locations and most OEMs.

We have organized our operations into two main operating groups, CDK North America ("CDKNA") and CDK International ("CDKI"), which are also reportable operating segments. We previously reported the results of Advertising North America ("ANA") as a reportable segment. During the fourth quarter of fiscal year 2019, we committed to a plan to divest: (a) all of the assets of ANA; and (b) certain assets of our CDKNA segment related to mobile advertising solutions and website services (collectively, the "Digital Marketing Business") in order to focus on our core suite of software-as-a-service ("SaaS") software and technology solutions for the markets we serve through the CDKNA and CDKI segments. The Digital Marketing Business is presented as discontinued operations. Additional information on discontinued operations is contained in Item 8 of Part II, "Financial Statements and Supplementary Data - Note 4 - Discontinued Operations." Additional information on our reportable segments and geographic areas is contained in Item 8 of Part II, "Financial Statements and Supplementary Data - Note 19 - Financial Data by Segment."

Our Strategy

To enable end-to-end automotive commerce, our strategy is to invest for the long-term in integrated software products and an open technology platform that can deliver seamless, workflow-driven solutions for our customers. The automotive retail market is evolving and demand for new and integrated technology solutions is growing: consumers increasingly expect a seamless omnichannel experience when purchasing or servicing vehicles; OEMs see technology as a tool to ensure a consistent and positive customer experience across their retail networks; and retailers are seeking integrated workflow technology solutions to help them improve both customer satisfaction and dealership cost structure. We believe that the best way to compete in a world with numerous providers of unconnected software solutions for numerous automotive retailers, OEMs, consumers, and vehicles is to provide integrated technology solutions and platform tools that can connect the disparate elements to create continuous retail workflows.

Our Business

We generate revenue primarily by providing a broad suite of subscription-based software and technology solutions for automotive retailers through our CDKNA and CDKI segments. We are focused on the use of SaaS and mobile-centric solutions that are highly functional, flexible, and fast. Our flagship Dealer Management System ("DMS") software solutions are hosted enterprise resource planning applications tailored to the unique requirements of the retail automotive industry. Our DMS products facilitate the sale of new and used vehicles, consumer financing, repair and maintenance services, and vehicle and parts inventory management. Additionally, these solutions enable company-wide accounting, financial reporting, cash flow management, and payroll services. Our DMSs are typically integrated with OEM data processing systems that enable automotive retailers to order vehicles and parts, receive vehicle records, process warranties, and check recall campaigns and service bulletins while helping them to fulfill their franchisee responsibilities to their OEM franchisors.

Complementary to our core DMSs in the CDKNA segment, we also provide a portfolio of layered software applications and services to address the unique needs of automotive retail workflows. These solutions are often integrated to and targeted at users of our DMSs, but may, in some cases, be provided to customers that do not otherwise use our DMS. Our principal layered applications are:

Solutions	Description
Vehicle Sales Solutions	Technology tools and services to streamline the entire vehicle inventory, sales, and finance and insurance ("F&I") process
Fixed Operations Solutions	Solutions to manage the parts and service profit center of dealerships, including customer targeting, appointment scheduling, on-site workflow, and billing
Customer Relationship Management Solutions	Software to manage interactions with current and prospective customers
Financial Management Solutions	Value-added capabilities for accounts payable, payments, and payroll
Document Management Solutions	Document creation and archiving solutions to address the complex automotive retail sales process
Network Management Solutions	Wired and wireless network solutions to support dealer connectivity and security efforts
Integrated Telephony Management Solutions	Integrated telephony solutions that allow automotive retailers to connect and communicate via presence, instant messaging, voice, and video

In the CDKNA segment, we further connect the automotive ecosystem by providing third party retail solution providers with robust and secure interfaces to the core DMS through our Partner Program. For both automotive retailers and OEMs we provide data management and business intelligence solutions that extract, cleanse, normalize, enhance, and distribute data and that provide actionable insights.

In both our CDKNA and CDKI segments, we offer automotive retailers and OEMs a variety of professional services, custom programming, consulting, implementation and training solutions, as well as a full range of customer support solutions.

In addition to providing solutions to automotive retailers and OEMs, our CDKNA segment also provides solutions to retailers and manufacturers of heavy trucks, construction equipment, agricultural equipment, motorcycles, boats, and other marine and recreational vehicles.

Product Development and Innovation

Our ability to strengthen and extend our solutions portfolio is a key element of our business strategy. We execute on this strategy through a combination of development and the selective pursuit of strategic acquisitions.

In addition to the ongoing investment to enhance existing solutions within our core business, we also invest in long- and medium-term product innovation aligned with our strategy. For example, the Fortellis Automotive Commerce Exchange under development is expected to be the foundation of our open technology platform for automotive commerce. Within the automotive commerce market, Fortellis allows CDK Global and third parties to develop adaptive and interchangeable application programming interfaces ("APIs") that can be used to connect existing technology solutions and build new solutions quickly and with high levels of reliability. Similarly, we have developed Drive Flex, a cloud-based DMS. We are developing these solutions using a methodical and measured approach with respect to capital and resource allocation. We believe these investments align to our strategy and will position CDK Global to take advantage of the evolving automotive retail market.

Competition

Our industry is highly competitive and fragmented. We compete with a broad and diverse range of information, technology, services, and consulting companies, as well as with the in-house capabilities of OEMs. Our competitors range from local providers to regional and global competitors. However, we believe that no competitor provides the same combination of geographical reach and breadth of solutions that we do.

Each of our solutions faces competition from an array of solution providers. For our DMS solutions in North America, our principal competitors are Reynolds and Reynolds, Dealertrack (Cox Automotive), Auto/Mate, AutoSoft, PBS Systems, and various local and regional providers. For our CDKI segment, DMS competition is principally from local and regional providers. The most significant competitive factors that we face across our solutions are price, breadth of features and functionality, user experience, quality, brand, scalability, and service capability.

Regulation

The automotive retail industry is highly regulated and automotive retailers and OEMs are subject to a broad array of complex regulations governing virtually every aspect of their operations. Our customers must ensure their compliance with their regulatory requirements, and, in turn, we must ensure that our solutions effectively address their regulatory compliance needs.

Because our business delivers solutions across a broad spectrum of automotive retailer operations, our activities are impacted by a wide variety of federal, state, local, and international laws and regulations. Central to the value of our Document Management Solutions application, for example, is that the forms we provide for our customers meet the requirements of their applicable laws. Likewise, within our Vehicle Sales Solutions application, our electronic vehicle registration service is dependent on our compliance with complex and detailed regulatory requirements. Across our portfolio of automotive retail solutions, we are focused on ensuring that we meet our regulatory compliance obligations and that our solutions enable our customers to comply with the laws and regulations applicable to them. See “Risk Factors-Risks Relating to Our Business" for additional information regarding the application and impact of laws and regulations on our operations.

Privacy and Data Protection Regulations

We are subject to a number of federal, state, and foreign laws and regulations regarding data governance and the privacy and protection of personal data. For example, under the Gramm-Leach-Bliley Act (the "GLB Act"), automotive retailers are generally deemed to be regulated financial institutions and therefore are subject to the GLB Act and applicable regulations, including the Federal Trade Commission's ("FTC") Privacy Rule and Safeguards Rule. In our capacity as a service provider to automotive retailers, we generally commit to our customers that we will handle non-public personal information consistent with the GLB Act and the related regulations. Similarly, many United States ("U.S.") states and foreign jurisdictions have adopted regulations that impose obligations on businesses that handle personal information, including notification requirements in the event of data breaches relating to personal data, as well as minimum security standards with respect to the handling and transmission of personal data. For a discussion of privacy and data protection regulation and the potential impacts on our business, see "Risk Factors - Risks Relating to Our Business."

Seasonality in Our Business

Though our business is not highly cyclical, a portion of it is seasonal. Our transaction revenues experience volatility around seasonal consumer vehicle shopping activity, and our Other revenues have a seasonal increase in the third quarter of each fiscal year.

Employees

As of June 30, 2019, we had a total of approximately 9,000 employees worldwide. None of our employees in the United States are represented by a collective bargaining agreement. We have work councils and statutory employee representation obligations in certain countries outside the United States. We believe that relations with our employees are good.

Information about our Executive Officers

The executive officers of the Company, their ages, and positions are as follows:

Name	Age*	Position(s)
Brian M. Krzanich	59	President, Chief Executive Officer and Director
Joseph A. Tautges	43	Executive Vice President, Chief Financial Officer
Dan Flynn	49	Executive Vice President, Business Leader, Core DMS
Neil Packham	48	President, CDK International
Mahesh Shah	42	Executive Vice President, Chief Product & Technology Officer
Lee J. Brunz	49	Executive Vice President, General Counsel and Secretary
Amy W. Byrne	48	Executive Vice President, Chief Human Resources Officer
Dean Crutchfield	58	Executive Vice President, Chief Information Officer

* As of June 30, 2019

Brian M. Krzanich has served as our President, Chief Executive Officer and as a member of our Board of Directors since November 7, 2018. Prior to joining CDK, Mr. Krzanich served as the Chief Executive Officer of Intel Corporation from 2013 to June 2018. As Chief Executive Officer, he led Intel's corporate strategy and operations, including development of Intel's business model and identification of emerging technologies. Mr. Krzanich joined Intel in 1982, became a corporate Vice President in 2006, and served until 2010 as Vice President and General Manager of Assembly and Test. He was Senior Vice President and General Manager of Manufacturing and Supply Chain from 2010 to 2012. He became Executive Vice President and Chief Operating Officer in 2012, responsible for global manufacturing, supply chain, human resources, and information technology. Mr. Krzanich has served as a member of the Supervisory Board of ams AG since June 2019.

Joseph A. Tautges has served as our Executive Vice President since August 1, 2017 and began service as our Executive Vice President, Chief Financial Officer on August 9, 2017. Prior to joining CDK, Mr. Tautges served as Chief Financial Officer of the $18 billion Enterprise Services segment of Hewlett Packard Enterprise ("HPE") from May 2014 to April 2017. While at HPE, he led a transformation initiative which enabled significant margin expansion and improved free cash flow resulting in the spin-merger of Enterprise Services with Computer Science Corporation to form DXC Technology Company. Prior to HPE, Mr. Tautges held various levels of increasing responsibility in both operations and financial management with Sears Holdings from 2011 to 2014 and Aon Hewitt from 2002 to 2011. Mr. Tautges is a Certified Public Accountant.

Dan Flynn has served as our Executive Vice President, Business Leader, Core DMS since July 2019. Mr. Flynn joined CDK in February 2016 as Executive Vice President, Business Transformation and served as our President, CDK North America from December 2017 through July 2019. Prior to joining CDK, Mr. Flynn served as the Senior Vice President, North America Rent-A-Car Operations at Hertz from 2014 through 2016. He previously served as Regional Vice President, Southeast Region and Separation Management Office, for Hertz Equipment Rental Corporation.

Neil Packham has served as our President, CDK International since January 18, 2017. Mr. Packham joined CDK in July 2013 as Vice President for CDK's UK region, which encompasses UK, Middle East, Ireland and Africa. Prior to joining CDK, Mr. Packham worked in the automotive, digital, and software sectors working in a variety of business areas such as business development and strategy, sales and marketing, product development, and general management. He has held senior positions within a number of large corporations and start-ups.

Mahesh Shah has served as our Chief Product & Technology Officer since April 22, 2019. Previously, Mr. Shah was Senior Vice President and General Manager of Application Services & Business Process Services at DXC Technology Company until April 2019. He served as Vice President and General Manager of Business Process Services at DXC Technology, including both the current portfolio of service offerings and next-generation business process services at DXC Technology Company until 2018. Previously, Mr. Shah served as General Manager and Vice President of Acquisition and Divestiture, IT Consulting Services at Hewlett Packard Enterprise. Prior to DXC Technology, Mr. Shah spent 16 years, in various roles at HPE including building a consulting organization focused on M&A, serving as chief information officer, vice president, Product R&D and IT, and executive director, Security Product Management and Development.

Lee J. Brunz has served as our Executive Vice President, General Counsel and Secretary since the spin-off. Prior to the spin-off, Mr. Brunz served as Vice President, Counsel for the Digital Marketing business of the Dealer Services division of

ADP since Dealer Services' 2010 acquisition of Cobalt Holding Company. Prior to joining the Dealer Services division of ADP, he served as Vice President, Finance & General Counsel of Cobalt from 2008 to 2010 and as Vice President & General Counsel from 2004 to 2008.

Amy W. Byrne has served as our Executive Vice President, Chief Human Resources Officer since June 5, 2017. Prior to joining CDK, Ms. Byrne served as Vice President, Human Resources, Latin America for Avon Products from 2011 to 2016 and as Vice President, Corporate Human Resources and Global Compensation and Benefits from 2006 to 2011.

Dean Crutchfield has served as our Executive Vice President and Chief Information Officer since in June 8, 2016. Prior to joining CDK, Mr. Crutchfield served as the Chief Information Officer of Zebra Technologies from 2013 to 2016. He also previously held information technology leadership roles at Dell from 1999 to 2013.

Available Information

Our company website is cdkglobal.com. The investor relations section of our website is investors.cdkglobal.com. We encourage investors to use our website as a way of easily finding information about us. We promptly make available on the investor relations section of our website, free of charge, the reports that we file or furnish with the Securities and Exchange Commission ("SEC"), corporate governance information (including our Code of Business Conduct and Ethics), and select press releases. The information contained on the websites referenced in this Annual Report on Form 10-K is not incorporated by reference into this filing. Further, the Company's references to website URLs are intended to be inactive textual references only.

Item 1A. Risk Factors

You should carefully consider each of the following risks and all of the other information set forth in this Annual Report on Form 10-K. Based on the information currently known to us, we believe that the following information identifies the risk factors that could materially affect our business, results of operations, and financial condition. If any of the following risks and uncertainties develop into actual events, they could have a material adverse effect on our business, results of operations, and financial condition.

Risks Relating to Our Business

We face intense competition. If we do not continue to compete effectively against other providers of technology solutions to automotive retailers, OEMs, and other participants in the automotive retail industry, it could have a material adverse effect on our business, results of operations, and financial condition.

Competition among automotive retail solutions providers is intense. The industry is highly fragmented and subject to changing technology, shifting customer needs, and frequent introductions of new solutions. We have a variety of competitors both for our integrated solutions and for each of our individual solutions. For example:

- for our Dealer Management System ("DMS") solutions in our CDKNA segment, our principal competitors are Reynolds and Reynolds, Dealertrack (Cox Automotive), Auto/Mate, AutoSoft, PBS Systems and various local and regional providers; and

- for our CDKI segment, DMS competition is principally from local and regional providers.

Our competitors may be able to respond more quickly or effectively to new or emerging technologies and changes in customer demands or to devote greater resources to the development, promotion, and sale of their solutions than we can to ours. We expect the industry to continue to attract new competitors and new technologies, possibly involving alternative technologies that are more sophisticated and cost-effective than our solutions. There can be no assurance that we will be able to compete successfully against current or future competitors or that the competitive pressures we face will not have a material adverse effect on our business, results of operations, and financial condition.

Market trends influencing the automotive retail industry could have a negative impact on our business, results of operations, and financial condition.

Market trends that negatively impact the automotive retail industry may affect our business by reducing the number and/or size of actual or potential customers or the money that actual or potential customers are willing or able to spend on our solution portfolio. Such market factors include:

- the adverse effect of long-term wage stagnation on the purchasing power of vehicle purchasers and the number of vehicle purchasers;

- pricing and purchase incentives for vehicles;

- disruption in the available inventory of vehicles;

- disruption in the franchised automotive retailer dealership model, including potential disintermediation by emerging business models;

- reductions in growth or decreases of automotive retailer spend on technology;

- contractions in the number of franchised automotive retailers;

- market oversupply of vehicles and declining used-vehicle pricing;

- the expectation that consumers will be purchasing fewer vehicles overall during their lifetime as a result of better quality vehicles and longer warranties and the development of shared-use mobility;

- the cost of gasoline and other forms of energy;

- the availability and cost of credit to finance the purchase of vehicles and excess negative equity in existing vehicle loans;
- the effect of adverse macroeconomic conditions on consumer shopping activity;
- increased federal and other taxation; and
- reductions in business and consumer confidence.

Such market trends could have a material adverse effect on our business, results of operations, and financial condition.

Market acceptance of and influence over our products and services is concentrated in a limited number of automobile OEMs and consolidated retailer groups, and we may not be able to maintain or grow these relationships.

Although the automotive retail industry is fragmented, a relatively small number of OEMs, consolidated retailer groups and retailer associations exert significant influence over the market acceptance of automotive retail products and services due to their concentrated purchasing activity, their endorsement or recommendation of specific products and services and/or their ability to define technical standards and certifications. For example, our DMSs are certified to technical standards established by OEMs and certain of our products and services are provided pursuant to OEM-designated endorsement or preferred vendor programs. While automotive retailers are generally free to purchase the solutions of their choosing, when an OEM has endorsed or certified a provider of products or services to its associated franchised automotive retailers and if our solutions lack such certification or endorsement, adoption or retention of our products and services among the franchised dealers of such OEM could be materially impaired.

We may be unable to develop and bring products and services in development to market, or bring new products and services to market in a timely manner or at all.

Our success depends in part upon our ability to bring to market new products and services, and enhancements thereto that address evolving customer demands. The successful development of Drive Flex, for example, is important to our future product strategy. The time, expense, and effort associated with developing and offering Drive Flex, Fortellis, and other new and enhanced products and services may be greater than anticipated. The length of the development cycle varies depending on the nature and complexity of the product, the availability of development, product management, and other internal resources and the role, if any, of strategic partners. If we are unable to develop and bring to market additional products and services, and enhancements thereto, in a timely manner, or at all, we could lose market share to competitors who are able to offer these new products and services, which could have a material adverse effect on our business, results of operations, and financial condition.

Our failure or inability to execute any element of our business strategy could negatively impact our business, results of operations, or financial condition.

Our business, results of operations, and financial condition depend on our ability to execute our business strategy, which includes the following key elements:

- deepening relationships with our existing customer base;
- continuing to expand our customer base;
- strengthening and extending our solutions portfolio;
- driving additional operational efficiency; and
- selectively pursuing strategic acquisitions.

We may not succeed in implementing a portion or all of our business strategy, and even if we do succeed, our strategy may not have the favorable impact on our business, results of operations, or financial condition that we anticipate. We may not be able to effectively manage the expansion of our business or achieve the rapid execution necessary to fully avail ourselves of the market opportunity for our solution portfolio. If we are unable to adequately implement our business strategy, our business, results of operations, and financial condition could suffer a material adverse effect.

We have announced that we intend to divest our Digital Marketing Business. The divestiture of the Digital Marketing Business will result in our complete exit from the ANA business, which we previously reported as a reportable segment. The failure to complete such divestiture, or if completed on terms that are even less favorable than the Company currently anticipates, could have a material adverse effect on the Company.

On June 27, 2019, we publicly announced that we have committed to a plan to divest our Digital Marketing Business, in order to focus on our core suite of SaaS software and technology solutions for the markets we serve through the CDKNA and CDKI segments. The divestiture of the Digital Marketing Business will result in our complete exit from the ANA business, which we previously reported as a reportable segment, as well as certain assets formerly included in our CDKNA segment related to mobile advertising solutions and website services. There can be no assurance that we will be successful in divesting the Digital Marketing Business. Although we are actively pursuing a sale of the Digital Marketing Business, no potential buyer has yet committed to purchasing the business and we have not yet entered into any agreement for the sale of such business. We may not be successful in selling our Digital Marketing Business in a timely manner, if at all, or may do so on terms that are less favorable than the Company currently anticipates. If the Digital Marketing Business is not sold as an ongoing business, we may have to liquidate those assets and incur substantial costs to shut down those operations. If we are unable to divest the Digital Marketing Business by June 27, 2020, whether through a sale or liquidation, on terms that we deem acceptable, we would be required to reverse its treatment as a discontinued operation. In that event, we may be required to again reflect the Digital Marketing Business as part of our continuing operations for financial accounting and reporting purposes. Such a change would also require us to restate our financial statements retroactively for all reportable periods subsequent to its classification as a discontinued operation, which would change the information being reported herein and in our other filings for those periods.

In addition, in the fourth quarter of fiscal 2019 we recorded an impairment charge for goodwill of ANA, as described in this Annual Report on Form 10-K under Item 8 of Part II, "Financial Statements and Supplementary Data - Note 4 - Discontinued Operations." If the Digital Marketing Business is sold, it is possible that the net proceeds from the sale could be less than its current carrying value on our books, which would require us to take an additional impairment charge against our earnings in the amount of the difference. Depending on the amount of net proceeds from the sale, the potential additional charge could be significant.

We are dependent on our key management, direct sales force, and technical personnel for continued success.

Our global senior management team is concentrated in a small number of key members, and our future success depends to a meaningful extent on the services of our executive officers and other key team members, including members of our direct sales force and technology staff. Generally, our executive officers and employees can terminate their employment relationship at any time. The loss of any key employees or our inability to attract or retain other qualified personnel could materially harm our business and prospects.

Effective succession planning is important to our long-term success. Disruptions in future leadership transitions or reorganizations could have a material adverse effect on our business, results of operations, and financial condition and could adversely affect our ability to attract and retain other key executives.

Competition for qualified leadership and technical personnel in the technology industry is intense, and we compete for leadership and technical personnel with other technology companies that have greater financial and other resources than we do. Our future success will depend in large part on our ability to attract, retain, and motivate highly qualified leadership and technical personnel, and there can be no assurance that we are able to do so. Any difficulty in hiring or retaining needed personnel, or increased costs related thereto, could have a material adverse effect on our business, results of operations, and financial condition.

Real or perceived errors or failures in our software and systems could negatively impact our results of operations and growth prospects.

We depend upon the sustained and uninterrupted performance of numerous proprietary and third-party technologies to deliver our solution portfolio. If one or more of those technologies cannot scale to meet demand, or if there are human or technological errors in our execution of any feature or functionality using any such technologies, then our business may be harmed. Because our software is often complex, undetected errors and failures may occur, especially when new versions or updates are made. Despite testing by us, errors or bugs in our solutions may not be found until the software or service is in active use by us or our customers. Moreover, our customers could incorrectly implement or inadvertently misuse our solutions, which could result in customer dissatisfaction and adversely impact the perceived utility of our solutions as well as our brand. Any of these real or perceived errors, failures, or bugs could result in negative publicity, reputational harm, loss of or delay in market acceptance of our solutions, loss of competitive position or claims by customers for losses sustained by them, all of which, along with the costs of responding to such effects, may have a material adverse effect on our business, results of operations, and financial condition.

Data security concerns relating to our technology or services could damage our reputation and deter current and potential customers from using our products and services. If our security measures fail to prevent the improper use and disclosure of our customers' data, our products and services may be perceived as not being secure, customers may curtail or stop using our products and services, and we may incur significant legal and financial exposure. A significant breach of the data security of our customers', vendors' or other partners' information technology systems may negatively impact our business, results of operations, and financial condition.

We handle substantial amounts of confidential information, including personal information of our employees and customers' consumers and employees. Our success depends on the confidence of OEMs, dealers, lenders, major credit reporting agencies and other data providers, and other users of (or participants in) our solutions, in our ability to store, process, and transmit this confidential information securely (whether over the internet or otherwise), and to operate our computer systems and operations without significant disruption or failure.

Our computer systems experience cyber attacks and data security incidents of varying degrees on a regular basis. These events may lead to interruptions and delays in our service and operations as well as loss, misuse, or theft of data that we store, process and transmit. Our security measures may also fail to prevent unauthorized access to our systems and data may be exfiltrated and improperly used or disclosed due to employee error, malfeasance, system errors, or vulnerabilities, including vulnerabilities of our vendors, suppliers, their products, or otherwise. While security measures are in place, concerns over the security of third-party data that we store, process, and transmit, which may be heightened by any well-publicized compromise of security, may deter customers from using our solution portfolio and/or deter vendors from providing their solutions to us. Moreover, if our security measures fail to prevent unauthorized access to such data, our solutions may be perceived as not being secure and our customers may curtail or stop using our solutions and/or vendors may curtail or stop providing their solutions to us. Any failure of, or lack of confidence in, the security of our solutions could have a material adverse effect on our business, results of operations, and financial condition.

Despite our focus on data security, we may not be able to stop unauthorized attempts to gain access to data that we store and process, or to stop disruptions in the transmission or provision of data and communications or other data by us. Advances in computer capabilities, new discoveries in the field of cryptography, or other events or developments could result in a compromise or breach of the controls used by our solutions to protect data contained in our, our customers' and/or our vendors' databases and the information being stored, transferred, or processed. While warranties and liabilities are usually limited in our customer and vendor contracts, they or other third parties may seek to hold us liable for any losses suffered as a result of unauthorized access to their confidential information or non-public personal information of consumers. In addition, while effort has been expanded to have insurance to cover these losses, we may be required to expend significant capital and other resources to protect against or alleviate any problems caused by actual or threatened cyber attacks or unauthorized access to such data. Our security measures may not be sufficient to prevent security breaches, and any failure to prevent the improper use and disclosure of data and/or to adequately alleviate any problems caused by such improper use and disclosure could have a material adverse effect on our business, results of operations, and financial condition.

Our customers, vendors and other partners are primarily responsible for the security of their information technology systems, and we rely on them to supply clean data content and/or to utilize our products and services in a secure manner. While we provide guidance and specific requirements of data security in some cases, we do not directly control any of such parties' cyber security operations. If our customers, vendors and other partners fail to prevent any significant cyber security breaches, their businesses could be disrupted and therefore may negatively impact our business, results of operations, and financial condition.

Interruption or failure of our networks, systems, and infrastructure could hurt our ability to effectively provide our products and services, which could damage our reputation and/or subject us to litigation or contractual penalties.

The availability of our products and services depends on the continuing operation of our network and systems. From time to time, we have experienced, and may experience in the future, network or system slowdowns and interruptions. These network and system slowdowns and interruptions may interfere with our ability to do business. While the appropriate upgrades to various systems, shoring up backup processes, and other measures to protect against data loss and system failures have been implemented and tested, there is still risk that we may lose critical data or experience network failures.

Despite the resiliency plans and facilities we have in place, our ability to conduct business may be adversely impacted by a disruption in the infrastructure that supports our businesses. This may include a disruption involving electrical, satellite, undersea cable or other communications, internet, cloud computing, transportation, or other services facilities used by us or third parties with which we conduct business. These disruptions may occur as a result of events that affect only our buildings or systems or those of such third parties, or as a result of events with a broader impact globally, regionally or in the cities where those buildings or systems are located, including, but not limited, to natural disasters, war, civil unrest, economic or political developments, pandemics, and weather events.

Such network, system or infrastructure failures or disruptions could result in lengthy interruptions in our service and lost revenue opportunities for our customers, which could result in litigation against us and/or our customers may curtail or stop using our solutions or vendors may curtail or stop providing their solutions to us. Additionally, we have service level agreements with certain of our customers that may result in penalties or trigger cancellation rights in the event of a network or system slowdown or interruption. Any of these could have a material adverse effect on our business, results of operations, and financial condition.

Our business is directly and indirectly subject to, and impacted by, extensive and complex laws and regulations in the U.S. and abroad, and new laws and regulations and/or changes to existing laws and regulations may negatively impact our business, results of operations, and financial condition.

Our business is directly and indirectly subject to, and impacted by, numerous U.S. and foreign laws and regulations covering a wide variety of subject matters. Compliance with complex foreign and U.S. laws and regulations that apply to our operations increases our costs and may impede our competitiveness. In addition, failure to comply with such laws or regulations may result in the suspension or termination of our ability to do business in applicable jurisdictions or the imposition of civil and criminal penalties, including fines or exposure to civil litigation. New regulations and/or changes to existing regulations could require us to modify our business practices, including modify the manner in which we contract with or provide products and services to our customers; directly or indirectly limit how much we can charge for our services; require us to invest additional time and resources to comply with such regulations; or limit our ability to update our existing products and services, or require us to develop new ones.

In addition to the data privacy and security laws and regulations mentioned below, our business is also directly or indirectly governed by domestic and international laws and regulations relating to issues such as information services, telecommunications, antitrust or competition, employment, motor vehicle and manufacturer licensing or franchising, vehicle registration, advertising, taxation, consumer protection, and accessibility. We must also comply with anti-corruption laws such as the U.S. Foreign Corrupt Practices Act and local laws prohibiting corrupt payments to governmental officials and private entities, such as the U.K. Anti-Bribery Act and the Criminal Law and Anti-Unfair Competition Law of the People's Republic of China. In addition, motor vehicle and manufacturer licensing, franchising and advertising is highly regulated at the state level and is subject to changing legislative, regulatory, political, and other influences. Such state laws are complex and subject to frequent change. The application of this framework of laws and regulations to our business is complex and, in many instances, is unclear or unsettled, which in turn increases our cost of doing business, may interfere with our ability to offer our solutions competitively in one or more jurisdictions and may expose us and our employees to potential fines, penalties, or other enforcement actions. In some cases, our customers may seek to impose additional requirements on our business in efforts to comply with their interpretation of their own or our legal obligations. These requirements may differ significantly from our existing solutions or processes and may require engineering and other costly resources to accommodate.

In addition, we are and expect to continue to be the subject of investigations, inquiries, data requests, actions, and audits from regulatory authorities, particularly in the area of competition. On June 22, 2017, the Company received from the Federal Trade Commission ("FTC") a Civil Investigative Demand consisting of interrogatories and a request to produce documents relating to any agreements between the Company and Reynolds and Reynolds. On April 22, 2019, the Company received a subsequent request to schedule interviews with certain current and former Company employees. Parallel document requests have been received from certain states' Attorneys General. The Company is responding to the requests and no proceedings have been instituted. At this time, the Company does not have sufficient information to predict the outcome of, or the cost of responding to or resolving these investigations.

These laws and regulations, as well as any associated inquiries or investigations or any other government actions, may be costly to comply with and may delay or impede the development of new products, result in negative publicity, increase our operating costs, require significant management time and attention, and subject us to remedies that may harm our business, including fines or demands or orders that we modify or cease existing business practices. Our failure to comply, or to provide solutions that allow our customers to comply, or any new investments of additional time and resources necessary to comply, or to provide solutions that allow our customers to comply, with any of the foregoing laws and regulations could have a material adverse effect on our business, results of operations, and financial condition.

We are subject to new regulations that restrict the manner and extent to which we can control access to our DMS and other software applications and limit what, if anything, we may charge for integration with those applications.

Revenue from the Partner Program in our CDKNA segment is dependent on the business model of charging third party retail solution providers for integration to our DMS through a program of robust and secure interfaces. Our ability to control the manner in which we provide this robust and secure access to information in our systems, and our pricing model for this service, has been, and will likely continue to be, challenged, dictated and constrained in certain jurisdictions. For example, during our fourth quarter ending June 30, 2019, Arizona, Montana, North Carolina and Oregon passed legislation that would require us to provide access to our software, in order to copy, extract and modify all data within our systems. The legislation in some of these states purports to impose such requirements on us at cost and without markup, to any third party designated by a dealer licensee of our software regardless of whether the dealer licensee has title to the data on our systems or the right under its software license to authorize non-licensee third parties access to our systems. We believe that compliance with such legislation will impair our ability to provide our customers with robust and secure technology solutions and will increase our risk of data security and privacy breaches, system and data integrity problems, and associated adverse competitive, financial, operational, and reputational impacts. Similar legislation has been proposed in other states and we cannot predict whether other states will consider or pass similar legislation. We may incur significant legal and regulatory expenses in connection with assessing or challenging the applicability of this legislation to our products and offerings and while we seek legal, regulatory, or policy solutions to address concerns with respect to the validity of the legislation or our ability to comply with it. Ultimately, our failure to comply, or to provide solutions that allow our customers to comply, or any new investments of additional time and resources necessary to comply, or to provide solutions that allow our customers to comply, with this legislation will increase our operating costs and reduce our revenue, and could have a material adverse effect on our business, results of operations, and financial condition.

Our business is directly or indirectly subject to, or impacted by, complex and rapidly evolving U.S. and foreign laws and regulation regarding privacy and data protection. Many of these laws and regulations are subject to change and uncertain interpretation and could result in claims, adjustments to our business practices, penalties, increased cost of operations, or declines in customer growth or engagement, or otherwise harm our business.

Many U.S. and foreign jurisdictions have passed, or are currently contemplating, a variety of consumer protection, privacy, and data security laws and regulations that may relate directly or indirectly to our business. For example, federal laws and regulations governing privacy and security of consumer information generally apply to our customers and/or to us as a service provider. These include, but are not limited to, the federal Fair Credit Reporting Act, the Gramm-Leach-Bliley Act (the "GLB Act") and regulations implementing its information safeguarding requirements, the Junk Fax Prevention Act of 2005, the Controlling the Assault of Non-Solicited Pornography and Marketing Act of 2003 (the "CAN-SPAM Act"), the Telephone Consumer Protection Act, the Do-Not-Call-Implementation Act, applicable Federal Communications Commission (the “FCC”) telemarketing rules (including the declaratory ruling affirming the blocking of unwanted robocalls), the FTC Privacy Rule, Safeguards Rule, Consumer Report Information Disposal Rule, Telemarketing Sales Rule, Risk-Based Pricing Rule, and Red Flags Rule. Laws of foreign jurisdictions, such as Canada's Anti-Spam Law and Personal Information Protection and Electronic Documents Act, similarly apply to our collection, processing, storage, use, and transmission of protected data.

In addition, the European Union's General Data Protection Regulation (the "GDPR"), which became effective on May 25, 2018, and superseded the previous Data Protection Directive of 95/46/EC imposes more stringent operational requirements for entities processing personal information and greater penalties for noncompliance. While we have made adjustments to our operations in Europe to comply with new requirements contained in the GDPR and to address customer concerns related to the GDPR, we may need to make more adjustments as more clarification and guidance on compliance with the GDPR become available. Any such adjustments may result in costs and expenses, and any failure to meet the requirements of the GDPR may result in significant fines, penalties, or other liabilities (including possible fines of up to 4% of global annual turnover for the preceding financial year or €20 million (whichever is higher) for the most serious infringements). Further, the European Union is expected to replace the EU Privacy and Electronic Communications Directive 2002/58/EC (“ePrivacy Directive”) governing the use of technologies to collect consumer information with the ePrivacy Regulation. The ePrivacy Regulation may impose burdensome requirements around obtaining consent, and impose fines for violations that are materially higher than those imposed under the European Union’s current ePrivacy Directive and related EU member state legislation.

There is also rapid development of new privacy laws and regulations elsewhere around the globe, including amendments of existing data protection laws to the scope of such laws and penalties for noncompliance. Failure to comply with these international data protection laws and regulations could have a negative impact on our reputation and subject us to significant fines, penalties or other liabilities, all of which may cause increased cost of operations or decline in customer growth, or otherwise harm our business, results of operations, and financial condition.

In the U.S., some state laws and regulations have imposed, and others have contemplated imposing, enhanced disclosure obligations and greater restrictions or prohibitions on the use of data than are already contained in federal laws such as the GLB Act and its implementing regulations or the FTC rules described above. For example, many states within the U.S. and certain countries have passed data protection laws that require notification to users when there is a security breach of personal data. While we have made adjustments to our operations in such states to comply with the requirements, any new laws and regulations could further impact the way we collect, store, process, transmit, or otherwise interact with data, particularly consumer data. These adjustments could have consequences for the design, development, and delivery of our products and services. Any such adjustment may result in costs and expenses, and any failure to meet the requirements may result in significant fines, penalties, or other liabilities.

For example, on June 28, 2018, California passed the California Consumer Privacy Act of 2018 ("CCPA"), to be effective on January 1, 2020. The new law provides California consumers with a greater level of transparency and broader rights and choices with respect to their personal information than those contained in any existing state and federal laws in the U.S. The "personal information" regulated by CCPA is broadly defined to include identification or association with a California consumer or household, including demographics, usage, transactions and inquiries, preferences, inferences drawn to create a profile about a consumer, and education information. Compliance with CCPA requires the implementation of a series of operational measures such as preparing data maps, inventories, or other records of all personal information pertaining to California residents, households and devices, as well as information sources, usage, storage, and sharing, maintaining and updating detailed disclosures in privacy policies, establishing mechanisms (including, at a minimum, a toll-free telephone number and an online channel) to respond to consumers' data access, deletion, portability, and opt-out requests, providing a clear and conspicuous "Do Not Sell My Personal Information" link on the home page of the business' website, etc. CCPA prohibits businesses from discriminating against consumers who have opted out of the sale of their personal information, subject to a narrow exception. It allows companies to provide financial incentives to California consumers in order to obtain their consent to the collection and use of their personal information. Violations of CCPA will result in civil penalties up to $7,500 per violation. CCPA further allows consumers to file lawsuits against a business if a data breach has occurred and the California Attorney General does not prosecute the business. . In addition, on May 29, 2019, Nevada's governor approved a bill (the "Amendment Bill"), to be effective on October 1, 2019. The Amendment Bill provides amendments to an existing law that requires operators of websites and online services to post a notice on their websites regarding their privacy practices. The Amendment Bill requires operators of internet websites or online services to establish a designated request address through which a consumer may submit a verified request directing such operators not to make any sale of covered information collected about the consumer. The "covered information" regulated by the Amendment Bill is defined to include an enumerated list of items of personally identifiable information (including names, addresses, email addresses, phone numbers, social security numbers and identifiers that allow a specific person to be contacted).

To comply with CCPA and the Amendment Bill and assist many of our customers who are subject to CCPA and the Amendment Bill to comply with CCPA and the Amendment Bill, we may need to modify or adjust the design, development, and delivery of our products and services in a significant way. Such modifications and adjustments may result in significant costs and expenses, and any delay or failure to make such changes may negatively affect our customers' confidence in or perception of our product and services, result in their ceasing to use our products or services or even lawsuits and significant liabilities.

The costs and other burdens of compliance with privacy and data security laws and regulations could negatively impact the use and adoption of our solutions and reduce overall demand for them. Additionally, evolving concerns regarding data privacy may cause our customers, or their customers and potential customers, to resist providing the data necessary to allow us to deliver our solutions effectively. Even the perception that personal information is not satisfactorily protected or does not meet regulatory requirements could inhibit sales of our solutions and any failure to comply with such laws and regulations could lead to significant fines, penalties, or other liabilities. Any such decrease in demand or incurred fines, penalties, or other liabilities could have a material adverse effect on our business, results of operations, and financial condition.

Our business operations may be harmed by events beyond our control.

Our business operations are vulnerable to damage or interruption from natural disasters, such as fires, floods and hurricanes, or from power outages, telecommunications failures, terrorist attacks, computer network service outages and disruptions, "denial of service" attacks, computer malware and ransomware, break-ins, sabotage, employee error or malfeasance, and other similar events beyond our control. For example, the majority of our North American research and development activities are located near significant seismic faults in the Portland, Oregon area. The occurrence of any such event at any of our facilities or at any third-party facility utilized by us or our third-party providers could cause interruptions or delays in our business, loss of data, or could render us unable to provide our solution portfolio. In addition, any failure of a third-party to provide the data, products, services, or facilities required by us, as a result of human error, bankruptcy, natural disaster, or other operational disruption, could cause interruptions to our computer systems and operations. The occurrence of any of these events could have a material adverse effect on our business, results of operations, and financial condition.

We utilize certain key technologies, data, and services from, and integrate certain of our solutions with, third parties and may be unable to replace those technologies, data, and services if they become obsolete, unavailable, or incompatible with our solutions.

We utilize certain key technologies and data from, and/or integrate certain of our solutions with, hardware, software, services, and data of third parties, including Chrome Systems, TrueCar, Microsoft, Google, Yahoo, EMC, Cisco Systems, Kyocera, Experian, Equifax, TransUnion and others. Some of these vendors are also our competitors in various respects. These third-party vendors could, in the future, seek to charge us cost-prohibitive fees for such use or integration or may design or utilize their solutions in a manner that makes it more difficult for us to continue to utilize their solutions, or integrate their technologies with our solutions, in the same manner or at all. Any significant interruption in the supply or maintenance of such third-party hardware, software, services, or data could negatively impact our ability to offer our solutions unless and until we replace the functionality provided by this third-party hardware, software, and/or data. In addition, we are dependent upon these third parties' ability to enhance their current products, develop new products on a timely and cost-effective basis, and respond to emerging industry standards and other technological changes. There can be no assurance that we would be able to replace the functionality or data provided by third-party vendors in the event that such technologies or data becomes obsolete or incompatible with future versions of our solutions or are otherwise not adequately maintained or updated. Any delay in or inability to replace any such functionality could have a material adverse effect on our business, results of operations, and financial condition. Furthermore, delays in the release of new and upgraded versions of third-party software applications could have a material adverse effect on our business, results of operations, and financial condition.

We have customers in over 100 countries, where we are subject to country-specific risks that could negatively impact our business, results of operations, and financial condition.

During the twelve months ended June 30, 2019, we generated 22% of our revenues from continuing operations outside of the U.S., and we expect revenues from other countries to continue to represent a significant part of our total revenues in the future, and such revenues are likely to increase as a result of our efforts to expand our business in non-U.S. markets. Business and operations in individual countries are subject to changes in local government regulations and policies, including those related to tariffs and trade barriers, investments, taxation, currency exchange controls, repatriation of earnings (as described below), environmental, and employment laws. For example, the referendum vote held in the United Kingdom ("U.K.") on June 23, 2016 resulted in the decision to leave the European Union ("Brexit"). Our results are subject to the uncertainties and instability in economic and market conditions caused by such vote, including uncertainty regarding the U.K.'s access to the EU Single Market and the wider trading, legal, regulatory, and labor environments, especially in the U.K. and EU. Depending on the final terms of Brexit, we could face new regulatory costs and challenges and greater volatility in the Pound Sterling and the Euro. Disruptions and uncertainty caused by Brexit may also cause our clients to closely monitor their costs and reduce their spending budget on our solutions and services. Changes in immigration laws and policies in connection with Brexit could make it more difficult for us to recruit or relocate skilled employees within, or to, our U.K. office. A weaker British pound versus the U.S. dollar also causes local currency results of our U.K. operations to be translated into fewer U.S. dollars. Our results are also subject to the difficulties of coordinating our activities across the countries in which we are active. In addition, our operations in each country are vulnerable to changes in local socio-economic conditions and monetary and fiscal policies, currency exchange rates, intellectual property protection disputes, the settlement of legal disputes through foreign legal systems, the collection of receivables through foreign legal systems, exposure to possible expropriation or other governmental actions, product preference and product requirements, difficulty to effectively establish and expand our business and operations in such markets, unsettled political conditions, possible terrorist attacks, acts of war, natural disasters, and pandemic disease. These and other factors relating to our international operations may have a material adverse effect on our business, results of operations, and financial condition.

Our business, results of operations, and financial condition could be harmed by negative rating actions by credit rating agencies.

Nationally recognized credit rating organizations have issued credit ratings relating to the Company and our senior notes. In November 2016, our credit ratings were downgraded to non-investment grade. If our ratings are downgraded further or if ratings agencies indicate that a downgrade may occur, it could limit our access to new financing, reduce our flexibility with respect to working capital needs, adversely affect the market price of our senior notes, result in an increase in financing costs, including interest expense under certain of our debt instruments, and result in less favorable covenants and financial terms in our future financing arrangements. Any of these outcomes could also negatively impact our relationships with our customers or otherwise have a material adverse effect on our business, results of operations, and financial condition. Additional details about the terms of our debt is contained in Item 8 of Part II, "Financial Statements and Supplementary Data - Note 15 - "Debt."

We are currently, and expect to be in the future, involved in litigation that is expensive and time consuming and, if resolved adversely, that may materially adversely affect us.

From time to time, we may become involved in various legal proceedings, including patent, copyright, commercial, product liability, employment, class action, whistleblower, antitrust and other litigation and claims, in addition to governmental and other regulatory investigations and proceedings. Such matters can be time-consuming, divert management's attention and resources, cause us to incur significant expenses or liability and/or require us to change our business practices. Because of the potential risks, expenses and uncertainties of litigation, we may, from time to time, settle disputes, even where we have meritorious claims or defenses, by agreeing to settlement agreements.

The Company is currently involved in several lawsuits that set forth allegations of anti-competitive conduct by the Company and anti-competitive agreements between the Company and Reynolds and Reynolds relating to the manner in which the defendants control access to, and allow integration with, their respective DMSs. Any negative outcome from any such lawsuits could result in payments of substantial monetary damages or fines, or undesirable changes to our products or business practices, and accordingly our business, financial condition, or results of operations could be materially and adversely affected. Although the results of such lawsuits and claims cannot be predicted with certainty, we do not believe that the final outcome of these matters relating to the manner in which we control access to, and allow integration with, our DMS, that we currently face will have a material adverse effect on our business, financial condition, or results of operations. We believe these cases are without merit and intend to continue to contest the claims in these cases vigorously.

Because litigation is inherently unpredictable, there can be no assurances that a favorable final outcome will be obtained in all our cases, and we cannot assure you that the results of any of these actions will not have a material adverse effect on our business, financial condition, results of operations and prospects. For more information regarding the litigation in which we are currently involved, see the information set forth under "Legal Proceedings" in Item 3 of Part I of this Annual Report on Form 10-K.

We may be unable to adequately protect, and we may incur significant costs in defending, our intellectual property and other proprietary rights.

Our success depends, in large part, on our ability to protect our intellectual property and other proprietary rights. We rely upon a combination of trademark, trade secret, copyright, patent and unfair competition laws, as well as license agreements and other contractual provisions, to protect our intellectual property and other proprietary rights. In addition, we attempt to protect our intellectual property and proprietary information by requiring certain of our team members and consultants to enter into confidentiality, non-competition and assignment of inventions agreements. To the extent that our intellectual property and other proprietary rights are not adequately protected, third parties might gain access to our proprietary information, develop and market products and services similar to ours or use trademarks similar to ours. Existing U.S. federal and state intellectual property laws offer only limited protection. Moreover, the laws of some foreign countries in which we market our products and services afford little or no effective protection of our intellectual property. If we resort to legal proceedings to enforce our intellectual property rights or to determine the validity and scope of the intellectual property or other proprietary rights of others, the proceedings could be burdensome and expensive, and we may not prevail. The failure to adequately protect our intellectual property and other proprietary rights, or manage costs associated with enforcing those rights, could have a material adverse effect on our business, results of operations, and financial condition.

Claims that we or our technologies infringe upon the intellectual property or other proprietary rights of a third party may require us to incur significant costs, enter into royalty or licensing agreements, or develop or license substitute technology.

We have in the past and may in the future be subject to claims that our technologies in our products and services infringe upon the intellectual property or other proprietary rights of a third party. In addition, the vendors providing us with technology that we use in our own technology could become subject to similar infringement claims. Although we believe that our products and services do not infringe any intellectual property or other proprietary rights, we cannot assure you that our products and services do not, or that they will not in the future, infringe intellectual property or other proprietary rights held by others. Any claims of infringement could cause us to incur substantial costs defending against the claim, even if the claim is without merit, and could distract our management from our business. Moreover, any settlement or adverse judgment resulting from the claim could require us to pay substantial amounts, obtain a license to continue to use the products and services that are the subject of the claim, and/or otherwise restrict or prohibit our use of the technology. There can be no assurance that we would be able to obtain a license on commercially reasonable terms, or at all, from the third party asserting any particular claim, that we would be able to successfully develop alternative technology on a timely basis, if at all, or that we would be able to obtain a license from another provider of suitable alternative technology to permit us to continue offering, and our customers to continue using, the products and services. In addition, we generally provide in our customer agreements for certain products and services that we will indemnify our customers against third-party infringement claims relating to technology that we provide to those customers, which could obligate us to pay damages if the products and services were ever found to be infringing. Infringement claims asserted against us, our vendors, or our customers could have a material adverse effect on our business, results of operations, and financial condition.

We have made strategic acquisitions and formed strategic alliances in the past and expect to do so in the future. If we are unable to find suitable acquisitions or alliance partners that strengthen our value proposition to customers or to achieve the expected benefits from such acquisitions or alliances, there could be a material adverse effect on our business, results of operations, and financial condition.

We have historically pursued growth through acquisitions, ranging from acquisitions of small start-up companies that provide a discrete application to a handful of customers, to acquisitions of substantial companies with more mature solutions and a larger customer base, such as our acquisition of Kerridge in 2005, which facilitated our international expansion, and our acquisition of ELEAD1ONE ("ELEAD") in 2018, which supports our CRM business. As part of our ongoing business strategy to expand solutions offerings, acquire new technologies, and strengthen our value proposition to customers, we frequently engage in discussions with third parties regarding, and enter into agreements relating to, possible acquisitions, strategic alliances, and joint ventures. However, there may be significant competition for acquisition, alliance, and joint venture targets in our industry, or we may not be able to identify suitable candidates, negotiate attractive terms, or obtain necessary regulatory approvals for such transactions in the future. Acquisitions, strategic alliances, and joint ventures also involve numerous other risks, including potential exposure to assumed litigation and unknown environmental and other liabilities, as well as undetected internal control, regulatory or other issues, or additional costs not anticipated at the time the transaction was approved or completed.

Even if we are able to complete acquisitions or enter into alliances and joint ventures that we believe will provide attractive growth opportunities, such transactions are inherently risky. Significant risks from these transactions include risks relating to:

- integration and restructuring costs, both one-time and ongoing;
- developing and maintaining sufficient controls, policies, and procedures;
- diversion of management’s attention from ongoing business operations;
- establishing new informational, operational, and financial systems to meet the needs of our business;
- losing key employees, customers, and vendors;
- failing to achieve anticipated synergies, including with respect to complementary solutions; and
- unanticipated or unknown liabilities.

If we are not successful in completing acquisitions in the future, we may be required to reevaluate our acquisition strategy. We also may incur substantial expenses and devote significant management time and resources in seeking to complete acquisitions. In addition, we could use substantial portions of our available cash to pay all or a portion of the purchase prices of future acquisitions. If we do not achieve the anticipated benefits of our acquisitions as rapidly or to the extent anticipated by our management and financial or industry analysts, others may not perceive the same benefits of the acquisition as we do. If these risks materialize, there could be a material adverse effect on our business, results of operations, and financial condition.

Our future acquisitions may involve the issuance of our equity securities as payment, in part or in full, for the business or assets acquired, which would dilute our existing stockholders' ownership interests. Future acquisitions may also decrease our earnings and the benefits derived by us from an acquisition might not outweigh or exceed the dilutive effect of the acquisition. We also may incur additional indebtedness, issue equity, have future impairment of assets or suffer adverse tax and accounting consequences in connection with any future acquisitions.

We could be liable for contract or product liability claims, and disputes over such claims may disrupt our business, divert management's attention, or have a negative impact on our financial results.

We provide limited warranties to purchasers of our products and services. In addition, errors, defects or other performance problems in our products and services, including with respect to data that we store, process and provide in connection with our products and services, could result in financial or other damages to our customers or consumers. There can be no assurance that any limitations of liability set forth in our contracts would be enforceable or would otherwise protect us from liability for damages. We maintain general liability insurance coverage, including coverage for errors and omissions in excess of the applicable deductible amount; however, there can be no assurance that this coverage will continue to be available on acceptable terms, in sufficient amounts to cover one or more large claims or at all, or that the insurer will not deny coverage for any future claim. The successful assertion of one or more large claims against us that exceeds available insurance coverage, or the occurrence of changes in our insurance policies, including premium increases or the imposition of large deductible or co-insurance requirements, could have a material adverse effect on our business, results of operations, and financial condition. Furthermore, any litigation, regardless of its outcome, could result in substantial cost to us and divert management's attention from our operations and could have a material adverse effect on our business, results of operations, and financial condition. In addition, some of our products and services are business-critical for our customers, and a failure or inability to meet a customer's expectations could seriously damage our reputation and negatively impact our ability to retain existing business or attract new business.

Because we recognize a majority of our revenue from our subscription-based products and services over the term of the subscription, downturns or upturns in new business may not be immediately reflected in our operating results.

We generally recognize a majority of our revenue from sales of our subscription-based products and services ratably over the term of the subscription contract. As a result, the majority of our quarterly revenue is attributable to service contracts entered into during previous quarters. A decline in new or renewed service agreements in any one quarter will not be fully reflected in our revenue in that quarter but will harm our revenue in future quarters. Consequently, the effect of significant downturns in sales and market acceptance of our subscription services in a particular quarter may not be fully reflected in our operating results until future periods. Our subscription model also makes it difficult for us to rapidly increase our revenue through additional sales in any period, because revenue from new subscription contracts, and from additional orders under existing subscription contracts, must be recognized over the applicable subscription term. In addition, delays or failures in deployment of our subscription services may prevent us from recognizing subscription revenue for indeterminate periods of time. Further, we may experience unanticipated increases in costs associated with providing our subscription services to customers over the term of our subscription contracts as a result of inaccurate internal cost projections or other factors, which may harm our operating results.

Changes in, or interpretations of, accounting principles may negatively impact our financial position and results of operations.

We prepare our consolidated financial statements in accordance with accounting principles generally accepted in the United States ("GAAP"). These principles are subject to interpretation by the SEC and other organizations that develop and interpret accounting principles. New accounting principles arise regularly, implementation of which can have a significant effect on and may increase the volatility of our reported operating results and may even retroactively affect previously reported operating results. In addition, the implementation of new accounting principles may require significant changes to our customer and vendor contracts, business processes, accounting systems, and internal controls over financial reporting. The costs and effects of these changes could adversely impact our operating results, and difficulties in implementing new accounting principles could cause us to fail to meet our financial reporting obligations.

For example, in May 2014, the Financial Accounting Standard Board ("FASB") issued Accounting Standards Update ("ASU") No. 2014-09, Revenue from Contracts with Customers (Topic 606), which supersedes nearly all existing GAAP revenue recognition guidance, changes how and when revenue is recognized, and provides guidance on how to account for costs related to contracts with customers. This new guidance became effective for us on July 1, 2018. We have implemented changes to our accounting systems and processes, internal controls, and disclosures to comply with the requirements of the new guidance. Our assessment of this new revenue recognition guidance and its impact is further discussed in Note 6, "Revenue" to our audited consolidated financial statements included under Item 8 of Part II of this Annual Report on Form 10-K.

We may experience foreign currency gains and losses.

We conduct transactions and hold cash in currencies other than the U.S. dollar. Changes in the value of major foreign currencies, particularly the Canadian dollar, Euro, Pound Sterling, and Renminbi relative to the U.S. dollar, can significantly affect our assets, revenues, and operating results. Generally, our revenues are adversely affected when the dollar strengthens relative to other currencies and are positively affected when the dollar weakens. Similarly, cash, other bank deposits, and other assets held in foreign currency are adversely affected when the dollar strengthens relative to other currencies and are positively affected when the dollar weakens.

We may have exposure to unanticipated tax liabilities, which could harm our business, results of operations, financial condition, and prospects.

Our global business operations subject us to income taxes and non-income based taxes, in both the U.S. and various foreign jurisdictions. The computation of the provision for income taxes and other tax liabilities is complex, as it is based on the laws of numerous taxing jurisdictions and requires significant judgment regarding the application of complicated rules governing accounting for tax provisions under GAAP. The provision for income taxes may require forecasts of effective tax rates for the year, which include assumptions and forward looking financial projections, including the expectations of profit and loss by jurisdiction. Various items cannot be accurately forecasted and future events may materially differ from our forecasts. Our provision for income tax could be materially impacted by a number of factors, including changes in the geographical mix of our profits and losses, changes in our business, such as internal restructuring and acquisitions, changes in tax laws and accounting guidance and other regulatory, legislative or judicial developments, tax audit determinations, changes in our uncertain tax positions, changes in our intent and ability to indefinitely reinvest foreign earnings, changes in our ability to utilize foreign tax credits, changes to our transfer pricing practices, tax deductions associated with stock-based compensation, and changes in our need for deferred tax valuation allowances. Any changes in corporate income tax laws or any implementation of tax laws relating to corporate tax reform, could significantly impact our overall tax liability. For these reasons, our actual tax liabilities in a future period may be materially different than our income tax provision.

In addition, changes in tax laws or tax rulings may have a significant adverse impact on our effective tax rate.

In the event that changes in tax laws negatively impact our effective tax rates, our provision for taxes, or generate unanticipated tax liabilities, our business, results of operations, and financial condition could suffer a material adverse effect.

Changes in tax laws or tax rulings could materially affect our financial position, results of operations, and cash flows.

The income and non-income tax regimes we are subject to or operate under are unsettled and may be subject to significant change. Changes in tax laws or tax rulings, or changes in interpretations of existing laws, could materially affect our financial position, results of operations, and cash flows. For example, changes to U.S. tax laws enacted in December 2017 had a significant impact on our tax obligations and effective tax rate for fiscal 2018 and beyond. In addition, many countries in Europe, as well as a number of other countries and organizations, have recently proposed or recommended changes to existing tax laws or have enacted new laws that could significantly increase our tax obligations in many countries where we do business or require us to change the manner in which we operate our business. The Organization for Economic Cooperation and Development has been working on a Base Erosion and Profit Shifting Project and is expected to continue to issue guidelines and proposals that may change various aspects of the existing framework under which our tax obligations are determined in many of the countries in which we do business. Due to our international business activities, these types of changes to the taxation of our activities could increase our worldwide effective tax rate and harm our financial position, results of operations, and cash flows.

Uncertainties in the interpretation and application of the 2017 Tax Cuts and Jobs Act could materially affect our tax obligations and effective tax rate.

The 2017 Tax Cuts and Jobs Act (the "Tax Reform Act") was enacted on December 22, 2017, and significantly affected U.S. federal tax law by changing how the U.S. imposes income tax on multinational corporations along with other changes. The U.S. Department of Treasury may issue regulations and interpretative guidance. In addition, the Tax Reform Act has U.S. state and local implications and additional guidance and interpretations are anticipated from state taxing authorities. The issuance of additional regulations and interpretations may significantly impact how we will apply the law and impact our results of operations in the period issued.

There can be no assurance that we will have access to the capital markets on terms acceptable to us.

From time to time we may need to access the long-term and short-term capital markets to obtain financing. Although we believe that the sources of capital currently in place will permit us to finance our operations for the foreseeable future on acceptable terms and conditions, our access to, and the availability of, financing on acceptable terms and conditions in the future or at all will be impacted by many factors, including, but not limited to:

- our financial performance;
- our credit ratings;
- the liquidity of the overall capital markets; and
- the state of the economy.

There can be no assurance that we will have access to the capital markets on terms acceptable to us.

Our current level of indebtedness could negatively impact our ability to raise additional capital to fund our operations and limit our ability to react to changes in the economy or our industry.

We have significant debt obligations. On August 17, 2018, we entered into a $750.0 million revolving credit facility (which was undrawn as of June 30, 2019) and borrowed $300.0 million under a three-year term loan facility that will mature on August 17, 2021 and $300.0 million under a five year term loan facility that will mature on August 17, 2023. In addition, we have approximately $2.35 billion of existing senior notes outstanding. See Note 15, "Debt" to our consolidated financial statements under Item 8 of Part II of this Annual Report on Form 10-K for details about the terms of our debt.

Our current indebtedness could have important consequences, including, but not limited to:

- increasing our vulnerability to, and reducing our flexibility to plan for and respond to, general adverse economic and industry conditions and changes in our business and the competitive environment;
- an increasingly substantial portion of our cash flow from operations will be dedicated to making payments of principal of, and interest on, our indebtedness, thereby reducing the availability of funds that would otherwise be available to fund working capital, capital expenditures, acquisitions, dividends, share repurchases or other corporate purposes;
- increasing our vulnerability to further downgrades of our credit rating, which could adversely affect our interest rates on existing indebtedness, cost of additional indebtedness, liquidity and access to capital markets;
- restricting us from making strategic acquisitions or causing us to make non-strategic divestitures;
- the introduction of secured debt to our capital structure;
- making it more difficult for us to repay, refinance or satisfy our obligations with respect to our debt;
- limiting or eliminating our ability to obtain additional financing, if necessary, for working capital, capital expenditures, acquisitions, or other purposes; and
- any failure to comply with the obligations of any of our debt instruments could result in an event of default under the agreements governing such indebtedness, which in turn, if not cured or waived, could result in the acceleration of the applicable debt, and may result in the acceleration of any other debt to which a cross-acceleration or cross-default provision applies.

Our ability to service our current and future levels of indebtedness will depend upon, among other things, our future financial and operating performance, which will be affected by prevailing economic conditions, including the interest rate environment, and financial, business, regulatory and other factors, some of which are beyond our control.

There is no assurance that we will generate cash flow from operations or that future debt or equity financings will be available to us to enable us to pay our indebtedness or to fund other needs and we may be forced to take actions such as reducing or delaying business activities, acquisitions, investments or capital expenditures, selling assets, restructuring or refinancing debt, reducing or discontinuing dividends we may pay in the future, or seeking additional equity capital. These actions may not be effected on satisfactory terms, or at all. Any inability to generate sufficient cash flow or refinance our indebtedness on favorable terms could have a material adverse effect on our business, results of operations, and financial condition.

Higher levels of indebtedness and increased debt service obligations will effectively reduce the amount of funds available for other business purposes and may adversely affect us.

Interest costs related to the notes will be substantial, and our increased level of indebtedness, including any future borrowings, could reduce funds available for acquisitions, capital expenditures or other business purposes, impact our credit ratings, restrict our financial and operating flexibility or create competitive disadvantages compared to other companies with lower debt levels. Further, increased indebtedness could make it more difficult for us to satisfy our obligations with respect to our debt, increase our vulnerability to adverse economic or industry conditions and limit our ability to obtain additional financing.

Our ability to make payments of principal and interest on our indebtedness, including the notes, depends upon our future performance, which will be subject to general economic conditions and financial, business and other factors affecting our consolidated operations, many of which are beyond our control. If we are unable to generate sufficient cash flow from operations in the future to service our debt and meet our other cash requirements, we may be required, among other things:

- to seek additional financing in the debt or equity markets;
- to refinance or restructure all or a portion of our indebtedness, including the notes;
- to sell selected assets or businesses; or
- to reduce or delay planned capital or operating expenditures.

Such measures might not be sufficient to enable us to service our debt, including the notes, and meet our other cash requirements. In addition, any such financing, refinancing or sale of assets might not be available on economically favorable terms or at all.

Risks Relating to Our Common Stock

The market price of our shares may fluctuate widely.

The market price of our common stock may fluctuate widely, depending upon many factors, some of which may be beyond our control, including:

- our business profile and market capitalization may not fit the investment objectives of our stockholders, and our common stock may not be included in some indices, causing certain holders to sell their shares;
- a shift in our investor base;
- the actions of significant stockholders;
- our quarterly or annual earnings, or those of other companies in our industry;
- actual or anticipated fluctuations in our operating results;
- announcements of acquisitions or dispositions and strategic moves, such as acquisitions or restructurings, by us or our competitors;
- the failure of securities analysts to cover our common stock;
- the operating and stock price performance of other comparable companies;
- changes in expectations concerning our future financial performance and the future performance of our industry in general, including financial estimates and recommendations by securities analysts;
- differences between our actual financial and operating results and those expected by investors and analysts;
- changes in the regulatory framework of our industry and regulatory action;

- changes in general economic or market conditions; and

- the other factors described in these "Risk Factors" and elsewhere in this Annual Report on Form 10-K.

Stock markets in general have experienced volatility that has often been unrelated to the operating performance of a particular company. These broad market fluctuations may adversely affect the trading price of our common stock.

Our revenue, operating results, and profitability vary from quarter to quarter, which may result in volatility in our stock price.

Our revenue, operating results, and profitability have varied in the past and are likely to continue to vary significantly from quarter to quarter, which may lead to volatility in our stock price. These variations are due to several factors, including:

- the timing, size, and nature of our customer revenues and any losses with respect thereto;
- product and price competition regarding our products and services;
- the timing of introduction and market acceptance of new products, services or product enhancements by us, or our competitors;
- changes in our operating expenses;
- foreign currency fluctuations;
- the timing of acquisitions or divestitures of businesses, products, and services;
- the seasonality of car sales;
- personnel changes; and
- fluctuations in economic and financial market conditions.

There is substantial volatility in the domestic and international stock markets that could negatively impact our stock regardless of our actual operating performance.

The stock market in general and the market for technology companies in particular have experienced extreme price and volume fluctuations. These fluctuations have often been unrelated or disproportionate to operating performance. These broad market and industry factors could materially and adversely affect the market price of our stock, regardless of our actual operating performance.

In the past, following periods of volatility in the market price of a company's securities, securities class action litigation has often been brought against that company. Due to the potential volatility of our stock price, we may therefore be the target of securities litigation in the future. Securities litigation could result in substantial costs and divert management's attention and resources from our business.

Holders of our common stock may be adversely affected through the issuance of more senior securities or through dilution.

We may need to incur additional debt or issue equity in order to fund working capital, capital expenditures and product development requirements, maintain debt capacity levels, or to make acquisitions and other investments. If we raise funds through the issuance of debt or equity, any debt securities or preferred stock issued will have liquidation rights, preferences, and privileges senior to those of holders of our common stock. If we raise funds through the issuance of common equity, the issuance will dilute the ownership interests of our stockholders. We cannot assure our investors or potential investors that debt or equity financing will be available to us on acceptable terms, if at all. If we are not able to obtain sufficient financing, we may be unable to maintain or grow our business.

Provisions in our certificate of incorporation and by-laws and of Delaware law may prevent or delay an acquisition of our Company.

Our certificate of incorporation and by-laws and Delaware law contain provisions that are intended to deter coercive takeover practices and inadequate takeover bids by making them more burdensome to the bidder and to encourage prospective acquirers to negotiate with our Board of Directors rather than to attempt a hostile takeover. These provisions include, among others:

- the inability of our stockholders to act by written consent; and

- the right of our Board of Directors to issue preferred stock without stockholder approval.

We have not opted out of the protections afforded by Section 203 of the Delaware General Corporation Law, which provides that a stockholder acquiring more than 15% of our outstanding voting shares (an "Interested Stockholder") but less than 85% of such shares may not engage in certain business combinations with us for a period of three years subsequent to the date on which the stockholder became an Interested Stockholder unless, prior to such date, our Board of Directors approves either the business combination or the transaction which resulted in the stockholder becoming an Interested Stockholder or the business combination is approved by our Board of Directors and by the affirmative vote of at least 66 2/3% of the outstanding voting stock that is not owned by the Interested Stockholder.

We believe these provisions protect our stockholders from coercive or otherwise unfair takeover tactics by requiring potential acquirers to negotiate with our Board of Directors and by providing our Board of Directors with more time to assess any acquisition proposal, and are not intended to make our Company immune from takeovers. However, these provisions apply even if the offer may be considered beneficial by some stockholders and could delay or prevent an acquisition that our Board of Directors determines is not in the best interests of our Company and our stockholders.

We cannot assure you that we will continue to pay dividends or repurchase shares of our common stock at the times or in the amounts we currently anticipate.

Our Board of Directors has declared, and we have paid, regular quarterly cash dividends on our common stock. The payment of such quarterly dividends and any other future dividends will be at the discretion of our Board of Directors. There can be no assurance that we will continue to pay dividends, as to what the amount of any future dividends will be, or that we will have sufficient surplus under Delaware law to be able to pay any future dividends. This may result from extraordinary cash expenses, actual expenses exceeding contemplated costs, funding of capital expenditures, or increases in reserves. If we do not pay future dividends, the price of our common stock must appreciate for you to receive a gain on your investment in us. This appreciation may not occur and our stock may in fact depreciate in value.

In January 2017, the Board of Directors authorized us to repurchase up to $2.0 billion of our common stock. We have funded this return of capital plan through a combination of free cash flow and incremental borrowings that as intended brought leverage, measured as financial debt, net of cash, divided by adjusted EBITDA, to 3.4x as of June 30, 2019. We have repurchased a total of approximately $1.5 billion of shares of our common stock under the authorization. For fiscal 2020, we expect that the aggregate value of our quarterly cash dividend payments and repurchases of shares of our common stock will be between $75 million and $150 million. There can be no assurance that we will be able to repurchase shares of our common stock at the times or in the amounts we currently anticipate due to market conditions, our cash position, our ability to access new financing, applicable laws and other factors, or that the results of the share repurchase program will be as beneficial as we currently anticipate.

The interests of significant stockholders may conflict with our interests or those of other stockholders, and their actions could disrupt our business and affect the market price and volatility of our securities.

Since we began operating as an independent public company, three of our stockholders have, at various times, made filings on Schedule 13D with the SEC indicating that they may take positions or make proposals with respect to, or with respect to potential changes in, among other things, our operations, management, management and employee incentives, our certificate of incorporation and bylaws, the composition of our Board of Directors, ownership, capital allocation policies, capital or corporate structure, dividend policy, potential acquisitions involving us or certain of our businesses or assets, strategy, and plans. Any such positions or proposals may not in all cases be aligned with the interests of our other stockholders. Significant stockholders may be proponents of pursuing acquisitions, divestitures, and other transactions that, in their judgment, could enhance their investment, even though such transactions involve risks to our other stockholders.

Responding to actions by significant stockholders can be costly, time-consuming, and disrupting to our operations and can divert the attention of management and our employees. Such activities could interfere with our ability to execute our business strategy, including plans relating to, growth strategies, business process improvement, or the return of capital to our stockholders. In addition, a proxy contest for the election of directors at our annual meeting would require us to incur significant legal fees and proxy solicitation expenses and require significant time and attention by management and our Board of Directors. The perceived uncertainties as to our future direction also could affect the market price and volatility of our securities.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

We own or lease approximately 1.2 million square feet of real estate, consisting of office and other commercial facilities around the world. We own and maintain our global headquarters, totaling approximately 155,000 square feet, in Hoffman Estates, Illinois. We also own or lease approximately 24 locations in North America and 37 locations internationally.

We regularly add or reduce facilities as necessary to accommodate changes in our business operations. We believe that our facilities are adequate to meet our immediate needs, and that, if and when needed, we will be able to secure adequate additional space to accommodate future expansion.

Item 3. Legal Proceedings

For a description of our legal proceedings, see Item 8 of Part II, "Financial Statements and Supplementary Data - Note 16 - Commitments and Contingencies" included in this Annual Report of Form 10-K.

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 for Registrant's Common Equity

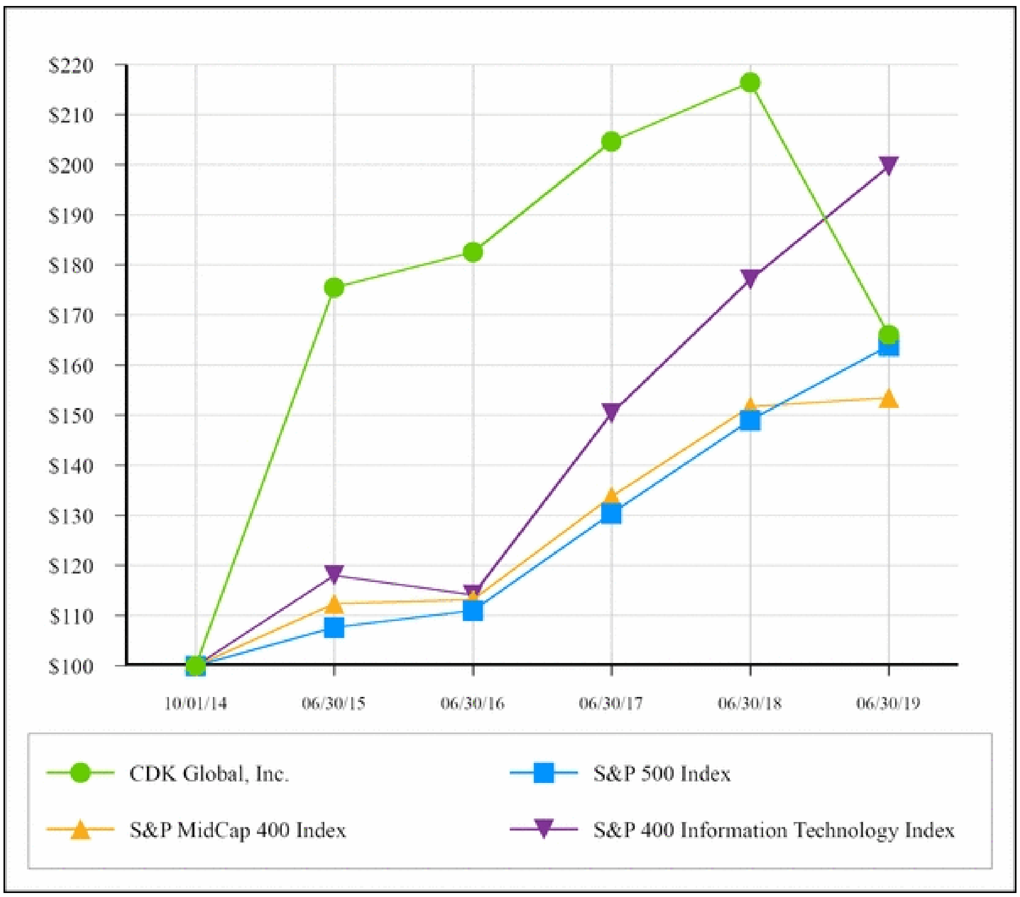
Our common stock began trading "regular way" on the NASDAQ Global Select Market under the symbol "CDK" on October 1, 2014. As of June 30, 2019, there were 14,500 holders of record of our common stock. As of such date, approximately 172,451 additional holders held their common stock in "street name."

Dividends

We expect to continue to pay dividends on our common stock. However, the declaration and payment of future dividends to holders of our common stock will be at the discretion of our Board of Directors and will depend upon many factors, including our financial condition, earnings, capital requirements of our businesses, legal requirements, regulatory constraints, industry practice and other factors that our Board of Directors deems relevant. There can be no assurance that we will continue to pay dividends or guarantee of the amounts of such dividends.

Stock Performance Graph

The following graph compares the cumulative total stockholder return on our common stock from October 1, 2014 to June 30, 2019 with the comparable cumulative return of the: (i) Standard & Poor's (S&P) 500 Index, (ii) S&P MidCap 400 Index, and (iii) S&P 400 Information Technology Index.



The graph assumes $100 was invested on October 1, 2014 in our common stock and in each of the indices and assumes that all cash dividends are reinvested. The comparisons in the graph are required by the Securities Exchange Commission ("SEC") and are not intended to forecast or be indicative of future performance of our common stock. The graph and related information shall not be deemed "soliciting material" or to be "filed" with the SEC, nor shall such information be incorporated by reference into any future filing under the Securities Act of 1933 or the Securities Exchange Act of 1934 (the "Exchange Act"), each as amended, except to the extent that we specifically incorporate it by reference into such filing.

Issuer Purchases of Equity Securities

The following table presents a summary of common stock repurchases made during the three months ended June 30, 2019.

Period	Total Number of Shares Purchased (1)	Average Price Paid per Share	Total Number of Shares as Part of Publicly Announced Programs (2)	Maximum Number (or Approximate Dollar Value) that May Yet Be Purchased Under the Program (2)
April 1 - 30, 2019	914,942	$ 59.73	914,468	$ 527,507,939
May 1 - 31, 2019	450,543	$ 55.96	450,469	$ 502,297,495
June 1 - 30, 2019	137	$ 48.59	—	$ 502,297,495
Total	1,365,622	$ 58.48	1,364,937	

(1) Pursuant to the Company's 2014 Omnibus Award Plan, shares of our common stock may be withheld upon exercise of stock options or vesting of restricted stock to satisfy tax withholdings. Shares withheld for such purposes have been included within the total number of shares purchased.

(2) In January 2017, the Board of Directors authorized us to repurchase up to $2.0 billion of our common stock under a return of capital program. This authorization will expire when it is exhausted or at such time as it is revoked by the Board of Directors.

Item 6. Selected Financial Data

Our spin-off from Automatic Data Processing, Inc. ("ADP") was completed on September 30, 2014. Selected financial data is presented on a combined basis for periods preceding the spin-off and on a consolidated basis for subsequent periods. The following table sets forth selected consolidated financial data from our audited consolidated financial statements as of June 30, 2019 and 2018 and for the years ended June 30, 2019, 2018, and 2017. The selected consolidated and combined financial data as of June 30, 2017, 2016, and 2015 and for the years ended June 30, 2016 and 2015 have been derived from consolidated and combined financial statements which are not included in this Form 10-K.

Our combined financial statements for periods preceding the spin-off present the combined financial condition and results of operations of the Company, which was under common control and common management by ADP until September 30, 2014. Our combined financial data may not be indicative of our future performance and does not necessarily reflect what our financial condition and results of operations would have been had we operated as a separate, stand-alone entity during the periods presented, including many changes that have occurred in operations and capitalization of our Company as a result of our spin-off from ADP. The selected financial data presented below should be read in conjunction with our consolidated financial statements and the accompanying notes included elsewhere in this Annual Report on Form 10-K and Item 7 of Part II "Management's Discussion and Analysis of Financial Condition and Results of Operations."

During the fourth quarter of fiscal year 2019, we committed to a plan to divest: (a) all of the assets of ANA; and (b) certain assets of CDKNA related to mobile advertising solutions and website services (collectively, the "Digital Marketing Business"). The operating results of the Digital Marketing business is being presented as discontinued operations for all periods presented.

(In millions, except per share amounts)	Years Ended June 30, 2019 (1)	2018	2017	2016	2015
Income Statement Data					
Revenues	$ 1,914.8	$ 1,798.0	$ 1,730.7	$ 1,658.9	$ 1,650.6
Earnings before income taxes	303.9	399.2	327.7	283.3	252.7
Provision for income taxes	62.2	88.1	92.8	90.1	91.4
Net earnings from continuing operations	241.7	311.1	234.9	193.2	161.3
(Loss) Earnings from discontinued operations, net of taxes	(109.8)	77.6	67.6	53.6	29.2
Net earnings	131.9	388.7	302.5	246.8	190.5
Net earnings attributable to noncontrolling interest	7.9	7.9	6.9	7.5	7.9
Net earnings attributable to CDK/Dealer Services	124.0	380.8	295.6	239.3	182.6
Net earnings (loss) attributable to CDK/Dealer Services per share - basic:					
Continuing operations	$ 1.86	$ 2.23	$ 1.55	$ 1.18	$ 0.96
Discontinued operations	$ (0.87)	$ 0.57	$ 0.46	$ 0.34	$ 0.18
Total net earnings attributable to CDK/Dealer Services per share - basic	$ 0.99	$ 2.80	$ 2.01	$ 1.52	$ 1.14
Net earnings (loss) attributable to CDK/Dealer Services per share - diluted:					
Continuing operations	$ 1.85	$ 2.21	$ 1.53	$ 1.17	$ 0.95
Discontinued operations	$ (0.87)	$ 0.57	$ 0.46	$ 0.34	$ 0.18
Total net earnings attributable to CDK/Dealer Services per share - diluted	$ 0.98	$ 2.78	$ 1.99	$ 1.51	$ 1.13
Weighted-average basic shares outstanding (2)	125.5	135.8	146.7	157.0	160.6
Weighted-average diluted shares outstanding (2)	126.4	136.8	148.2	158.0	161.6
Cash dividends declared per share	$ 0.600	$ 0.590	$ 0.555	$ 0.525	$ 0.360
Balance Sheet Data					
Cash and cash equivalents	$ 311.4	$ 804.4	$ 726.1	$ 219.1	$ 408.2
Total current assets	987.1	1,367.3	1,278.8	738.7	885.2
Property, plant and equipment, net	144.8	127.6	129.6	111.0	90.7
Total assets	2,999.0	3,008.4	2,883.1	2,365.0	2,518.5
Total current liabilities	837.9	548.4	552.6	523.4	498.4
Long-term debt	2,659.4	2,575.5	2,125.2	1,190.3	971.1
Total liabilities	3,713.5	3,355.7	2,939.9	1,988.8	1,734.4
Total stockholders' (deficit) equity	(714.5)	(347.3)	(56.8)	376.2	784.1

(1) Effective July 1, 2018, the Company adopted the Financial Accounting Standard Board Accounting Standards Update ("ASU") 2014-09, "Revenue from Contracts with Customers," and related ASUs using the modified retrospective approach. The comparative information has not been restated and continues to be reported under the accounting standards in effect for the periods presented. For further information, see Item 8 of Part II, "Financial Statements and Supplementary Data - Note 6 - Revenue."

(2) On September 30, 2014, ADP stockholders of record as of the close of business on September 24, 2014 received one share of our common stock for every three shares of ADP common stock held as of the record date. For all periods prior to the spin-off, basic and diluted earnings per share were computed using the number of shares of our stock outstanding on September 30, 2014, the date on which our common stock was distributed to the stockholders of ADP.

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

Forward-Looking Statements

The following discussion should be read in conjunction with our consolidated financial statements and accompanying notes thereto included elsewhere in this Annual Report on Form 10-K.

This Annual Report on Form 10-K contains, and other written or oral statements made from time to time by CDK Global, Inc. ("CDK," or the "Company") may contain, “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995. All statements, other than statements of historical fact, including: the Company's business outlook, generally accepted accounting principles in the United States ("GAAP") and adjusted EBITDA targets for the Company's fiscal year ending June 30, 2020 ("fiscal 2020"); the Company's plan to divest its Digital Marketing Business (defined below); other plans; objectives; forecasts; goals; beliefs; business strategies; future events; business conditions; results of operations; financial position business outlook trends; and other information, may be forward-looking statements. Words such as "might," "will," "may," "could," "should," "estimates," "expects," "continues," "contemplates," "anticipates," "projects," "plans," "potential," "predicts," "intends," "believes," "forecasts," "future," "assumes," and variations of such words or similar expressions are intended to identify forward-looking statements. In particular, information appearing under “Risk Factors” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations” includes forward-looking statements. These statements are based on management's expectations and assumptions and are subject to risks and uncertainties that may cause actual results to differ materially from those expressed, or implied by, these forward-looking statements. Factors that could cause actual results to differ materially from those contemplated by the forward-looking statements include:

- the Company's success in obtaining, retaining, and selling additional services to customers;
- the pricing of our products and services;
- overall market and economic conditions, including interest rate and foreign currency trends, and technology trends;
- adverse global economic conditions and credit markets and volatility in the countries in which we do business (such as the adverse economic impact and related uncertainty caused by the United Kingdom's ("U.K.") decision to leave the European Union ("Brexit"));
- auto sales and related industry changes;
- competitive conditions;
- changes in regulation (including new regulations that restrict the manner and extent to which we can control access to our DMS and other software applications and limit what, if anything, we may charge for integration with those applications);
- changes in technology, security breaches, interruptions, failures, and other errors involving our systems;
- availability of skilled technical employees/labor/personnel;
- the impact of new acquisitions and divestitures;
- employment and wage levels;
- availability of capital for the payment of debt service obligations or dividends or the repurchase of shares;
- any changes to our credit rating and the impact of such changes on our financing costs, rates, terms, debt service obligations, and access to capital market and working capital needs;
- the impact of our indebtedness, our access to cash and financing, and our ability to secure financing or financing at attractive rates;
- the onset of or developments in litigation involving contract, intellectual property, competition, stockholder, and other matters, and governmental investigations;
- our ability to complete the divestiture of the Digital Marketing Business; and
- the ability of our significant stockholders and their affiliates to significantly influence our decisions, or cause us to incur significant costs.

There may be other factors that may cause our actual results, performance or achievements to differ materially from those expressed in, or implied by, the forward-looking statements. We can give no assurances that any of the events anticipated by the forward-looking statements will occur or, if any of them do, what impact they will have on our results of operations and financial condition. You should carefully read the factors described elsewhere in this document under "Risk Factors" in Part I, Item 1A in this Annual Report on Form 10-K for a description of certain risks that could, among other things, cause our actual results to differ from these forward-looking statements.

All forward-looking statements speak only as of the date of this Annual Report on Form 10-K, even if subsequently made available by us on our website or otherwise, and are expressly qualified in their entirety by the cautionary statements included in this Annual Report on Form 10-K. We disclaim any obligation to update or revise forward-looking statements that may be made to reflect new information or future events or circumstances that arise after the date made or to reflect the occurrence of unanticipated events, other than as required by law.

The following discussion should be read in conjunction with our consolidated financial statements and accompanying notes thereto included elsewhere herein. In this Annual Report on Form 10-K, all references to "we," "our," and "us" refer collectively to CDK and its consolidated subsidiaries.

(Tabular amounts in millions, except per share amounts)

Executive Overview

CDK Global enables end-to-end automotive commerce across the globe. For over 40 years, we have served automotive retailers and original equipment manufacturers ("OEMs") by providing innovative solutions that allow them to better connect, manage, analyze, and grow their businesses. Our solutions automate and integrate all parts of the buying process, including the, acquisition, sale, financing, insuring, parts supply, repair, and maintenance of vehicles, in more than 100 countries around the world, for approximately 30,000 retail locations and most OEMs.

We generate revenue primarily by providing a broad suite of subscription-based software and technology solutions for automotive retailers through our CDK North America and CDK International segments. We are focused on the use of software-as-a-service ("SaaS") and mobile-centric solutions that are highly functional, flexible and fast. Our flagship Dealer Management System ("DMS") software solutions are hosted enterprise resource planning applications tailored to the unique requirements of the retail automotive industry. Our DMS products facilitate the sale of new and used vehicles, consumer financing, repair and maintenance services, and vehicle and parts inventory management. Additionally, these solutions enable company-wide accounting, financial reporting, cash flow management, and payroll services. Our DMSs are typically integrated with OEM data processing systems that enable automotive retailers to order vehicles and parts, receive vehicle records, process warranties, and check recall campaigns and service bulletins while helping them to fulfill their franchisee responsibilities to their OEM franchisors.

The Company is organized into two main operating groups, CDK North America ("CDKNA") and CDK International ("CDKI"), which are also reportable segments. A brief description of each of these two segments' operations is provided below. We previously reported the results of Advertising North America ("ANA") as a reportable segment. During the fourth quarter of fiscal year 2019, we committed to a plan to divest: (a) all of the assets of ANA; and (b) certain assets of CDKNA related to mobile advertising solutions and website services (collectively, the “Digital Marketing Business”). The Digital Marketing Business is presented as discontinued operations. Additional information on discontinued operations is contained in Item 8 of Part II, "Financial Statements and Supplementary Data, Note 4 - Discontinued Operation."

CDK North America

Through our CDKNA segment, we provide technology-based solutions, including our DMS products, a broad portfolio of layered software applications and services, a robust and secure interface to the DMS through our Partner Program, data management and business intelligence solutions, a variety of professional services, and a full range of customer support solutions. These solutions help automotive retailers, OEMs, consumers and other industry participants manage the acquisition, sale, financing, insuring, parts supply, and repair and maintenance of vehicles. Our solutions help our customers streamline their operations, better target and serve their customers, and enhance the financial performance of their retail operations. In addition to providing solutions to automotive retailers and OEMs, we also provide solutions to retailers and manufacturers of heavy trucks, construction equipment, agricultural equipment, motorcycles, boats, and other marine and recreational vehicles.

CDK International

Through our CDKI segment, we provide automotive retailers with core DMS solutions and we offer automotive retailers and OEMs a variety of professional services, custom programming, consulting, implementation and training solutions, as well as a full range of customer support solutions in approximately 100 countries outside of the United States ("U.S.") and Canada. The solutions that we provide within this segment allow our customers to streamline their business operations and enhance their financial performance within their local marketplace, and in some cases where we deal directly with OEMs, across international borders. Customers of this segment include automotive retail dealers and OEMs across Europe, the Middle East, Asia, Africa, and Latin America.

Business Process Modernization Program

As of July 1, 2019, we initiated a three-year program designed to improve the way we do business for our customers through best-in-class product offerings, process, governance and systems. The Business Process Modernization Program will include a comprehensive redesign in the way we go to market, including the quoting, contracting, fulfilling, and invoicing processes, and systems and tools used by the Company. We estimate the investment to implement this holistic business reform, including the design and implementation of a new enterprise resource planning ("ERP") system, will require investment of approximately $30 million over a three-year time horizon.

Business Transformation Plan

During fiscal year ended June 30, 2015 ("fiscal 2015"), we initiated a three-year business transformation plan designed to increase operating efficiency and improve the cost structure of our global operations. As we executed the business transformation plan, we continually monitored, evaluated and refined its structure, including its design, goals, term, and our estimate and allocation of total restructuring expenses. As part of this ongoing review process, in fiscal year ended June 30, 2017 ("fiscal 2017") we extended the business transformation plan by one year through the fiscal year ended June 30, 2019 ("fiscal 2019"). Additional information on the business transformation plan is contained in Item 8 of Part II, "Financial Statements and Supplementary Data, Note 7 - Restructuring."

In December 2015, we announced our intent to return $1.0 billion to our stockholders in the form of dividends and share repurchases. In December 2016, we completed the $1.0 billion return of capital plan. In February 2017, we announced our intent to return $750.0 million to $1.0 billion of capital to stockholders per calendar year through 2019 through a combination of dividends and share repurchases. Since this announcement, we have returned $1.7 billion to our stockholders through June 30, 2019. For fiscal 2020 we expect shareholder returns, including dividends and share repurchases, of $75.0 million to $150.0 million.

Sources of Revenues and Expenses

Revenues. We generally receive fee-based revenue by providing services to customers. We generate revenues from four categories: subscription, on-site licenses and installation, transaction services, and other.

In our CDKNA segment, we have the following sources of revenue:

Subscription: for software and technology solutions provided to automotive retailers and OEMs, which includes:

- DMSs and layered applications, which may be installed on-site at the customer’s location, or hosted and provided on a SaaS basis, including ongoing maintenance and support;
- Interrelated services such as installation, initial training, and data updates; and
- Hardware on a service basis, meaning no specific assets are identified or a substantive right of substitution exists.

On-site licenses and installation: DMSs applications where the software is installed on-site at the customer's location and interrelated services such as installation.

Transaction: fees per transaction to process credit reports, vehicle registrations, and automotive equity mining.

Other: consulting and professional services, sales of hardware, and other miscellaneous revenues.

CDKI revenues are generated primarily from Subscription revenue, aside from the absence of layered applications, and On-site licenses and installation revenue, as described above.

Expenses. Expenses generally relate to the cost of providing services to customers in our two reportable segments. In the CDKNA and CDKI segments, significant expenses include employee payroll and other labor-related costs, the cost of hosting customer systems, third-party costs for transaction-based solutions and licensed software utilized in our solution offerings, telecommunications, transportation and distribution costs, computer hardware, software, and other general overhead items. We also have some company-wide expenses attributable to management compensation and corporate overhead.

Potential Material Trends and Uncertainties in our Marketplace

A number of material trends and/or uncertainties in our marketplace could have either a positive or negative impact on our ability to conduct business, our results of operations, and/or our financial condition. The following is a summary of trends or uncertainties that have the potential to affect our liquidity, capital resources, or results of operations:

- Our revenues, operating earnings, and profitability have varied in the past as a result of these trends and uncertainties and are likely to continue to vary from quarter to quarter, which may lead to volatility in our stock price. These trends or uncertainties could occur in a variety of different areas of our business and the marketplace.

- Changing market trends, including changes in the automotive marketplace, both in North America and internationally, could have a material impact on our business. From time to time, the economic trends of a region could have an impact on the volume of automobiles sold at retail within one or more of the geographic markets in which we operate. To some extent, our business is impacted by these trends, either directly through a shift in the number of transactions processed by customers of our transactional business, or indirectly through changes in our customers' spending habits based on their own changes in profitability.

- Our presence in multiple markets internationally could pose challenges that would impact our business or results of operations. We currently operate in over 100 countries and derive a significant amount of our overall revenues from markets outside of North America. The geographic breadth of our presence exposes us to potential economic, social, regulatory, and political shifts.

- Our ability to bring new solutions to market, research and develop, or acquire the data and technology that enables those solutions is important to our continued success. In addition, our strategy includes the selective pursuit of acquisitions that support or complement our existing technology and solution set. An inability to invest in the continued development of new solutions for the automotive marketplace, or an inability to acquire new technology or solutions due to a lack of liquidity or resources, could impair our strategic position.

- Our success depends on our ability to maintain the security of our data and intellectual property, as well as our customers' data. Although we maintain a clear focus on data and system security, and we incur significant costs securing our infrastructure annually in support of that focus, we may experience interruptions of service or potential security issues that may be beyond our control.

Factors Affecting Comparability of Financial Results

Debt Financing

On June 18, 2018, we completed an offering of 5.875% senior notes with a $500.0 million aggregate principal amount due in 2026 (the "2026 notes"). The net proceeds from the sale of the 2026 notes were used for general corporate purposes, which included share repurchases, dividends, acquisitions (including our September 2018 acquisition of ELEAD1ONE ("ELEAD")), repayments of debt, working capital and capital expenditures.

On August 17, 2018, we entered into a five-year senior unsecured revolving credit facility, which was undrawn as of June 30, 2019. The credit facility replaced the previous unsecured revolving credit facility agreement, which was undrawn as of June 30, 2018. The revolving credit facility provides up to $750.0 million of borrowing capacity and includes a sub-limit of up to $100.0 million for loans in Euro, Pound Sterling, and, if approved by the revolving lenders, other currencies. In addition, the revolving credit facility contains an accordion feature that allows for an increase in the available borrowing capacity of up to $100.0 million, subject to the agreement of lenders under the revolving credit facility or other financial institutions that become lenders to extend commitments as part of the increased revolving credit facility. Borrowings under the revolving credit facility are available for general corporate purposes. The revolving credit facility will mature on August 17, 2023, subject to no more than two one-year extensions if lenders holding a majority of the revolving commitments approve such extensions.

On August 17, 2018, we borrowed an aggregate of $600.0 million under term loan facilities comprising a $300.0 million term loan facility that will mature on August 17, 2021 (our "three year term loan facility"), and a $300.0 million term loan facility that will mature on August 17, 2023 (our "five year term loan facility"). Borrowings under the three year term loan facility and the five year term loan facility were used to pay off all of the outstanding principal, interest and related fees with respect to each of the two $250.0 million senior unsecured term loan facilities, and the $400.0 million senior unsecured term loan facility.

On May 2, 2019, we completed an offering of 5.250% senior notes with a $500.0 million aggregate principal amount due in 2029 (the "2029 notes"). The net proceeds from the sale of the 2029 notes was primarily used to repay borrowings under the Company's revolving credit facility and for general corporate purposes, which included share repurchases, dividends, acquisitions, working capital and capital expenditures.

Acquisitions

On October 20, 2017, the Company acquired the outstanding stock of Dashboard Dealership Enterprises, a provider of executive reporting solutions for auto dealers.

On April 3, 2018, the Company acquired the membership interests of Progressus Media LLC, a provider of mobile advertising solutions for dealerships, agencies, and automotive marketing companies.

On September 14, 2018, the Company acquired the equity interests of ELEAD. ELEAD's automotive customer relationship management ("CRM") software and call center solutions enable interaction between sales, service and marketing operations to provide dealers with an integrated customer acquisition and retention platform.

Adoption of Accounting Standard Updates related to Revenue from Contracts with Customers and related ASUs

On July 1, 2018, we adopted Accounting Standard Update ("ASU") 2014-09, "Revenue from Contracts with Customers," and related ASUs ("ASC 606") which outlines a single comprehensive model for entities to use in accounting for revenue arising from contracts with customers and supersedes most current revenue recognition guidance, including industry-specific guidance using the modified retrospective approach. Results for reporting periods beginning after July 1, 2018 are presented under ASC 606, while prior period amounts are not adjusted and continue to be reported under the accounting standards in effect for the prior period. For additional information, refer to Item 8 of Part II, "Financial Statements and Supplementary Data - Note 6 - Revenue" of this Annual Report on Form 10-K.

Tax Cuts and Jobs Act of 2017

On December 22, 2017, the Tax Cuts and Jobs Act ("Tax Reform Act") was enacted into law. The Tax Reform Act significantly revises the U.S. corporate income tax laws by, among other things, reducing the corporate income tax rate from 35.0% to 21.0%. For additional information, refer to Item 8 of Part II, "Financial Statements and Supplementary Data - Note 10 - Income Taxes" of this Annual Report on Form 10-K.

Key Performance Measures

We regularly review the following key performance measures in evaluating our business results, identifying trends affecting our business, and making operating and strategic decisions:

Dealer Management System Customer Sites. We track the number of retail customer sites with an active DMS that sell vehicles in automotive and adjacent markets as an indicator of our opportunity set for generating subscription revenue. We consider a DMS to be active if we have billed a subscription fee for that solution during the most recently ended calendar month. Adjacent markets include heavy truck dealerships that provide vehicles to the over-the-road trucking industry, recreation dealerships in the motorcycle, marine, and recreational vehicle industries, and heavy equipment dealerships in the agriculture and construction equipment industries.

Average Revenue Per DMS Customer Site. Average revenue per DMS customer site is an indicator of the scope of adoption of our solutions by DMS customers, and we monitor changes in this metric to measure the effectiveness of our strategy to deepen our relationships with our current customer base through upgrading and expanding solutions. We calculate average revenue per DMS customer site by dividing the revenue generated from our solutions, in an applicable period by the average number of DMS customer sites in the same period. The metric excludes subscription revenue generated by customers not included in our DMS customer site count as well as subscription revenue related to certain installation and training activities that is deferred then recognized as revenue over the life of the contract. Revenue underlying this metric is based on budgeted foreign exchange rates. When we discuss growth in average revenue per DMS customer site, revenue for the comparable prior period has been adjusted to reflect budgeted foreign exchange rates for the current period.

Non-GAAP Measures

Throughout the following results of operations discussions, we disclose certain financial measures for our consolidated and operating segment results on both a GAAP and a non-GAAP (adjusted) basis. The non-GAAP financial measures disclosed should be viewed in addition to, and not as an alternative to, results prepared in accordance with GAAP. Our use of each of the following non-GAAP financial measures may differ from similarly titled non-GAAP financial measures presented by other companies, and other companies may not define these non-GAAP financial measures, or reconcile them to the comparable GAAP financial measures, in the same way.

Non-GAAP Financial Measure	Comparable GAAP Financial Measure
Adjusted earnings before income taxes	Earnings before income taxes
Adjusted provision for income taxes	Provision for income taxes
Adjusted net earnings attributable to CDK	Net earnings attributable to CDK
Adjusted diluted earnings attributable to CDK per share	Diluted earnings attributable to CDK per share
Adjusted EBITDA	Net earnings attributable to CDK
Adjusted EBITDA margin	Net earnings attributable to CDK margin
Constant currency adjusted revenues	Revenues
Constant currency adjusted earnings before income taxes	Earnings before income taxes

We use adjusted earnings before income taxes, adjusted provision for income taxes, adjusted net earnings attributable to CDK, adjusted diluted earnings attributable to CDK per share, adjusted EBITDA and adjusted EBITDA margin internally to evaluate our performance on a consistent basis, because the measures adjust for the impact of certain items that we believe do not directly reflect our underlying operations. By adjusting for these items we believe we have more precise inputs for use as factors in (i) our budgeting process, (ii) making financial and operational decisions, (iii) evaluating ongoing segment and overall operating performance on a consistent period-to-period basis and relative to our competitors, (iv) target leverage calculations, (v) debt covenant calculations, and (vi) determining incentive-based compensation.

We believe our non-GAAP financial measures are helpful to users of the financial statements because they (i) provide investors with meaningful supplemental information regarding financial performance by excluding certain items, (ii) permit investors to view performance using the same tools that management uses, and (iii) otherwise provide supplemental information that may be useful to investors in evaluating our ongoing operating results on a consistent basis. We believe that the presentation of these non-GAAP financial measures, when considered in addition to the corresponding GAAP financial measures and the reconciliations to those measures disclosed below, provides investors with a better understanding of the factors and trends affecting our business than could be obtained absent these disclosures.

We review revenues and adjusted earnings before income taxes on a constant currency basis to understand underlying business trends. To present these results on a constant currency basis, current period results for entities reporting in currencies other than the U.S. dollar were translated into U.S. dollars using the average monthly exchange rates for the comparable prior period. As a result, constant currency results neutralize the effects of foreign currency.

We incorporated additional adjustments within our calculations of non-GAAP financial measures where management has deemed it appropriate to better reflect our underlying operations. These adjustments are inconsistent in amount and frequency and do not directly reflect our underlying operations. Therefore, management believes that excluding such information provides us with a better understanding of our ongoing operating performance across periods. Prior period information has been revised to conform to the new presentation.

Fiscal 2019 Modifications:

- Effective July 1, 2018, we modified our presentation of adjusted earnings before income taxes, adjusted provision for income taxes, adjusted net earnings attributable to CDK, and adjusted diluted net earnings attributable to CDK per share to include adjustments for amortization of acquired intangible assets. Although we exclude amortization of acquired intangible assets from our non-GAAP measure, we believe that it is important for the users of the financial statements to understand that the associated intangible assets contribute to revenue generation.

- Effective October 1, 2018, we modified our presentation of adjusted earnings before income taxes, adjusted provision for income taxes, adjusted net earnings attributable to CDK, adjusted diluted earnings attributable to CDK per share, and adjusted EBITDA to include adjustments for impairment of intangible assets.

- During the fourth quarter of fiscal 2019, we modified our presentation of:
  i. adjusted earnings before income taxes, adjusted provision for income taxes, adjusted net earnings attributable to CDK, adjusted diluted net earnings attributable to CDK per share, and adjusted EBITDA to include adjustments for loss from equity method investment;
  ii. adjusted provision for income taxes, adjusted net earnings attributable to CDK, adjusted diluted net earnings attributable to CDK per share to include adjustments for a decrease in valuation allowance; and

iii. adjusted net earnings attributable to CDK, adjusted diluted net earnings attributable to CDK per share, and adjusted EBITDA to include adjustments for loss (earnings) from discontinued operations, net of taxes.

Results of Operations

We review results on a constant currency basis to understand underlying business trends. To present these results on a constant currency basis, current period results for entities reporting in currencies other than the U.S. dollar were translated into U.S. dollars using the average monthly exchange rate for the comparable prior period. As a result, constant currency results neutralize the effects of foreign currency.

Fiscal 2019 Compared to Fiscal 2018

The following is a discussion of the results of our consolidated results of operations for fiscal 2019 and 2018, respectively. For a discussion of our operations by segment, see "Analysis of Reportable Segments" below.

The table below presents consolidated statements of operations for the periods indicated and the dollar change and percentage change between periods.

	Years Ended June 30,		Change	
	2019	2018	$	%
Revenues	$ 1,914.8	$ 1,798.0	$ 116.8	6 %
Costs of revenues	899.8	854.5	45.3	5 %
Selling, general and administrative expenses	444.7	441.2	3.5	1 %
Restructuring expenses	28.0	20.6	7.4	36 %
Litigation provision	90.0	—	90.0	n/m
Total expenses	1,462.5	1,316.3	146.2	11 %
Operating earnings	452.3	481.7	(29.4)	(6)%
Interest expense	(139.1)	(95.9)	(43.2)	(45)%
Loss from equity method investment	(17.0)	—	(17.0)	n/m
Other income, net	7.7	13.4	(5.7)	(43)%
Earnings before income taxes	303.9	399.2	(95.3)	(24)%
Margin %	*15.9%*	*22.2%*		
Provision for income taxes	(62.2)	(88.1)	25.9	29 %
Effective tax rate	*20.5%*	*22.1%*		
Net earnings from continuing operations	241.7	311.1	(69.4)	(22)%
(Loss) Earnings from discontinued operations, net of taxes	(109.8)	77.6	(187.4)	n/m
Net earnings	131.9	388.7	(256.8)	(66)%
Less: net earnings attributable to noncontrolling interest	7.9	7.9	—	— %
Net earnings attributable to CDK	$ 124.0	$ 380.8	$ (256.8)	(67)%

Revenues. Revenues for fiscal 2019 increased by $116.8 million as compared to fiscal 2018. The CDKNA segment contributed $151.3 million, partially offset by declines in the CDKI segment of $34.5 million. The impact of foreign exchange rates on revenues was a decrease of $18.5 million. The foreign exchange rate impact was primarily due to the strength of the Euro, Canadian dollar, British pound, and South African rand against the U.S. dollar.

Cost of Revenues. Cost of revenues for fiscal 2019 increased by $45.3 million as compared to fiscal 2018 which includes a $24.7 million decrease for costs to fulfill that were deferred and costs related to revenue that was recognized prior to July 1, 2018 upon adoption of ASC 606. The constant currency impact of foreign exchange rates on cost of revenues was a decrease of $8.6 million. Cost of revenues increased due to the ELEAD acquisition, a $12.0 million impairment charge related to write-off of certain intangible assets within the CDKNA segment, higher costs relating to investments in strategic growth initiatives, higher transaction and integration-related costs and incentive compensation; and a $2.6 million impairment charge related to write-off of certain long-lived assets associated with exiting a facility within the Other segment. These increases were partially offset by operating efficiencies obtained from the business transformation plan, and lower other business transformation expenses. Cost of revenues include expenses to research, develop, and deploy new and enhanced solutions for our customers of $79.5 million and $115.0 million for fiscal 2019 and 2018, respectively, representing 4.2% and 6.4% of revenues, respectively.

Selling, General and Administrative Expenses. Selling, general and administrative expenses for fiscal 2019 increased $3.5 million as compared to fiscal 2018. ASC 606 did not have a significant impact on selling, general and administrative expenses in fiscal 2019. The constant currency impact of foreign exchange rates on selling, general and administrative expenses was a decrease of $4.1 million. Selling, general and administrative expenses increased due to the ELEAD acquisition, higher legal and other expenses related to regulatory and competition matters, higher officer transitions related expense, and a $2.9 million impairment charge related to write-off of certain intangible assets within the CDKNA segment. These increases were partially offset by operating efficiencies obtained from the business transformation plan, costs to implement the new revenue recognition standard in the prior year, lower transaction and integration related expenses and other business transformation expenses, and a net benefit to true-up contingent consideration liabilities related to prior acquisitions.

Restructuring Expenses. Restructuring expenses related to the business transformation plan for fiscal 2019 increased $7.4 million as compared to fiscal 2018 and relate to the business transformation plan we initiated in fiscal 2015.

Litigation Provision. During fiscal 2019, the Company recorded a $90.0 million litigation provision related to antitrust lawsuits. Additional information on litigation provision is contained in Item 8 of Part II, "Financial Statements and Supplementary Data - Note 16 - Commitments and Contingencies."

Interest Expense. Interest expense for fiscal 2019 increased $43.2 million as compared to fiscal 2018 largely due to higher average debt levels and interest rate in fiscal 2019 compared to fiscal 2018.

Loss from Equity Method Investment. During fiscal 2019, the Company recorded a $17.0 million loss from equity method investment related to termination of a joint-venture contract.

Other Income, Net. Other income, net for fiscal 2019 decreased by $5.7 million as compared to fiscal 2018 primarily due to lower interest income in fiscal 2019 and a recovery of an impaired non-operating receivable in fiscal 2018.

Provision for Income Taxes. The effective tax rate for fiscal 2019 was 20.5% as compared to 22.1% for fiscal 2018. The effective tax rate was impacted by $2.8 million of net expense in fiscal 2019 and $18.5 million of net benefit in fiscal 2018 for one-time adjustments related to the Tax Reform Act. In fiscal 2019, the adjustments to the valuation allowance for the capital loss carryforwards including a $14.8 million decrease related to the capital gain that we expect to recognize in conjunction with the sale of the assets of the Digital Marketing Business which were classified as held for sale in the fourth quarter of fiscal 2019, and a $4.3 million increase related to a new capital loss generated in the fourth quarter of fiscal 2019 resulting from the termination of a joint venture agreement resulted in a net favorable impact to the effective tax rate. In addition, the effective tax rate for fiscal 2019 and 2018 was favorably impacted by $1.4 million and $5.1 million of excess tax benefits, respectively. The federal statutory income tax rate was 21.0% in fiscal 2019 compared to 28.1% in fiscal 2018.

Loss (Earnings) from Discontinued Operations, Net of Taxes. During the fourth quarter of fiscal year 2019, the Company committed to a plan to divest Digital Marketing business which is comprising: (a) all of the assets of ANA; and (b) certain assets of our CDKNA segment related to mobile advertising solutions and website services. Loss (Earnings) from discontinued operations, net of taxes reflects the results of the Digital Marketing Business.

During fiscal 2019, the Digital Marketing Business was impacted by a $168.7 million goodwill impairment charge. In addition, the Digital Marketing Business generated lower earnings due to a decline in our advertising business revenues which were impacted by a reduction in OEM-funded advertising placements, local marketing association internet advertising placements, and dealer spend; and decline in our website business revenues.

Net Earnings Attributable to CDK. Net earnings attributable to CDK for fiscal 2019 decreased $256.8 million as compared to fiscal 2018. The decrease in net earnings attributable to CDK was primarily due to the factors previously discussed.

Consolidated Non-GAAP Results

The tables below present the reconciliation of the most directly comparable GAAP measures on both an ASC 606 and an ASC 605 basis to constant currency revenues, constant currency adjusted earnings before income taxes, adjusted provision for income taxes, adjusted net earnings attributable to CDK, and adjusted diluted earnings attributable to CDK per share.

	Years Ended June 30,				
	2019		2018	ASC 605 Change	
	ASC 606	ASC 605		$	%
Revenues [1]	**$ 1,914.8**	**$ 1,945.8**	**$ 1,798.0**	**$ 147.8**	**8 %**
Impact of exchange rates	18.5	19.4	—	19.4	
Constant currency revenues	$ 1,933.3	$ 1,965.2	$ 1,798.0	$ 167.2	9 %
Earnings before income taxes [1]	**$ 303.9**	**$ 309.7**	**$ 399.2**	**$ (89.5)**	**(22)%**
Margin %	*15.9%*	*15.9%*	*22.2%*		
Impairment of intangible assets [2]	14.9	14.9	—	14.9	
Restructuring expenses [1] [3]	28.0	28.0	20.6	7.4	
Other business transformation expenses [1] [3]	20.9	20.9	45.0	(24.1)	
Total stock-based compensation [1] [4]	30.5	30.5	33.4	(2.9)	
Amortization of acquired intangible assets [1] [5]	15.3	15.3	11.1	4.2	
Transaction and integration-related costs [1] [6]	13.2	13.2	15.6	(2.4)	
Officer transition expense [7]	6.4	6.4	0.6	5.8	
Legal and other expenses related to regulatory and competition matters [8]	111.2	111.2	7.4	103.8	
Loss from equity method investment [9]	17.0	17.0	—	17.0	
Tax matters indemnification gain [10]	—	—	(0.4)	0.4	
Adjusted earnings before income taxes [1]	**$ 561.3**	**$ 567.1**	**$ 532.5**	**$ 34.6**	**6 %**
Adjusted margin %	*29.3%*	*29.1%*	*29.6%*		
Impact of exchange rates	6.0	6.5	—	6.5	
Constant currency adjusted earnings before income taxes	$ 567.3	$ 573.6	$ 532.5	$ 41.1	8 %

	Years Ended June 30,				
	2019		2018	ASC 605 Change	
	ASC 606	ASC 605		$	%
Provision for income taxes [1]	**$ 62.2**	**$ 64.2**	**$ 88.1**	**$ (23.9)**	**(27)%**
Effective tax rate	*20.5%*	*20.7%*	*22.1%*		
Income tax effect of pre-tax adjustments [11]	57.4	57.4	40.4	17.0	
Decrease in valuation allowance [12]	14.8	14.8	—	14.8	
Excess tax benefit from stock-based compensation [13]	1.4	1.4	5.1	(3.7)	
Pre spin-off filed return adjustment [14]	—	—	0.4	(0.4)	
Impact of U.S. tax reform [15]	(2.8)	(2.8)	18.5	(21.3)	
Adjusted provision for income taxes [1]	**$ 133.0**	**$ 135.0**	**$ 152.5**	**$ (17.5)**	**(11)%**
Adjusted effective tax rate	*23.7%*	*23.8%*	*28.6%*		

	Years Ended June 30,			ASC 605 Change	
	2019		2018		
	ASC 606	ASC 605		$	%
Net earnings	**$ 131.9**	**$ 136.2**	**$ 388.7**	**$ (252.5)**	**(65)%**
Less: net earnings attributable to noncontrolling interest	**7.9**	**7.9**	**7.9**		
Net earnings attributable to CDK	**124.0**	**128.3**	**380.8**	**(252.5)**	**(66)%**
Loss (Earnings) from discontinued operations, net of taxes (16)	109.8	109.3	(77.6)	186.9	
Impairment of intangible assets (2)	14.9	14.9	—	14.9	
Restructuring expenses (1) (3) (17)	27.9	27.9	20.4	7.5	
Other business transformation expenses (1) (3) (17)	20.9	20.9	44.8	(23.9)	
Total stock-based compensation (1) (4) (17)	30.5	30.5	33.3	(2.8)	
Amortization of acquired intangible assets (1) (5) (17)	15.0	15.0	10.8	4.2	
Transaction and integration-related costs (1) (6)	13.2	13.2	15.6	(2.4)	
Officer transition expense (7)	6.4	6.4	0.6	5.8	
Legal and other expenses related to regulatory and competition matters (8) (17)	111.0	111.0	7.3	103.7	
Loss from equity method investment (9)	17.0	17.0	—	17.0	
Tax matters indemnification gain (10)	—	—	(0.4)	0.4	
Income tax effect of pre-tax adjustments (11)	(57.4)	(57.4)	(40.4)	(17.0)	
Decrease in valuation allowance (12)	(14.8)	(14.8)	—	(14.8)	
Excess tax benefit from stock-based compensation (13)	(1.4)	(1.4)	(5.1)	3.7	
Pre spin-off filed return adjustment (14)	—	—	(0.4)	0.4	
Impact of U.S. tax reform (15)	2.8	2.8	(18.5)	21.3	
Adjusted net earnings attributable to CDK (1)	**$ 419.8**	**$ 423.6**	**$ 371.2**	**$ 52.4**	**14 %**

	Years Ended June 30,			ASC 605 Change	
	2019		2018		
	ASC 606	ASC 605		$	%
Diluted earnings attributable to CDK per share	**$ 0.98**	**$ 1.02**	**$ 2.78**	**$ (1.76)**	**(63)%**
Loss (Earnings) from discontinued operations, net of taxes (16)	0.87	0.86	(0.57)		
Impairment of intangible assets (2)	0.12	0.12	—		
Restructuring expenses (1) (3) (17)	0.22	0.22	0.15		
Other business transformation expenses (1) (3) (17)	0.17	0.17	0.33		
Total stock-based compensation (1) (4) (17)	0.24	0.24	0.25		
Amortization of acquired intangible assets (1) (5) (17)	0.12	0.12	0.08		
Transaction and integration-related costs (1) (6)	0.10	0.10	0.12		
Officer transition expense (7)	0.05	0.05	—		
Legal and other expenses related to regulatory and competition matters (8) (17)	0.88	0.88	0.05		
Loss from equity method investment (9)	0.13	0.13	—		
Tax matters indemnification gain (10)	—	—	—		
Income tax effect of pre-tax adjustments (11)	(0.45)	(0.45)	(0.30)		
Decrease in valuation allowance (12)	(0.12)	(0.12)	—		
Excess tax benefit from stock-based compensation (13)	(0.01)	(0.01)	(0.04)		
Pre spin-off filed return adjustment (14)	—	—	—		
Impact of U.S. tax reform (15)	0.02	0.02	(0.14)		
Adjusted diluted earnings attributable to CDK per share	**$ 3.32**	**$ 3.35**	**$ 2.71**	**$ 0.64**	**24 %**
Weighted-average common shares outstanding:					
Diluted	126.4	126.4	136.8		

(1) Excludes amounts attributable to discontinued operations.

(2) Impairment of intangible assets consists of the write-off of certain intangible assets within the CDKNA segment and is reported within cost of revenues and selling, general and administrative expenses.

(3) Restructuring expense recognized in connection with our business transformation plan. Other business transformation expenses incurred in connection with our business transformation plan and included within cost of revenues and selling, general and administrative expenses.

(4) Total stock-based compensation expense included within cost of revenues and selling, general and administrative expenses.

(5) Amortization of acquired intangible assets consists of amortization of intangible assets such as customer lists, purchased software, and trademarks acquired in connection with business combinations. Although we exclude amortization of acquired intangible assets from our non-GAAP measure, we believe that it is important for the users of the financial statements to understand that the associated intangible assets contribute to revenue generation.

(6) Transaction and integration-related expenses include: (i) legal, accounting, outside service fees, and other costs incurred in connection with assessment and integration of acquisitions and other strategic business opportunities; and (ii) post-close adjustments to acquisition-related contingent consideration, reported within cost of revenues and selling, general and administrative expenses.

(7) Officer transition expense includes severance expense in connection with officer departures included within selling, general and administrative expenses.

(8) Legal and other expenses, including litigation provision, related to regulatory and competition matters included within selling, general and administrative expenses and litigation provision.

(9) Loss from equity method investment in connection with termination of a joint-venture contract.

(10) Net gain recorded within other income, net associated with an indemnification receivable from ADP for pre spin-off tax periods in accordance with tax matters agreement.

(11) Income tax effect of pre-tax adjustments calculated at applicable statutory rates.

(12) Decrease in valuation allowance associated with a deferred tax asset for a capital loss carryforward which the Company expects to utilize in connection with the plan to divest the Digital Marketing Business.

(13) Excess tax benefit from stock-based compensation.

(14) Net income tax benefit to adjust the liability for pre spin-off tax returns related to the gain.

(15) As a result of the Tax Reform Act, a $3.4 million deferred tax charge associated with executive compensation limitations partially offset by $0.6 million benefit due to a true-up to the one-time transition tax impacted fiscal 2019. An estimated one-time tax benefit of $26.2 million from the revaluation of the net deferred tax liability partially offset by an estimated one-time expense of $7.7 million associated with undistributed foreign earnings impacted fiscal 2018.

(16) Loss (Earnings) from discontinued operations, net of taxes associated with the Company's plan to divest the Digital Marketing Business.

(17) The portion of expense related to noncontrolling interest of $0.1 million, $0.3 million and $0.2 million has been removed from restructuring expenses, amortization of acquired intangible assets, and legal and other expenses related to regulatory and competition matters, respectively, in fiscal 2019. The portion of expense related to noncontrolling interest of $0.2 million, $0.2 million, $0.3 million, $0.1 million, and $0.1 million has been excluded from restructuring expenses, other business transformation expenses, amortization of acquired intangible assets, stock-based compensation expenses, and legal and other expenses related to regulatory and competition matters, respectively, in fiscal 2018.

Adjusted Earnings Before Income Taxes. Adjusted earnings before income taxes for fiscal 2019 increased $34.6 million as compared to fiscal 2018. ASC 605 adjusted margin decreased from 29.6% to 29.1%. ASC 605 constant currency impact of foreign exchange rates on adjusted earnings before income taxes was a decrease of $6.5 million. ASC 605 adjusted earnings before income taxes were favorably impacted by operating efficiencies obtained from our business transformation plan, primarily related to lower-headcount and geographic mix, contribution from the ELEAD acquisition, and costs to implement the new revenue recognition standard in prior year; partially offset by higher interest expense, investments in strategic growth initiatives, and incentive compensation.

Adjusted Provision for Income Taxes. ASC 605 adjusted effective tax rate for fiscal 2019 was 23.8% impacted by a lower federal statutory tax rate as compared to 28.6% for fiscal 2018.

Adjusted Net Earnings Attributable to CDK. ASC 605 adjusted net earnings attributable to CDK for fiscal 2019 increased $52.4 million as compared to fiscal 2018. The increase in adjusted net earnings attributable to CDK was primarily due to the items discussed above in adjusted earnings before income taxes, partially offset by the associated tax effect.

The table below presents the reconciliation of net earnings attributable to CDK to adjusted EBITDA.

	Years Ended June 30,			Change	
	2019		2018	ASC 605	
	ASC 606	**ASC 605**		**$**	**%**
Net earnings attributable to CDK	**$ 124.0**	**$ 128.3**	**$ 380.8**	**$ (252.5)**	**(66)%**
Margin %	*6.5%*	*6.6%*	*21.2%*		
Net earnings attributable to noncontrolling interest [2]	7.9	7.9	7.9	—	
Loss (Earnings) from discontinued operations, net of taxes [3]	109.8	109.3	(77.6)	186.9	
Provision for income taxes [1] [4]	62.2	64.2	88.1	(23.9)	
Interest expense [5]	139.1	139.1	95.9	43.2	
Depreciation and amortization [1] [6]	89.8	89.8	70.8	19.0	
Impairment of intangible assets [7]	14.9	14.9	—	14.9	
Total stock-based compensation [1] [8]	30.5	30.5	33.4	(2.9)	
Restructuring expenses [1] [9]	28.0	28.0	20.6	7.4	
Other business transformation expenses [1] [9]	20.9	20.9	44.8	(23.9)	
Transaction and integration-related costs [1] [10]	13.2	13.2	15.6	(2.4)	
Officer transition expense [11]	6.4	6.4	0.6	5.8	
Legal and other expenses related to regulatory and competition matters [12]	111.2	111.2	7.4	103.8	
Loss from equity method investment [13]	17.0	17.0	—	17.0	
Tax matters indemnification gain [14]	—	—	(0.4)	0.4	
Adjusted EBITDA	**$ 774.9**	**$ 780.7**	**$ 687.9**	**$ 92.8**	**13 %**
Adjusted margin %	*40.5%*	*40.1%*	*38.3%*		

(1) Excludes amounts attributable to discontinued operations.

(2) Net earnings attributable to noncontrolling interest included within the financial statements.

(3) Loss (Earnings) from discontinued operations, net of taxes associated with the Company's plan to divest the Digital Marketing Business.

(4) Provision for income taxes included within the financial statements.

(5) Interest expense included within the financial statements.

(6) Depreciation and amortization included within the financial statements.

(7) Impairment of intangible assets consists of the write-off of certain intangible assets within the CDKNA segment and is reported within cost of revenues and selling, general and administrative expenses.

(8) Total stock-based compensation expense recognized.

(9) Restructuring expense recognized in connection with our business transformation plan in fiscal 2019 and 2018. Other business transformation expenses incurred in connection with our business transformation plan and included within cost of revenues and selling, general and administrative expenses. Other business transformation expenses exclude $0.2 million of accelerated depreciation expense for fiscal 2018.

(10) Transaction and integration-related expenses include: (i) legal, accounting, outside service fees, and other costs incurred in connection with assessment and integration of acquisitions and other strategic business opportunities; and (ii) post-close adjustments to acquisition-related contingent consideration, reported within cost of revenues and selling, general and administrative expenses.

(11) Officer transition expense includes severance expense in connection with officer departures is included within selling, general and administrative expenses.

(12) Legal and other expenses, including litigation provision, related to regulatory and competition matters included within selling, general and administrative expenses and litigation provision.

(13) Loss from equity method investment recognized in connection with termination of a joint-venture contract.

(14) Net gain recorded within other income, net associated with an indemnification receivable from ADP for pre spin-off tax periods in accordance with tax matters agreement.

Adjusted EBITDA. ASC 605 adjusted EBITDA for fiscal 2019 increased $92.8 million as compared to fiscal 2018. ASC 605 adjusted margin increased from 38.3% to 40.1%. Adjusted EBITDA was favorably impacted by operating efficiencies obtained from initiatives under our business transformation plan, primarily related to lower-headcount and geographic mix, contribution from the ELEAD acquisition, and costs to implement the new revenue recognition standard in the prior year; partially offset by higher investments in strategic growth initiatives, and incentive compensation.

Analysis of Reportable Segments

During the fourth quarter of fiscal year 2019, we committed to a plan to divest: (a) all of the assets of ANA which we previously reported as a reportable segment; and (b) certain assets of CDKNA related to mobile advertising solutions and website services (collectively, the "Digital Marketing Business"). The Digital Marketing Business is presented as discontinued operations. Additional information on discontinued operations is contained in the "Consolidated Results of Operations" of this section and Item 8 of Part II, "Financial Statements and Supplementary Data - Note 4 - Discontinued Operations."

The following is a discussion of the results of our continuing operations by reportable segment for fiscal 2019 and 2018. Certain expenses are charged to the reportable segments at a standard rate for management reporting purposes. Other costs are charged to the reportable segments based on management's responsibility for the applicable costs.

CDK North America

The table below presents the reconciliation of revenues to constant currency revenues, and earnings before income taxes to constant currency adjusted earnings before income taxes for the CDKNA segment. Refer to the footnotes in "Consolidated Non-GAAP Results" for additional information on the adjustments presented below.

	Years Ended June 30,			Change	
	2019		2018	ASC 605	
	ASC 606	**ASC 605**		$	%
Revenues	**$ 1,593.0**	**$ 1,598.2**	**$ 1,441.7**	**$ 156.5**	**11 %**
Impact of exchange rates	4.0	4.0	—	4.0	
Constant currency revenues	$ 1,597.0	$ 1,602.2	$ 1,441.7	$ 160.5	11 %
Earnings before income taxes	**$ 517.5**	**$ 505.0**	**$ 576.4**	**$ (71.4)**	**(12)%**
Margin %	*32.5%*	*31.6%*	*40.0%*		
Transaction and integration-related costs	11.2	11.2	15.6	(4.4)	
Amortization of acquired intangible assets	14.6	14.6	7.6	7.0	
Impairment of intangible assets	14.9	14.9	—	14.9	
Legal and other expenses related to regulatory and competition matters	111.2	111.2	7.4	103.8	
Loss from equity method investment	17.0	17.0	—	17.0	
Adjusted earnings before income taxes	**$ 686.4**	**$ 673.9**	**$ 607.0**	**$ 66.9**	**11 %**
Adjusted margin %	*43.1%*	*42.2%*	*42.1%*		
Impact of exchange rates	2.5	2.3	—	2.3	
Constant currency adjusted earnings before income taxes	$ 688.9	$ 676.2	$ 607.0	$ 69.2	11 %

The table below presents revenue disaggregation for the CDKNA segment for ASC 606 and ASC 605 for fiscal 2019 and ASC 605 for fiscal 2018. In connection with the adoption of ASC 606, we revised the presentation of certain sources of revenue as on-site license and installation and other. Prior period data has not been restated to reflect this new presentation.

	Years Ended June 30,			Change	
	2019		2018	ASC 605	
	ASC 606	ASC 605		$	%
Revenues:					
Subscription	$ 1,283.3	$ 1,291.8	$ 1,176.4	$ 115.4	10 %
On-site license and installation	7.9	—	—	—	— %
Transaction	162.5	162.9	164.0	(1.1)	(1)%
Other	139.3	143.5	101.3	42.2	42 %
Total revenues	$ 1,593.0	$ 1,598.2	$ 1,441.7	$ 156.5	11 %

Revenues. CDKNA ASC 606 revenues were $5.2 million less than ASC 605 revenues for fiscal 2019 related to the change in timing of recognition under ASC 606 where on-site license and installation revenues are being recorded up-front upon installation instead of ratably over time.

CDKNA ASC 605 revenues for fiscal 2019 increased $156.5 million as compared to fiscal 2018 and includes an unfavorable currency impact of $4.0 million.

Subscription revenues grew due to the ELEAD acquisition, an increase in average revenue per DMS customer site primarily due to pricing and higher layered application sales, and a net increase in DMS customer site count which increased from 14,557 sites as of June 30, 2018 to 14,681 sites as of June 30, 2019. Other revenues increased $42.2 million primarily due to the ELEAD acquisition. Transaction revenues decreased due to a decline in revenues generated from automotive equity mining.

Earnings before Income Taxes. CDKNA ASC 606 earnings before income taxes were $12.5 million higher compared to ASC 605 earnings before income taxes for fiscal 2019 primarily due to timing of revenues discussed above and additional costs to fulfill that are now deferred.

CDKNA ASC 605 earnings before income taxes decreased by $71.4 million for fiscal 2019 as compared to fiscal 2018 and includes an unfavorable currency impact of $2.3 million. Margin decreased from 40.0% to 31.6%.

CDKNA ASC 605 earnings before income taxes for fiscal 2019 decreased compared to fiscal 2018 primarily due to higher legal and other expenses related to regulatory and competition matters which includes a $90.0 million litigation provision related to anti-trust lawsuits, a $17.0 million loss from equity method investment related to termination of a joint-venture contract, a $14.9 million impairment charge related to the write-off of certain intangible assets, investments related to strategic growth initiatives, higher incentive compensation and amortization of acquired intangibles, and a net benefit from recovery of a non-operating receivable in prior year. These decreases were partially offset by operating efficiencies driven by our business transformation plan, contribution from the ELEAD acquisition and other subscription revenue growth noted above, lower transition and integration related expenses, and a net benefit to true-up the contingent consideration liabilities related to prior acquisitions.

CDK International

The table below presents the reconciliation of revenues to constant currency revenues, and earnings before income taxes to constant currency adjusted earnings before income taxes for the CDKI segment. Refer to the footnotes in "Consolidated Non-GAAP Results" for additional information on the adjustments presented below.

	Years Ended June 30,			Change	
	2019		2018	ASC 605	
	ASC 606	**ASC 605**		$	%
Revenues	**$ 321.8**	**347.6**	**$ 356.3**	**$ (8.7)**	**(2)%**
Impact of exchange rates	14.5	15.4	—	15.4	
Constant currency revenues	$ 336.3	$ 363.0	$ 356.3	$ 6.7	2 %
Earnings before income taxes	**$ 77.1**	**$ 95.4**	**$ 97.7**	**$ (2.3)**	**(2)%**
Margin %	*24.0%*	*27.4%*	*27.4%*		
Amortization of acquired intangible assets	0.7	0.7	3.5	(2.8)	
Adjusted earnings before income taxes	**77.8**	**96.1**	**101.2**	**(5.1)**	**(5)%**
Adjusted Margin %	24.2%	27.6%	28.4%		
Impact of exchange rates	3.6	4.3	—	4.3	
Constant currency adjusted earnings before income taxes	$ 81.4	$ 100.4	$ 101.2	$ (0.8)	(1)%

The table below presents revenue disaggregation for the CDKI segment for ASC 606 and ASC 605 for fiscal 2019 and ASC 605 for fiscal 2018. In connection with the adoption of ASC 606, we revised the presentation of certain sources of revenue as on-site license and installation and other. Prior period data has not been restated to reflect this new presentation.

	Years Ended June 30,			Change	
	2019		2018	ASC 605	
	ASC 606	ASC 605		$	%
Revenues:					
Subscription	$ 257.3	$ 347.6	$ 356.3	$ (8.7)	(2)%
On-site license and installation	47.1	—	—	—	— %
Other	17.4	—	—	—	— %
Total revenues	$ 321.8	$ 347.6	$ 356.3	$ (8.7)	(2)%

Revenues. CDKI ASC 606 revenues were $25.8 million less than ASC 605 revenues for fiscal 2019 primarily related to changes in the timing of revenue recognition under ASC 606 where on-site license and installation revenues are being recorded up-front upon installation instead of ratably over time.

CDKI ASC 605 revenues decreased by $8.7 million for fiscal 2019 as compared to fiscal 2018. CDKI ASC 605 revenues were impacted by the strength of the Euro, the British pound, and South African rand against the U.S. dollar, which contributed to a decrease of $15.4 million.

CDKI's growth in ASC 605 revenues on a constant currency basis was primarily due to increased average revenue per customer site despite a decrease in DMS customer site count from 13,274 sites for fiscal 2018 to 13,098 sites for fiscal 2019, partially offset by acceleration of deferred revenue due to an early contract termination during fiscal 2018 and timing of certain other revenues.

Earnings before Income Taxes. CDKI ASC 606 earnings before income taxes were $18.3 million less than ASC 605 due to timing of revenues discussed above and additional costs to fulfill that are now deferred.

CDKI ASC 605 earnings before income taxes decreased by $2.3 million for fiscal 2019 as compared to fiscal 2018. Margin remained stable at 27.4% for both years. The constant currency impact of foreign exchange rates on earnings before income taxes, due to the strength of the Euro, British pound, and South African rand against U.S. dollar, was a decrease of $4.3 million.

CDKI ASC 605 earnings before income taxes on a constant currency basis increased primarily due to increase in revenues noted above and lower amortization of acquired intangible assets, partially offset by investments related to strategic growth initiatives.

Other Segment

The table below presents the reconciliation of loss before income taxes to constant currency adjusted loss before income taxes for the Other segment. There was no impact of adopting ASC 606 on the Other segment. Refer to the footnotes in "Consolidated Non-GAAP Results" for additional information on the adjustments presented below.

	Years Ended June 30,		Change	
	2019	2018	$	%
Loss before income taxes	**$ (290.7)**	**$ (274.9)**	**$ (15.8)**	**(6)%**
Restructuring expenses	28.0	20.6	7.4	
Other business transformation expenses	20.9	45.0	(24.1)	
Total stock-based compensation	30.5	33.4	(2.9)	
Transaction and integration-related costs	2.0	—	2.0	
Officer transition expense	6.4	0.6	5.8	
Tax matters indemnification gain, net	—	(0.4)	0.4	
Adjusted loss before income taxes	**$ (202.9)**	**$ (175.7)**	**$ (27.2)**	**(15)%**
Impact of exchange rates	(0.1)	—	(0.1)	
Constant currency adjusted loss before income taxes	$ (203.0)	$ (175.7)	$ (27.3)	(16)%

The primary components of the Other loss before income taxes are certain costs that are not allocated to our reportable segments, such as interest expense, stock-based compensation expense, costs attributable to the business transformation plan, and certain unallocated expenses.

Loss before Income Taxes. The Other loss before income taxes increased by $15.8 million for fiscal 2019 as compared to fiscal 2018. The Other loss before income taxes was unfavorably impacted by increased interest expense largely due to higher average debt levels and interest rate during fiscal 2019, higher restructuring and officer transition expenses, and a $3.3 million impairment charge for certain long-lived assets associated with exiting certain facilities. These increases were partially offset by lower other business transformation expenses, stock-based compensation expenses, and costs to implement the new revenue recognition standard in prior year.

Fiscal 2018 Compared to Fiscal 2017

The following is a discussion of the results of our consolidated results of operations for fiscal 2018 and 2017. For a discussion of our operations by segment, see "Analysis of Reportable Segments" below.

The table below presents consolidated statements of operations data for the periods indicated and the dollar change and percentage change between periods.

	Years Ended June 30,		Change	
	2018	2017	$	%
Revenues	$ 1,798.0	$ 1,730.7	$ 67.3	4 %
Costs of revenues	854.5	898.2	(43.7)	(5)%
Selling, general and administrative expenses	441.2	433.2	8.0	2 %
Restructuring expenses	20.6	17.7	2.9	16 %
Total expenses	1,316.3	1,349.1	(32.8)	(2)%
Operating earnings	481.7	381.6	100.1	26 %
Interest expense	(95.9)	(57.2)	(38.7)	68 %
Other income, net	13.4	3.3	10.1	n/m
Earnings before income taxes	399.2	327.7	71.5	22 %
Margin %	*22.2%*	*18.9%*		
Provision for income taxes	(88.1)	(92.8)	4.7	(5)%
Effective tax rate	*22.1%*	*28.3%*		
Net earnings from continuing operations	311.1	234.9	76.2	32 %
Earnings from discontinued operations, net of taxes	77.6	67.6	10.0	15 %
Net earnings	388.7	302.5	86.2	
Less: net earnings attributable to noncontrolling interest	7.9	6.9	1.0	14 %
Net earnings attributable to CDK	$ 380.8	$ 295.6	$ 85.2	29 %

Revenues. Revenues for fiscal 2018 increased $67.3 million as compared to fiscal 2017. The CDKI segment contributed $44.4 million, the CDKNA segment contributed $22.9 million. The impact of foreign exchange rates on revenues was an increase of $26.7 million. The foreign exchange rate impact was primarily due to the strength of the U.S. dollar against the Euro, British pound, and Canadian dollar.

Cost of Revenues. Cost of revenues for fiscal 2018 decreased $43.7 million as compared to fiscal 2017. The impact of foreign exchange rates on cost of revenues was an increase of $12.7 million. Cost of revenues was favorably impacted by lower labor-related costs attributable to our business transformation plan primarily related to lower headcount and geographic labor mix, lower incentive compensation, and lower business transformation expenses partially offset by an increase in depreciation and amortization. Cost of revenues include expenses to research, develop, and deploy new and enhanced solutions for our customers of $115.0 million and $125.1 million for fiscal 2018 and 2017, respectively, representing 6.4% and 7.2% of revenues.

Selling, General and Administrative Expenses. Selling, general and administrative expenses for fiscal 2018 increased $8.0 million as compared to fiscal 2017. The impact of foreign exchange rates on selling, general and administrative expenses was an increase of $7.2 million. Selling, general and administrative expenses were favorably impacted by lower labor-related costs attributable to initiatives under our business transformation plan, stock-based compensation, lower business transformation expenses, and incentive compensation partially offset by increased expenses due to acquisition transaction and integration-related expenses, costs to implement the new revenue recognition standard and other outside services, and legal and other expenses related to regulatory and competition matters.

Restructuring Expenses. Restructuring expenses related to the business transformation plan for fiscal 2018 increased $2.9 million as compared to fiscal 2017.

Interest Expense. Interest expense for fiscal 2018 increased $38.7 million as compared to fiscal 2017 due to the full year impact of borrowings under our 2027 notes issued in May 2017, and the partial year impact of issuing our 2026 notes entered into in June 2018.

Other Income, Net. Other income, net for fiscal 2018 increased by $10.1 million as compared to fiscal 2017 due primarily to a recovery in fiscal 2018 of a non-operating receivable that had been impaired in fiscal 2017 upon execution of a licensing and service agreement, higher interest income in fiscal 2018, and fluctuations in foreign exchange gains and losses.

Provision for Income Taxes. The effective tax rate for fiscal 2018 was 22.1% as compared to 28.3% for fiscal 2017. The effective tax rate for fiscal 2018 was favorably impacted by $4.7 million for the current year effect of the reduced corporate income tax rate and $18.5 million for the estimated net one-time Tax Reform Act adjustments. In addition, the effective tax rate for fiscal 2018 and 2017 was favorably impacted by $5.1 million and $13.1 million of excess tax benefits, respectively.

Earnings from discontinued operations, net of taxes. Earnings from discontinued operations, net of taxes for fiscal 2018 increased by 10.0 million as compared to fiscal 2017 as our Digital Marketing Business benefited from operating efficiencies obtained from our business transformation plan which were partially offset by decline in our website business revenues.

Net Earnings Attributable to CDK. Net earnings attributable to CDK for fiscal 2018 increased $85.2 million as compared to fiscal 2017. The increase in net earnings attributable to CDK was primarily due to the factors previously discussed.

Consolidated Non-GAAP Results

The tables below present the reconciliation of the most directly comparable GAAP measure on an ASC 605 basis to constant currency revenues, adjusted earnings before income taxes, constant currency adjusted earnings before income taxes, adjusted provision for income taxes, adjusted net earnings attributable to CDK, and adjusted diluted earnings attributable to CDK per share.

	Years Ended June 30,		Change	
	2018	2017	$	%
Revenues [(1)]	**$ 1,798.0**	**$ 1,730.7**	**$ 67.3**	**4%**
Impact of exchange rates	(26.7)	—	(26.7)	
Constant currency revenues	$ 1,771.3	$ 1,730.7	$ 40.6	2%
Earnings before income taxes [(1)]	**$ 399.2**	**$ 327.7**	**$ 71.5**	**22%**
Margin %	*22.2%*	*18.9%*		
Restructuring expenses [(1) (2)]	20.6	17.7	2.9	
Other business transformation expenses [(1) (2)]	45.0	72.2	(27.2)	
Total stock-based compensation [(1) (3)]	33.4	52.7	(19.3)	
Amortization of acquired intangible assets [(1) (4)]	11.1	11.5	(0.4)	
Transaction and integration-related costs [(5)]	15.6	0.7	14.9	
Officer transition expense [(6)]	0.6	0.7	(0.1)	
Legal and other expenses related to regulatory and competition matters [(7)]	7.4	—	7.4	
Tax matters indemnification gain [(8)]	(0.4)	—	(0.4)	
Adjusted earnings before income taxes [(1)]	**$ 532.5**	**$ 483.2**	**$ 49.3**	**10%**
Adjusted margin %	*29.6%*	*27.9%*		
Impact of exchange rates	(8.1)	—	(8.1)	
Constant currency adjusted earnings before income taxes	$ 524.4	$ 483.2	$ 41.2	9%

	Years Ended June 30, 2018	2017	Change $	%
Provision for income taxes [1]	**$ 88.1**	**$ 92.8**	**$ (4.7)**	**(5)%**
Effective tax rate	*22.1%*	*28.3%*		
Income tax effect of pre-tax adjustments [9]	40.4	56.4	(16.0)	
Excess tax benefit from stock-based compensation [10]	5.1	13.1	(8.0)	
Pre spin-off filed tax return adjustment [11]	0.4	—	0.4	
Impact of U.S. tax reform [12]	18.5	—	18.5	
Adjusted provision for income taxes [1]	**$ 152.5**	**$ 162.3**	**$ (9.8)**	**(6)%**
Adjusted effective tax rate	*28.6%*	*33.6%*		

	Years Ended June 30, 2018	2017	Change $	%
Net earnings	**$ 388.7**	**$ 302.5**	**$ 86.2**	**28%**
Less: net earnings attributable to noncontrolling interest	**$ 7.9**	**$ 6.9**		
Net earnings attributable to CDK	**$ 380.8**	**$ 295.6**	**$ 85.2**	**29%**
Earnings from discontinued operations, net of taxes [13]	(77.6)	(67.6)	(10.0)	
Restructuring expenses [1] [2] [14]	20.4	17.7	2.7	
Other business transformation expenses [1] [2] [14]	44.8	72.2	(27.4)	
Total stock-based compensation [1] [3] [14]	33.3	52.7	(19.4)	
Amortization of acquired intangible assets [1] [4] [14]	10.8	11.5	(0.7)	
Transaction and integration-related costs [5]	15.6	0.7	14.9	
Officer transition expense [6]	0.6	0.7	(0.1)	
Legal and other expenses related to regulatory and competition matters [7]	7.3	—	7.3	
Tax matters indemnification gain [8]	(0.4)	—	(0.4)	
Income tax effect of pre-tax adjustments [9]	(40.4)	(56.4)	16.0	
Excess tax benefit from stock-based compensation [10]	(5.1)	(13.1)	8.0	
Pre spin-off filed tax return adjustment [11]	(0.4)	—	(0.4)	
Impact of U.S. tax reform [12]	(18.5)	—	(18.5)	
Adjusted net earnings attributable to CDK	**$ 371.2**	**$ 314.0**	**$ 57.2**	**18%**

	Years Ended June 30,		Change	
	2018	2017	$	%
Diluted earnings attributable to CDK per share	**$ 2.78**	**$ 1.99**	**$ 0.79**	**40%**
Earnings from discontinued operations, net of taxes (13)	(0.57)	(0.46)		
Restructuring expenses (1) (2)	0.15	0.12		
Other business transformation expenses (1) (2)	0.33	0.50		
Total stock-based compensation (1) (3)	0.25	0.35		
Amortization of acquired intangible assets (1) (4) (14)	0.08	0.08		
Transaction and integration-related costs (5)	0.12	—		
Officer transition expense (6)	—	—		
Legal and other expenses related to regulatory and competition matters (7)	0.05	—		
Tax matters indemnification gain (8)	—	—		
Income tax effect of pre-tax adjustments (9)	(0.30)	(0.38)		
Excess tax benefit from stock-based compensation (10)	(0.04)	(0.08)		
Pre spin-off filed tax return adjustment (11)	—	—		
Impact of U.S. tax reform (12)	(0.14)	—		
Adjusted diluted earnings attributable to CDK per share	**$ 2.71**	**$ 2.12**	**$ 0.59**	**28%**
Weighted-average common shares outstanding:				
Diluted	136.8	148.2		

(1) Excludes amounts attributable to discontinued operations.

(2) Restructuring expense recognized in connection with our business transformation plan. Other business transformation expenses incurred in connection with our business transformation plan and included within cost of revenues and selling, general and administrative expenses.

(3) Total stock-based compensation expense included within cost of revenues and selling, general and administrative expenses.

(4) Amortization of acquired intangible assets consists of amortization of intangible assets such as customer lists, purchased software, and trademarks acquired in connection with business combinations. Although we exclude amortization of acquired intangible assets from our non-GAAP measure, we believe that it is important for the users of the financial statements to understand that the associated intangible assets contribute to revenue generation.

(5) Transaction and integration-related expenses include: (i) legal, accounting, outside service fees, and other costs incurred in connection with assessment and integration of acquisitions and other strategic business opportunities; and (ii) post-close adjustments to acquisition-related contingent consideration, reported within cost of revenues and selling, general and administrative expenses.

(6) Officer transition expense includes severance expense in connection with officer departures included within selling, general and administrative expenses.

(7) Legal and other expenses related to regulatory and competition matters included within selling, general and administrative expenses.

(8) Net gain recorded within other income, net associated with an indemnification receivable from ADP for pre spin-off tax periods in accordance with tax matters agreement.

(9) Income tax effect of pre-tax adjustments calculated at applicable statutory rates.

(10) Excess tax benefit from stock-based compensation.

(11) Net income tax benefit to adjust the liability for pre spin-off tax returns related to the gain.

(12) As a result of the Tax Reform Act, an estimated one-time tax benefit of $26.2 million from the revaluation of the net deferred tax liability partially offset by an estimated one-time expense of $7.7 million associated with undistributed foreign earnings in fiscal 2018.

(13) Earnings from discontinued operations, net of taxes associated with the Company's plan to divest the Digital Marketing Business.

(14) The portion of expense related to noncontrolling interest of $0.2 million, $0.2 million, $0.1 million, and $0.1 million has been excluded from restructuring expenses, other business transformation expenses, stock-based compensation expenses, and legal and other expenses related to regulatory and competition matters, respectively, in fiscal 2018.

Adjusted Earnings before Income Taxes. Adjusted earnings before income taxes for fiscal 2018 increased $49.3 million as compared to fiscal 2017. Adjusted margin increased from 27.9% to 29.6%. The impact of foreign exchange rates on adjusted earnings before income taxes was an increase of $8.1 million. Adjusted earnings before income taxes was favorably impacted by benefits obtained from our business transformation plan, primarily related to lower headcount and geographic mix, and operating efficiencies inclusive of revenue growth, lower incentive compensation and a recovery in fiscal 2018 on a non-operating receivable that had been impaired in fiscal 2017 upon execution of a licensing and service agreement. The favorable effects of these items were partially offset by increased interest expense, costs to implement the new revenue recognition standard and other outside services, and depreciation and amortization.

Adjusted Provision for Income Taxes. The adjusted effective tax rate for fiscal 2018 was 28.6% as compared to 33.6% for fiscal 2017. The adjusted effective tax rate for fiscal 2018 was favorably impacted by the reduced corporate income tax rate.

Adjusted Net Earnings Attributable to CDK. Adjusted net earnings attributable to CDK for fiscal 2018 increased $57.2 million as compared to fiscal 2017. The increase in adjusted net earnings attributable to CDK was primarily due to the items discussed above in adjusted earnings before income taxes partially offset by the associated tax effect.

The table below presents the reconciliation of net earnings attributable to CDK to adjusted EBITDA.

	Years Ended June 30,		Change	
	2018	2017	$	%
Net earnings attributable to CDK	**$ 380.8**	**$ 295.6**	**$ 85.2**	**29%**
Margin %	*21.2%*	*17.1%*		
Net earnings attributable to noncontrolling interest (2)	7.9	6.9	1.0	
Earnings from discontinued operations, net of taxes (3)	(77.6)	(67.6)	(10.0)	
Provision for income taxes (1) (4)	88.1	92.8	(4.7)	
Interest expense (5)	95.9	57.2	38.7	
Depreciation and amortization (1) (6)	70.8	63.4	7.4	
Total stock-based compensation (1) (7)	33.4	52.7	(19.3)	
Restructuring expenses (1) (8)	20.6	17.7	2.9	
Other business transformation expenses (1) (8)	44.8	69.7	(24.9)	
Transaction and integration-related costs (9)	15.6	0.7	14.9	
Officer transition expense (10)	0.6	0.7	(0.1)	
Legal and other expenses related to regulatory and competition matters (11)	7.4	—	7.4	
Tax matters indemnification gain (12)	(0.4)	—	(0.4)	
Adjusted EBITDA	**$ 687.9**	**$ 589.8**	**$ 98.1**	**17%**
Adjusted margin %	*38.3%*	*34.1%*		

(1) Excludes amounts attributable to discontinued operations.

(2) Net earnings attributable to noncontrolling interest included within the financial statements.

(3) Earnings from discontinued operations, net of taxes associated with the Company's plan to divest the Digital Marketing Business.

(4) Provision for income taxes included within the financial statements.

(5) Interest expense included within the financial statements.

(6) Depreciation and amortization included within the financial statements.

(7) Total stock-based compensation expense recognized.

(8) Restructuring expense recognized in connection with our business transformation plan in fiscal 2018 and 2017. Other business transformation expenses incurred in connection with our business transformation plan and included within cost of revenues and selling, general and administrative expenses. Other business transformation expenses excluded $0.2 million and $2.5 million of accelerated depreciation expense for fiscal 2018 and 2017.

(9) Transaction and integration-related expenses include: (i) legal, accounting, outside service fees, and other costs incurred in connection with assessment and integration of acquisitions and other strategic business opportunities; and (ii) post-close adjustments to acquisition-related contingent consideration, reported within cost of revenues and selling, general and administrative expenses.

(10) Officer transition expense includes severance expense in connection with officer departures included within selling, general and administrative expenses.

(11) Legal and other expenses related to regulatory and competition matters included within selling, general and administrative expenses.

(12) Net gain recorded within other income, net associated with an indemnification receivable from ADP for pre spin-off tax periods in accordance with tax matters agreement.

Adjusted EBITDA. Adjusted EBITDA for fiscal 2018 increased $98.1 million as compared to fiscal 2017. Adjusted margin increased from 34.1% to 38.3%. Adjusted EBITDA was favorably impacted by benefits obtained from our business transformation plan, primarily related to lower headcount and geographic mix, and operating efficiencies inclusive of revenue growth, lower incentive compensation, a recovery in fiscal 2018 of a non-operating receivable that had been impaired in fiscal 2017 upon execution of a licensing and service agreement, and the impact of foreign exchange rates. The favorable effects of these items were partially offset by costs to implement the new revenue recognition standard and other outside services.

Analysis of Reportable Segments

The following is a discussion of the results of our continuing operations by reportable segment for fiscal 2018 and 2017. Certain expenses are charged to the reportable segments at a standard rate for management reporting purposes. Other costs are charged to the reportable segments based on management's responsibility for the applicable costs.

CDK North America

The table below presents the reconciliation of revenues to constant currency revenues, and earnings before income taxes to constant currency adjusted earnings before income taxes for the CDKNA segment. Refer to the footnotes in "Consolidated Non-GAAP Results" for additional information on the adjustments presented below.

	Years Ended June 30,		Change	
	2018	2017	$	%
Revenues	**$ 1,441.7**	**$ 1,418.8**	**$ 22.9**	**2%**
Impact of exchange rates	(4.1)	—	(4.1)	
Constant currency revenues	$ 1,437.6	$ 1,418.8	$ 18.8	1%
Earnings before income taxes	**$ 576.4**	**$ 534.2**	**$ 42.2**	**8%**
Margin %	*40.0%*	*37.7%*		
Amortization of acquired intangible assets	7.6	7.7	(0.1)	
Transaction and integration-related costs	15.6	0.7	14.9	
Legal and other expenses related to regulatory and competition matters	7.4	—	7.4	
Adjusted earnings before income taxes	**$ 607.0**	**$ 542.6**	**$ 64.4**	**12%**
Adjusted margin %	*42.1%*	*38.2%*		
Impact of exchange rates	(2.0)	—	(2.0)	
Constant currency adjusted earnings before income taxes	$ 605.0	$ 542.6	$ 62.4	12%

The table below presents revenue disaggregation for the CDKNA segment:

	Years Ended June 30,		Change	
	2018	2017	$	%
Revenues:				
Subscription	$ 1,176.4	$ 1,127.3	$ 49.1	4 %
Transaction	164.0	179.6	(15.6)	(9)%
Other	101.3	111.9	(10.6)	(9)%
Total Revenues	$ 1,441.7	$ 1,418.8	$ 22.9	2 %

Revenues. CDKNA revenues for fiscal 2018 increased $22.9 million as compared to fiscal 2017. CDKNA revenues were favorably impacted by the strength of the U.S. dollar against the Canadian dollar on a constant currency basis, which contributed to an increase of $4.1 million.

Subscription revenues grew due to an increase in average revenue per DMS customer site of 5.5%, which resulted from a combination of increased sales of new or expanded solutions to our customer base and pricing. This was partially offset by a decrease in DMS customer site count from 14,611 sites as of June 30, 2017 to 14,557 sites as of June 30, 2018. The increase in average revenue per DMS customer site contributed $49.1 million of revenue growth, or approximately 4%, and includes a favorable currency impact of $3.7 million. Transaction revenues generated from vehicle registrations, credit checks, and automotive equity mining, decreased $15.6 million, primarily due to dropped point solutions. Other revenues decreased $10.6 million primarily due to lower hardware sales; partially offset by favorable currency impact of $0.4 million.

Earnings before Income Taxes. CDKNA earnings before income taxes for fiscal 2018 increased $42.2 million as compared to fiscal 2017. Margin increased from 37.7% to 40.0%.

CDKNA earnings before income taxes were favorably impacted by operating efficiencies inclusive of benefits obtained from our business transformation plan, primarily related to lower headcount and geographic mix, lower incentive compensation, and a recovery in fiscal 2018 of a non-operating receivable that had been impaired in fiscal 2017 upon execution of a licensing and service agreement partially offset by an increase in acquisition and integration costs, legal and regulatory expenses related to competition matters, depreciation and amortization, and outside services.

CDK International

The table below presents the reconciliation of revenues to constant currency revenues, and earnings before income taxes to constant currency adjusted earnings before income taxes for the CDKI segment. Refer to the footnotes in "Consolidated Non-GAAP Results" for additional information on the adjustments presented below.

	Years Ended June 30,		Change	
	2018	2017	$	%
Revenues	**$ 356.3**	**$ 311.9**	**$ 44.4**	**14%**
Impact of exchange rates	(22.6)	—	(22.6)	
Constant currency revenues	$ 333.7	$ 311.9	$ 21.8	7%
Earnings before income taxes	**$ 97.7**	**$ 75.0**	**$ 22.7**	**30%**
Margin %	*27.4%*	*24.0%*		
Amortization of acquired intangible assets	3.5	3.8	(0.3)	
Adjusted earnings before income taxes	**101.2**	**78.8**	**22.4**	**28%**
Adjusted Margin %	*28.4%*	*25.3%*		
Impact of exchange rates	(5.3)	—	(5.3)	
Constant currency adjusted earnings before income taxes	$ 95.9	$ 78.8	$ 17.1	22%

Revenues. CDKI revenues for fiscal 2018 increased $44.4 million as compared to fiscal 2017. CDKI revenues were impacted by the strength of the Euro, the Pound Sterling, and the Renminbi against the U.S. dollar, which contributed to an increase of $22.6 million, or 7 percentage points. CDKI experienced growth in revenues on a constant currency basis primarily due to increased average revenue per customer site and accelerated deferred revenue due to an early contract termination despite a decrease in DMS customer site count.

Earnings before Income Taxes. CDKI earnings before income taxes for fiscal 2018 increased $22.7 million as compared to fiscal 2017. Margin increased from 24.0% to 27.4%. The constant currency impact of foreign exchange rates on CDKI earnings before income taxes was an increase of $5.3 million. CDKI earnings before income taxes were favorably impacted by increased average revenue per customer site and operating efficiencies, which resulted from benefits obtained from our business transformation plan and lower incentive compensation.

Other Segment

The table below presents the reconciliation of loss before income taxes to adjusted loss before income taxes for the Other segment. Refer to the footnotes in "Consolidated Non-GAAP Results" for additional information on the adjustments presented below.

	Years Ended June 30,		Change	
	2018	2017	$	%
Loss before income taxes	**$ (274.9)**	**$ (281.5)**	**$ 6.6**	**2 %**
Restructuring expenses	20.6	17.7	2.9	
Other business transformation expenses	45.0	72.2	(27.2)	
Total stock-based compensation	33.4	52.7	(19.3)	
Officer transition expense	0.6	0.7	(0.1)	
Tax matters indemnification gain, net	(0.4)	—	(0.4)	
Adjusted loss before income taxes	**$ (175.7)**	**$ (138.2)**	**$ (37.5)**	**(27)%**
Impact of exchange rates	(0.8)	—	(0.8)	
Constant currency loss before income taxes	$ (176.5)	$ (138.2)	$ (38.3)	(28)%

The primary components of the Other loss before income taxes are certain costs that are not allocated to our reportable segments, such as interest expense, stock-based compensation expense, costs attributable to the business transformation plan, and certain unallocated expenses.

Loss before Income Taxes. The Other loss before income taxes for fiscal 2018 decreased by $6.6 million as compared to fiscal 2017. The Other loss before income taxes was favorably impacted by lower business transformation expenses, lower stock-based compensation, and higher interest income. The Other loss before income taxes was unfavorably impacted by increased interest expense due to the full year impact of the 2027 notes issued in May 2017 and the partial year impact of our 2026 notes issued in June 2018, and costs to implement the new revenue recognition standard and other outside services.

FINANCIAL CONDITION, LIQUIDITY AND CAPITAL RESOURCES

Capital Structure Overview

Our principal source of liquidity is derived from cash generated through operations. At present, and in future periods, we expect cash generated by our operations, together with cash and cash equivalents and borrowings from the capital markets, including our revolving credit facility, to be sufficient to cover our cash needs for working capital, capital expenditures, strategic acquisitions, and anticipated quarterly dividends and stock repurchases under our return of capital plan.

As of June 30, 2019, cash and cash equivalents were $311.4 million, total CDK stockholders' deficit was $729.6 million, and total debt was $2,930.2 million, which is net of unamortized financing costs of $28.5 million. Working capital as of June 30, 2019 was $323.3 million as compared to $866.0 million as of June 30, 2018. Working capital as used herein excludes current maturities of long-term debt and capital lease obligation, and current assets and liabilities held for sale.

Our borrowings consist of two term loan facilities with initial principal amounts of $600.0 million, 3.30% senior notes with a $250.0 million aggregate principal amount due in 2019, 4.50% senior notes with a $500.0 million aggregate principal amount due in 2024, 5.875% senior notes with a $500.0 million aggregate principal amount due in 2026, 4.875% senior notes with a $600.0 million aggregate principal amount due in 2027, and 5.250% senior notes with a $500.0 million aggregate principal amount due in 2029. Interest rates for the 2019 notes and 2024 notes increased to 3.80% from 3.30% and to 5.00% from 4.50%, respectively. Additionally, we have a $750.0 million revolving credit facility, which was undrawn as of June 30, 2019.

Our long-term credit ratings and senior unsecured debt ratings are Ba1 (Stable Outlook) with Moody's, and BB+ (Stable Outlook) with S&P, which are non-investment grade.

Of the $311.4 million of cash and cash equivalents held as of June 30, 2019, $248.1 million was held by our foreign subsidiaries. As of June 30, 2019, the Company intends to indefinitely reinvest the aggregate of approximately $329.0 million of undistributed foreign earnings. Amounts held by foreign subsidiaries, if repatriated to the U.S., would generally be subject to foreign withholding taxes. Foreign earnings after December 31, 2017 are considered indefinitely reinvested since our intent is to use the earnings outside of the U.S. to fund local working capital needs and future foreign investments, including potential acquisitions. Our current plans do not demonstrate a need to repatriate the earnings to fund our U.S. operations. In determining whether the undistributed earnings of our foreign subsidiaries are indefinitely reinvested, we consider the following: (i) cash flow forecasts and cash requirements of our U.S. business and our foreign subsidiaries, both for the short and long term; (ii) costs associated with permanent reinvestment plans, including cost of capital and tax consequences; and (iii) local country legal restrictions.

If circumstances change, and it becomes apparent that earnings currently considered indefinitely reinvested will be remitted to the U.S. in the foreseeable future, the Company does not expect to incur significant additional tax.

Return of Capital Plan

Stock Repurchase Program

In January 2017, the Board of Directors authorized us to repurchase up to $2.0 billion of our common stock as part of a return of capital plan, whereby we have repurchased approximately $1.5 billion of common stock through June 30, 2019. Our top priorities for capital allocation will continue to be a thoughtful balance between: (i) organic investments that will continue to accelerate the growth and performance of the business; (ii) inorganic opportunities that are synergistic with our portfolio and would meaningfully provide additional profitable revenue and increased long-term value; and (iii) return of capital to shareholders, while targeting a leverage ratio, measured as financial debt, net of cash, divided by adjusted EBITDA, at a range of 2.5x to 3.0x net debt to adjusted EBITDA. Our leverage was 3.4x net debt to adjusted EBITDA as of June 30, 2019, due to the loss of earnings attributable to the Digital Marketing Business. For fiscal 2020, we expect shareholder returns, including dividends and share repurchase, of $75.0 million to $150.0 million.

Under the authorization, we may continue to purchase our common stock in the open market or in privately negotiated transactions from time to time as permitted by federal securities laws and other legal requirements. The actual timing, number, and price of any shares repurchased will be determined at management's discretion and will depend on a number of factors, which may include the market price of the shares, general market and economic conditions, the availability and cost of additional indebtedness, and other potential uses for free cash flow including, but not limited to, potential acquisitions.

Dividends to Common Stockholders

The Company declared and paid cash dividends during fiscal 2019 as follows:

Three Months Ended	Record Date	Payment Date	Dividend Per Share	Amount
September 30, 2018	9/4/2018	9/28/2018	$ 0.150	$ 19.3
December 31, 2018	12/3/2018	12/28/2018	0.150	18.7
March 31, 2019	3/1/2019	3/29/2019	0.150	18.6
June 30, 2019	6/3/2019	6/27/2019	0.150	18.2
Total			$ 0.600	$ 74.8

Cash Flows

Our cash flows from operating, investing, and financing activities, as reflected in the consolidated statements of cash flows for fiscal 2019, 2018, and 2017, are summarized as follows:

	Years Ended June 30,			$ Change	
	2019	2018	2017	2019	2018
Cash provided by (used in):					
Operating activities, continuing operations	$ 438.5	$ 373.9	$ 362.7	$ 64.6	$ 11.2
Operating activities, discontinued operations	44.6	92.5	73.0	(47.9)	19.5
Investing activities, continuing operations	(614.5)	(86.9)	(84.2)	(527.6)	(2.7)
Investing activities, discontinued operations	(8.7)	(26.6)	(3.7)	17.9	(22.9)
Financing activities, continuing operations	(349.0)	(271.2)	159.9	(77.8)	(431.1)
Effect of exchange rate changes on cash and cash equivalents	(6.9)	1.4	4.0	(8.3)	(2.6)
Net change in cash and cash equivalents	$ (496.0)	$ 83.1	$ 511.7	$ (579.1)	$ (428.6)

Fiscal 2019 Compared to Fiscal 2018

Net cash flows provided by operating activities from continuing operations were $438.5 million for fiscal 2019 as compared to $373.9 million in fiscal 2018. This $64.6 million increase was primarily due to a $90.0 million litigation provision, partially offset by timing of cash payments made to tax authorities.

Net cash flows provided by operating activities from discontinued operations were $44.6 million for fiscal 2019 as compared to $92.5 million in fiscal 2018. This $47.9 million decrease was due to lower earnings and decrease in cash used for working capital associated with the Digital Marketing Business.

Net cash flows used in investing activities for continuing operations were $614.5 million for fiscal 2019 as compared to $86.9 million in fiscal 2018. This $527.6 million increase in cash used in investing activities was primarily due to the acquisition of ELEAD in fiscal 2019.

Net cash flows used in investing activities for discontinued operations were \$8.7 million for fiscal 2019 as compared to \$26.6 million in fiscal 2018. This \$17.9 million decrease in cash used in investing activities was primarily due to the acquisition of Progressus Media LLC, in fiscal 2018.

Net cash flows used in financing activities for continuing operations were \$349.0 million for fiscal 2019 as compared to \$271.2 million in fiscal 2018. This \$77.8 million increase in cash used in financing activities was mainly due to increased borrowings, net of repayments, primarily to fund the ELEAD acquisition; partially offset by higher cash outflows associated with repurchases of common stock in fiscal 2018.

Fiscal 2018 Compared to Fiscal 2017

Net cash flows provided by operating activities from continuing operations were \$373.9 million for fiscal 2018 as compared to \$362.7 million in fiscal 2017. This \$11.2 million increase was primarily due to an increase in cash provided by net earnings adjusted for non-cash items of \$33.3 million primarily due to earnings growth in our business. This increase was partially offset by an increase in cash used for working capital of \$22.1 million, which was due to timing of cash payments made to our vendors and employees partially offset by the timing of cash payments received from our customers in the normal course of business.

Net cash flows provided by operating activities from discontinued operations for fiscal 2018 were \$92.5 million as compared to \$73.0 million in fiscal 2017 primarily due to higher net earnings and decrease in cash used for working capital associated with our Digital Marketing Business in fiscal 2018.

Net cash flows used in investing activities for continuing operations were \$86.9 million for fiscal 2018 as compared to \$84.2 million in fiscal 2017.

Net cash flows used in investing activities for discontinued operations were \$26.6 million for fiscal 2018 as compared to \$3.7 million in fiscal 2017. The increase in cash used in fiscal 2018 was primarily for the acquisition of Progressus Media LLC.

Net cash flows used in financing activities from continuing operations for fiscal 2018 were \$271.2 million compared to net cash flows provided by financing activities of \$159.9 million in fiscal 2017. This \$431.1 million increase in cash used was primarily due to proceeds from long-term debt in fiscal 2017 of \$1.0 billion compared to the fiscal 2018 additional borrowing of \$500.0 million. During fiscal 2018, our primary cash outflows were repurchases of common stock of \$623.6 million, dividend payments to our stockholders of \$80.1 million, and the repayments of debt and capital lease obligations of \$46.4 million. During fiscal 2017, our primary cash outflows consisted of common stock repurchases of \$700.0 million, dividend payments to our stockholders of \$80.7 million, and repayments of debt and capital lease obligation of \$36.9 million.

Contractual Obligations

The following table provides a summary of our contractual obligations as of June 30, 2019.

	Payments Due by Period				
Contractual Obligations	Less than 1 year	1-3 years	3-5 years	More than 5 years	Total
Term loan facilities (1)	$ 15.0	$ 330.0	$ 243.8	$ —	$ 588.8
Senior notes (2)	250.0	—	—	2,100.0	2,350.0
Interest on senior notes (2)	115.9	219.8	219.8	278.0	833.5
Capital lease obligations	19.9	—	—	—	19.9
Operating lease obligations (3)	16.7	26.4	15.8	15.8	74.7
Purchase obligations (4)	6.2	14.7	10.8	—	31.7
Other long-term liabilities reflected within other liabilities on the consolidated balance sheet (5)	0.4	19.5	4.3	—	24.2
Total	$ 424.1	$ 610.4	$ 494.5	$ 2,393.8	$ 3,922.8

(1) These amounts represent the principal repayments of the term loan facilities included within our consolidated balance sheet as of June 30, 2019. Interest on our term loan facilities is based on variable rates, and interest payments will fluctuate as our interest rates fluctuate each period. Accordingly, future interest payments related to these instruments have been excluded from the table above. The interest rate per annum on the two $300.0 million term loan facilities with three year term was 3.94% and with five year term was 4.07% as of June 30, 2019. Additional information is contained in Item 8 of Part II, "Financial Statements and Supplementary Data - Note 15 - Debt" in this Annual Report on Form 10-K for further information.

(2) These amounts represent the principal repayments of the senior notes included within our consolidated balance sheet as of June 30, 2019 and expected future interest payments over the term of the senior notes based on the stated interest rates in effect as of June 30, 2019. Our 2019 notes bear interest at a rate of 3.80%, our 2024 notes bear interest at a rate of 5.00%, our 2026 notes bear interest at a rate of 5.875%, our 2027 notes bear interest at a rate of 4.875%, and our 2029 notes bear interest at a rate of 5.250%. Interest is payable semi-annually on April 15 and October 15 of each year for the 2019 and 2024 notes, June 15 and December 15 of each year for the 2026 notes, June 1 and December 1 of each year for the 2027 notes, and March 15 and September 15 of each year for the 2029 notes. Additional information is contained in Item 8 of Part II, "Financial Statements and Supplementary Data - Note 15 - Debt" in this Annual Report on Form 10-K for further information.

(3) These amounts represent various operating leases for facilities and equipment entered into in the normal course of business. The majority of our lease agreements have fixed payment terms based on the passage of time. Certain facility and equipment leases require payment of maintenance and real estate taxes and contain escalation provisions based on future adjustments in price indices. Our future operating lease obligations could change if we exit certain contracts or if we enter into additional operating lease agreements.

(4) These amounts represent payments related to the Company's purchase and maintenance agreements for software, equipment, and other assets.

(5) Other long-term liabilities for which a payment date is readily available include a contingent consideration payable in installments through March 31, 2021 for the acquisition of Progressus Media LLC, software license fees, and cash settlements expected for restricted stock units accounted for as liability awards based on the closing price of our common stock on June 30, 2019.

In the normal course of business, we also enter into contracts in which we make representations and warranties that relate to the performance of our services and products. We do not expect any material losses related to such representations and warranties.

Off-Balance Sheet Arrangements

As of June 30, 2019, we did not have any off-balance sheet arrangements consisting of transactions, agreements, or other contractual arrangements to which an entity not consolidated in our financial statements was a party. However, in the normal course of operations, we may enter into contractual obligations consisting of operating lease obligations and purchase commitments. Such obligations have been presented under the caption "Contractual Obligations."

Related Party Agreements

Refer to Item 8 of Part II, Financial Statement and Supplementary Data, "Note 10 - Income Taxes" and "Note 18 - Transactions with ADP" of this Annual Report on Form 10-K for financial information regarding agreements entered into with ADP as part of the spin-off.

CRITICAL ACCOUNTING POLICIES

Our consolidated financial statements and accompanying notes have been prepared in accordance with GAAP. The preparation of these financial statements requires management to make estimates, judgments, and assumptions that affect reported amounts of assets, liabilities, revenues, and expenses. We continually evaluate the accounting policies and estimates used to prepare the consolidated financial statements. Estimates are based on historical experience and assumptions believed to be reasonable under current facts and circumstances. Actual amounts and results could differ from estimates made by management. Certain accounting policies that require significant management estimates and are deemed critical to our results of operations or financial condition are discussed below.

Revenue Recognition

We recognize revenues in accordance with Accounting Standards Codification ("ASC") 606 "Revenue from Contracts with Customers." We adopted ASC 606 effective July 1, 2018 using the modified retrospective approach. The comparative information has not been restated and continues to be reported under ASC 985-605 "Software - Revenue Recognition," and non-software related revenue, including Software-as-a-Service ("SaaS"), in accordance with ASC 605, "Revenue Recognition".

The Company determines the amount of revenue to be recognized through the following steps:

- Identification of the contract, or contracts, with a customer;
- Identification of the performance obligations in the contract;
- Determination of the transaction price;
- Allocation of the transaction price to the performance obligations in the contract; and
- Recognition of revenue when, or as, the Company satisfies the performance obligations.

The majority of the Company’s revenue is generated from contracts with multiple performance obligations. A performance obligation is a promise in a contract to transfer a distinct good or service to the customer, and is the unit of account in ASC 606. A contract’s transaction price is allocated to each distinct performance obligation and recognized as revenue when, or as, the performance obligation is satisfied. The Company is required to estimate the total consideration expected to be received from contracts with customers. In limited circumstances, the consideration expected to be received may be variable based on the specific terms of the contract.

The Company rarely licenses or sells products or services on a standalone basis. As such, the Company is required to develop its best estimate of standalone selling price of each distinct good or service as the basis for allocating the total transaction price. The primary method used to estimate standalone selling price is the adjusted market assessment approach, with some product categories using the expected cost plus a margin approach. When establishing standalone selling price, the Company considers various factors which may include geographic region, current market trends, customer class, its market share and position, its general pricing practices for bundled products and services, and recent contract sales data.

The Company applies significant judgment in order to identify and determine the number of performance obligations, estimate the total transaction price, determine the allocation of the transaction price to each identified performance obligation, and determine the appropriate method and timing of revenue recognition.

The Company generates revenues from the following four categories: subscription, on-site licenses and installation, transaction, and other. Taxes collected from customers and remitted to governmental authorities are presented on a net basis; that is, such taxes are excluded from revenues.

Subscription. In the CDKNA and CDKI segments, CDK provides software and technology solutions for automotive retailers and OEMs, which includes:

- Dealer Management Systems ("DMSs") and layered applications, where the software is hosted and provided on a software-as-a-service ("SaaS") basis;
- Interrelated services such as installation, initial training, and data updates;
- Ongoing maintenance and support related to on-site software; and
- Hardware on a service basis, meaning no specific assets are identified or a substantive right of substitution exists, that provides the customer continuous access to hardware owned by the Company.

Revenues for SaaS and other hosted service arrangements, are recognized ratably over the duration of the contract. The Company has determined its obligation under these arrangements is to stand ready to perform the underlying services as required by the customer. The customer receives the benefit of the services and the Company has the right to payment as the services are performed. A time-elapsed output method is used to measure progress as the Company transfers control evenly over the duration of the contract.

On-site licenses and installation. In the CDKNA and CDKI segments, on-site software arrangements include a license of intellectual property as the customer has the contractual right to take possession of the software and the customer can either run the software on its own hardware or contract with another party unrelated to the Company to host the software. The customer receives the right to use the software license upon its installation for the term of the arrangement. As such, the Company has concluded that the software license is a distinct performance obligation and recognizes the transaction price allocated to on-site software upon installation. The Company also provides maintenance and support of the software applications. Such maintenance and support services may include server and desktop support, bug fixes, and support resolving other issues a customer may encounter in utilizing the software. Revenue allocated to support and maintenance is generally recognized ratably over the contract period as customers simultaneously consume and receive benefits, given the support and maintenance comprise distinct performance obligations that are satisfied ratably over time. A time-elapsed output method is used to measure progress as the Company transfers control evenly over the duration of the contract.

Transaction. The Company receives fees per transaction for providing auto retailers interfaces with third parties to process credit reports, vehicle registrations, and automotive equity mining. Transaction revenues are variable based on the volume of transactions processed. For these transaction revenues, the Company has a right to payment as the transactions are performed in an amount that corresponds directly with the value to the customer. As such, the Company recognizes transaction revenues as the services are rendered and in the amount to which it has the right to invoice. Transaction revenues for credit report processing and automotive equity mining are recorded in revenues gross of costs incurred when the Company is substantively and contractually responsible for providing the service, software, and/or connectivity to the customer, and controls the specified good or service before it is transferred to the customer. The Company recognizes vehicle registration revenues net of the state registration fee when it is acting as an agent and does not control the related goods and services before they are transferred to the customer.

Other. The Company provides consulting and professional services, including marketing campaign solutions, and sells hardware such as laser printers, networking and telephony equipment, and related items. Consulting and professional services are either billed on a time and materials basis or on a fixed monthly, quarterly or semi-annual basis based on the amount of services contracted.

Stock-Based Compensation

Certain of our employees (a) have been granted stock options to purchase shares of our common stock and (b) have been granted restricted stock or restricted stock units under which shares of our common stock vest based on the passage of time or achievement of performance and market conditions.

We recognize stock-based compensation expense in net earnings based on the fair value of the award on the date of the grant. We determine the fair value of stock options issued using a binomial option-pricing model. The binomial option-pricing model considers a range of assumptions related to volatility, dividend yield, risk-free interest rate, and employee exercise behavior. Expected volatilities utilized in the binomial option pricing model are based on a combination of implied market volatilities and historical volatilities of our stock and a peer group of companies due to the limited trading history associated with our common stock. Inclusion of our stock volatility in the valuation of future stock option grants may impact stock-based compensation expense recognized. Similarly, the dividend yield is based on historical experience and expected future dividend payments. The risk-free rate is derived from the U.S. Treasury yield curve in effect at the time of grant. The binomial option pricing model also incorporates exercise and forfeiture assumptions based on an analysis of historical data. The expected life of a stock option grant is derived from the output of the binomial model and represents the period of time that options granted are expected to be outstanding.

The grant date fair value of restricted stock and restricted stock units that vest upon achievement of service conditions is based on the closing price of our common stock on the date of grant. We also grant performance-based awards that vest over a performance period. Under these programs, we communicate “target awards” at the beginning of the performance period with possible payouts at the end of the performance period ranging from 0% to 260% of the target awards. The fair value of performance-based awards subject to a market condition is determined using a Monte Carlo simulation model. The principal variable assumptions utilized in determining the grant date fair value of performance-based awards subject to a market condition include the risk-free rate, stock volatility, dividend yield, and correlations between our stock price and the stock prices of the peer group of companies. The probability associated with the achievement of performance conditions affects the vesting of our performance-based awards. Expense is only recognized for those shares expected to vest. We adjust stock-based compensation expense (increase or decrease) when it becomes probable that actual performance will differ from our estimate.

Income Taxes

Income tax expense is recognized for the amount of taxes payable or refundable for the current year. Deferred tax assets and liabilities are recognized for the expected future tax consequences of temporary differences between the financial reporting and tax bases of assets and liabilities, and for operating losses and tax credit carryforwards. Management must make assumptions, judgments, and estimates to determine the provision for income taxes, taxes payable or refundable, and deferred tax assets and liabilities. Our assumptions, judgments, and estimates take into consideration the realization of deferred tax assets and changes in tax laws or interpretations thereof. Our income tax returns are subject to examination by various tax authorities. A change in the assessment of the outcomes of such matters could materially impact our consolidated financial statements.

We record a valuation allowance to reduce deferred tax assets to the amount that is more likely than not to be realized. In determining the need for a valuation allowance, we consider future market growth, forecasted earnings, future taxable income, and prudent and feasible tax planning strategies. In the event we determine that it is more likely than not that an entity will be unable to realize all or a portion of its deferred tax assets in the future, we would increase the valuation allowance and recognize a corresponding charge to earnings in the period in which such a determination is made. Likewise, if we later determine that it is more likely than not that the deferred tax assets will be realized, we would reverse the applicable portion of the previously recognized valuation allowance. In order to realize deferred tax assets, we must be able to generate sufficient taxable income of the appropriate character in the jurisdictions in which the deferred tax assets are located.

We recognize tax benefits for tax positions that are more likely than not to be sustained upon examination by tax authorities. The amount recognized is measured as the largest amount of benefit that is greater than 50 percent likely to be realized upon ultimate settlement. Unrecognized tax benefits are tax benefits claimed in our income tax returns that do not meet these recognition and measurement standards. Assumptions, judgments, and the use of estimates are required in determining whether the "more likely than not" standard has been met when developing the provision for income taxes.

If certain pending tax matters settle within the next twelve months, the total amount of unrecognized tax benefits may increase or decrease for all open tax years and jurisdictions. Audit outcomes and the timing of audit settlements are subject to significant uncertainty. We continually assess the likelihood and amount of potential adjustments and adjust the income tax provision, the current taxes payable and deferred taxes in the period in which the facts that give rise to a revision become known.

We account for the global intangible low taxed income ("GILTI") tax as a period cost when incurred. The GILTI provision is effective beginning in fiscal year 2019.

We account for goodwill impairment as a permanent tax difference and as a period cost when incurred effective beginning in fiscal year 2019.

Goodwill

We test goodwill for impairment annually and whenever events or changes in circumstances indicate the carrying value may not be recoverable. We test goodwill for impairment at the reporting unit level. A reporting unit is an operating segment or a component of an operating segment. Based on how the chief operating decision maker regularly reviews information for purposes of allocating resources and assessing performance, we have five reporting units.

We test impairment by first comparing the fair value of each reporting unit to its carrying amount. If the carrying value of the reporting unit exceeds its fair value, the difference, up to the amount of goodwill recorded for the reporting unit, is recognized as an impairment.

We estimate the fair value of our reporting units by weighting the results from the income approach, which is the present value of expected cash flows discounted at a risk-adjusted weighted-average cost of capital, and the market approach, which uses market multiples of companies in similar lines of business. These valuation approaches require significant judgment and consider a number of factors including assumptions about the future growth and profitability of our reporting units, the determination of appropriate comparable publicly traded companies in our industry, discount rates, and terminal growth rates.

During fiscal 2018, the ANA reporting unit, which was previously a reportable segment, was at risk of failing step one of the goodwill impairment test. The impairment test indicated that the fair value of the reporting unit exceeded the carrying value by less than 10%. Declines in advertising revenue from certain OEM contracts and changes in revenue mix were the primary drivers of the decline in fair value.

In the first quarter of fiscal 2019, ANA updated its estimates regarding operating results and growth rate due to continued changes to the business primarily related to certain OEM contracts. Therefore, the Company determined that the carrying amount of goodwill should be evaluated for impairment at September 30, 2018. The impairment test indicated that the fair value of ANA exceeded its carrying value by approximately 7% which was lower than the fourth quarter of fiscal 2018. No goodwill impairment was recorded.

During the second and third quarters of fiscal 2019, there were no events or changes in circumstances that would indicate a potential decline in ANA's fair value. Therefore, the Company did not evaluate ANA's goodwill for impairment at December 31, 2018 and March 31, 2019.

During the fourth quarter of fiscal 2019, the Company committed to a plan to divest the Digital Marketing Business which includes all of the assets of ANA resulting in an evaluation of ANA's goodwill for impairment. The impairment test indicated that the carrying value of ANA was higher than its fair value. The decline in ANA's fair value was driven by a decrease in estimated future earnings and an unfavorable change in the discount rate representing management’s assessment of increased risk with respect to the business forecasts primarily due to business uncertainty after the public announcement of the planned sale of business and management's shift in focus to customer retention instead of growth. As a result, the Company recorded a goodwill impairment charge of $168.7 million in the Loss (Earnings) from discontinued operations, net of taxes line in its Consolidated Statements of Operations. The remaining goodwill of ANA of $45.6 million as of June 30, 2019 is recorded in current assets held for sale in our Consolidated Balance Sheets. Further adverse change in ANA's forecasts, or other underlying assumptions, could negatively impact the estimated fair value and result in additional impairment charges which could be material to our consolidated earnings.

The valuation of a reporting unit requires significant judgment and is highly sensitive to underlying assumptions including forecasted revenue growth, profitability and discount rates. An adverse change to the fair value of reporting units could result in an impairment charge which could be material to consolidated earnings.

Long-Lived Assets

We review our long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amount of the asset may not be recoverable. Recoverability of assets to be held and used is measured by a comparison of the carrying value of the asset to its undiscounted future cash flows expected to be generated by the asset. If the carrying amount of the asset exceeds its estimated undiscounted future cash flow, an impairment charge is recognized for the amount by which the carrying amount exceeds the fair value. Given the significance of our long-lived assets, an adverse change to the fair value of our long-lived assets could result in an impairment charge which could be material to our consolidated earnings.

Assets Held for Sale

We consider assets to be held for sale when management, with appropriate authority, approves and commits to a formal plan to actively market the assets for sale at a price reasonable in relation to their estimated fair value, the assets are available for immediate sale in their present condition, an active program to locate a buyer has been initiated, the sale of the assets is probable and expected to be completed within one year, and it is unlikely that significant changes will be made to the plan. Upon designation as held for sale, we record the assets at the lower of their carrying value or their estimated fair value, reduced for the cost to dispose the assets. Depending on the net realized value from the sale, the potential charge could be material to our consolidated earnings.

Legal and Other Contingencies

From time to time, the Company is subject to various claims and is involved in various legal, regulatory, and arbitration proceedings concerning matters arising in connection with the conduct of its business activities. including those noted in Item 8 of Part II, "Financial Statements and Supplementary Data - Note 16 - Commitments and Contingencies." We routinely assess the likelihood of any adverse judgments or outcomes related to these matters, as well as ranges of probable losses, by consulting with internal personnel involved with such matters as well as with outside legal counsel handling such matters. We accrue for estimated losses for those matters where we believe that the likelihood of a loss has occurred, is probable and the amount of the loss is reasonably estimable. The determination of the amount of such reserves is made after careful analysis of each matter. The amount of such reserves may change in the future due to new developments or changes in approach such as a change in settlement strategy in dealing with these matters. The inherent uncertainty related to the outcome of these matters can result in amounts materially different from any provisions made with respect to their resolution.

The Company is involved in several antitrust lawsuits that set forth allegations of anti-competitive agreements between the Company and The Reynolds and Reynolds Company ("Reynolds and Reynolds") relating to the manner in which the defendants control access to, and allow integration with, their respective DMSs, and that seek, among other things, treble damages and injunctive relief. These lawsuits have been transferred to, or filed in, the U.S. District Court for the Northern District of Illinois for consolidated and coordinated pretrial proceedings as part of a multi-district litigation proceeding (“MDL”).

During the fourth quarter of fiscal 2019, the Company established a litigation provision of $90 million related to the anti-trust lawsuits. This estimated loss is based upon currently available information and represents the Company’s best estimate of such loss. Estimating the value of this estimated loss involved significant judgment given the uncertainty that still exists with respect to the unsettled cases due to a variety of factors typical of complex, large scale litigation, including, among others: (i) formative issues, including: (a) the causes of action the plaintiffs can pursue; (b) the definition of the class(es) of plaintiffs; (c) the types of damages that can be recovered; and (d) whether plaintiffs can establish loss causation as a matter of law, all of which have yet to be determined pending the outcome of dispositive motions (e.g., motions for class certification and motions for summary judgment); (ii) discovery is ongoing and significant factual issues remain to be resolved; (iii) expert discovery with respect to, among other things, alleged antitrust injury and damages is not sufficiently advanced; (iv) the absence of productive settlement discussions to date with plaintiffs other than Cox; and (v) the novel or uncertain nature of the legal issues presented. For these same reasons, the Company cannot reasonably estimate a maximum potential loss exposure at this time. In addition, the Company’s estimate does not incorporate or reflect the potential value of the Company’s counterclaims against certain of the plaintiffs in the ongoing cases. The legal proceedings underlying the estimated litigation liability will change from time to time and actual results may vary significantly from the estimate. As noted above, an adverse result in any of the remaining cases could have a material adverse effect on the Company's business, results of operations, financial condition, or liquidity.

RECENTLY ISSUED ACCOUNTING PRONOUNCEMENTS

Refer to Item 8 of Part II, "Financial Statements and Supplementary Data - Note 3 - New Accounting Pronouncements" of this Annual Report on Form 10-K for financial information regarding recently issued and adopted accounting pronouncements including the effects on our results of operations, financial condition, and cash flows.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

We are subject to interest rate risk related to our revolving credit facility and term loan facilities as those arrangements contain interest rates that are not fixed. As of June 30, 2019, our revolving credit facility was undrawn. The interest rate per annum on the two $300.0 million term loan facilities with three year term was 3.94% and with five year term was 4.07% as of June 30, 2019. A hypothetical increase in the interest rate of 10% would have resulted in approximately $0.7 million impact on earnings before income taxes for the year ended June 30, 2019.

We operate and transact business in various foreign jurisdictions and are therefore exposed to market risk from changes in foreign currency exchange rates that could impact our financial condition, results of operations, and cash flows. We have not been materially impacted by fluctuations in foreign currency exchange rates as a significant portion of our business is transacted in U.S. dollars, and is expected to continue to be transacted in U.S. dollars or U.S. dollar-based currencies. As of June 30, 2019, operations in foreign jurisdictions were principally transacted in Canadian dollars, Euros, Pound Sterling, and Renminbi. A hypothetical change in all foreign currency exchange rates of 10% would have resulted in an increase or decrease in consolidated operating earnings of approximately $12.0 million for the year ended June 30, 2019.

We primarily manage our exposure to these market risks through our regular operating and financing activities. We also use derivatives not designated as hedges which consisted of foreign currency forward contracts to offset the risks associated with the effects of certain foreign currency exposure on intercompany loans.

Item 8. Financial Statements and Supplementary Data

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Consolidated Financial Statements

Financial Statement Schedule

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the stockholders and the Board of Directors of
CDK Global, Inc.
Hoffman Estates, Illinois

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of CDK Global, Inc. and subsidiaries (the "Company") as of June 30, 2019 and 2018, the related consolidated statements of operations, comprehensive income, stockholders' (deficit) equity, and cash flows for each of the three years in the period ended June 30, 2019, and the related notes and the schedule listed in the Index at Item 8 (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of June 30, 2019 and 2018, and the results of its operations and its cash flows for each of the three years in the period ended June 30, 2019, in conformity with accounting principles generally accepted in the United States of America.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of June 30, 2019, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated August 13, 2019 expressed an unqualified opinion on the Company's internal control over financial reporting.

Change in Accounting Principle

As discussed in Note 6 to the financial statements, effective July 1, 2018, the Company adopted the Financial Accounting Standards Board Accounting Standards Codification 606, *Revenue from Contracts with Customers*, using the modified retrospective approach.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the 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 audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the 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 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 financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matters

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

Goodwill - Advertising North America Reporting Unit - Refer to Notes 2 and 14 to the financial statements

Critical Audit Matter Description

The Company tests goodwill for impairment annually and whenever events or changes in circumstances indicate the carrying value may not be recoverable, by comparing the fair value of each reporting unit to its carrying amount. During the fourth quarter of fiscal 2019, the Company determined the fair value of the Advertising North America ("ANA") reporting unit was lower than its carrying value, resulting in a goodwill impairment charge of $168.7 million for the year ended June 30, 2019. Additionally, in June 2019, the Company committed to a plan to divest all of the assets of the ANA reporting unit. This action resulted in the reclassification of the assets and liabilities comprising the ANA reporting unit to assets and liabilities held for sale in the consolidated balance sheets.

The Company estimates the fair value of the ANA reporting unit by using a weighted average of the fair values indicated by the income approach, which is the present value of expected cash flows discounted at a risk-adjusted weighted-average cost of capital, and the market approach, which uses market multiples of companies in similar lines of business. The income approach requires management to make significant estimates and assumptions related to forecasts of future growth and profitability, and the selection of discount rates. Changes in these assumptions could have a significant impact on the fair value of the ANA reporting unit, the amount of any goodwill impairment charge, or the fair value of the net assets held for sale.

Given declines in advertising revenue, the inherent subjectivity in the selection of inputs to the income approach, sensitivity of both indicated fair value and related goodwill impairment charge to changes in those inputs, and the plan to divest the ANA reporting unit, performing audit procedures to evaluate the reasonableness of management's estimates and assumptions related to forecasts of future growth and profitability and the selection of the discount rate for the ANA reporting unit required a high degree of auditor judgment and an increased extent of effort, including the need to involve our fair value specialists.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to forecasts of future growth and profitability and the discount rate used by management to estimate the fair value of the ANA reporting unit included the following, among others:

- We tested the effectiveness of controls over goodwill, including those over the forecasts of future growth and profitability, and the selection of the discount rate.

- We evaluated management's ability to accurately forecast future growth and profitability by comparing actual results to management's historical forecasts.

- We evaluated the reasonableness of management's revenue and operating margin forecasts by comparing the forecasts to:

  - Historical revenues and operating margins.

  - Internal communications to management and the Board of Directors.

  - Forecasted information included in Company press releases as well as in analyst and industry reports for the Company and certain of its peer companies.

- We evaluated the impact of changes in management's forecasts throughout the current year by evaluating trends and changes on a quarterly basis, considering changes in significant customer contracts, and evaluating the impact of other changes in the economy and business environment that would impact the forecasts through June 30, 2019.

- With the assistance of our fair value specialists, we evaluated the reasonableness of the (1) valuation methodology and (2) discount rate by:

  - Testing the source information underlying the determination of the discount rate and the mathematical accuracy of the calculation.

  - Developing a range of independent estimates and comparing those to the discount rate selected by management.

Revenue - Refer to Notes 2 and 6 to the financial statements

Critical Audit Matter Description

The Company generates revenue from the following four categories: subscription, on-site licenses and installation, transaction, and other. The majority of the Company's revenue is generated from contracts with multiple performance obligations, and the Company's products and services are rarely licensed or sold on a standalone basis. Revenue recognized for the year ended June 30, 2019, was $1,914.8 million.

Due to the multiple element nature of the Company's contracts, appropriate revenue recognition requires the Company to exercise significant judgment in the following areas:

- Determination of whether products and services are considered distinct performance obligations that should be accounted for separately versus together, such as software licenses and related services that are sold in hosted service arrangements.

- Determination of stand-alone selling prices for products and services.

- Estimation of contract transaction price and allocation of the transaction price to identified performance obligations.

- The pattern of delivery (i.e., timing of when revenue is recognized) for each distinct performance obligation.

In addition, the Company's subscription and on-site license and installation revenue consists of a significant volume of transactions, sourced from multiple systems, databases, and other tools across different business entities. The processing and recording of revenue is highly automated and involves migrating, formatting, and combining significant volumes of data across multiple systems and interfaces, partially facilitated by custom-built algorithms.

Given the complexity of certain of the Company's contracts and judgments necessary to evaluate the revenue recognition considerations as noted above, the volume of contracts, and the complex automated systems to process and record revenue, performing procedures to audit revenue required a high degree of auditor judgment and extensive audit effort, including involvement of professionals with expertise in information technology (IT).

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to the Company's accounting for contracts with customers included the following, among others:

- We tested the effectiveness of the controls over the review of customer contracts, including, among others the identification of performance obligations, determination of stand-alone selling prices, estimating transaction price, and determination of pattern of delivery of performance obligations.

- With the assistance of our IT specialists, we:

  – Identified the significant systems used to process revenue transactions and tested the general IT controls over each of these systems, including testing of user access controls, change management controls, and IT operations controls.

  – Performed testing of system interface controls and automated controls within the relevant revenue streams, as well as the controls designed to determine the accuracy and completeness of revenue.

- We selected a sample of customer contracts and performed the following, among others:

  – Obtained contract documents for each selection, including master agreements, and other documents that were part of the agreement.

  – Analyzed the contract to determine if arrangement terms that may have an impact on revenue recognition were identified and properly considered in the evaluation of the accounting for the contract.

  – Confirmed the contract terms with the counterparty and performed alternative procedures in the event of nonreplies.

  – Tested management's identification of distinct performance obligations by evaluating whether the underlying goods, services, or both were highly interdependent and interrelated.

  – Evaluated the total transaction price determined by management based on the terms of the contract, including any variable consideration, and recalculated the allocation of the total transaction price to each distinct performance obligation based on respective standalone selling prices.

  – Evaluated the appropriateness of the selected pattern of revenue recognition for each performance obligation and tested delivery/installation of the goods and services.

  – For a sample of revenue transactions, we performed detail transaction testing by agreeing the amounts recognized to source documents and testing the mathematical accuracy of the recorded revenue.

- We evaluated the reasonableness of the Company's methodology for estimating standalone selling prices by:

  – Holding discussions with sales department personnel to understand the Company's pricing strategy.

  – Comparing a sample of standalone selling price estimates to historical selling prices and investigating estimates with low correlation to historical pricing.

Contingencies - Refer to Note 16 to the financial statements

Critical Audit Matter Description

The Company is involved in several antitrust lawsuits that set forth allegations of anti-competitive agreements. Legal loss contingencies are evaluated based on the likelihood of the Company incurring a liability and whether a loss or range of losses is reasonably estimable. The likelihood and amount of a loss or range of losses are estimated based on the progression of settlement discussions, legal and expert fees, and the Company's historical litigation experience. In July 2019, the Company entered into a settlement agreement for one antitrust lawsuit. Following this settlement, the Company determined that:

- A loss on the remaining unsettled antitrust lawsuits was probable and could be reasonably estimated.
- The maximum potential loss exposure was not reasonably estimable.

Accordingly, in the fourth quarter of 2019, the Company recorded a litigation provision of $90 million. Estimating the value of the loss involved significant judgment given the uncertainty that exists with respect to the remaining unsettled cases.

Given the subjectivity of estimating the likelihood and amount of a loss and range of potential loss, performing audit procedures to evaluate whether legal loss contingencies were appropriately recorded and disclosed as of June 30, 2019, required a high degree of auditor judgment and an increased extent of effort.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to the legal loss contingencies included the following, among others:

- We tested the effectiveness of controls related to legal loss contingencies, including those over the review of outstanding legal matters.
- We inquired of internal and external legal counsel to understand developments in legal matters and progression in potential settlement discussions.
- We requested and received a written response from external legal counsel as it relates to the antitrust lawsuits.
- We read Board of Directors meeting minutes for evidence of unrecorded contingencies.
- We evaluated the assumptions used by the Company to estimate the litigation provision, including corroborating the assumptions with internal legal counsel.
- We evaluated the Company's legal contingencies disclosures for consistency with our knowledge of the Company's legal matters.

/s/ DELOITTE & TOUCHE LLP
Chicago, Illinois
August 13, 2019

We have served as the Company's auditor since 2014.

CDK Global, Inc.
Consolidated Statements of Operations
(In millions, except per share amounts)

	Years Ended June 30,		
	2019	2018	2017
Revenues	$ 1,914.8	$ 1,798.0	$ 1,730.7
Expenses:			
Cost of revenues	899.8	854.5	898.2
Selling, general and administrative expenses	444.7	441.2	433.2
Restructuring expenses	28.0	20.6	17.7
Litigation provision	90.0	—	—
Total expenses	1,462.5	1,316.3	1,349.1
Operating earnings	452.3	481.7	381.6
Interest expense	(139.1)	(95.9)	(57.2)
Loss from equity method investment	(17.0)	—	—
Other income, net	7.7	13.4	3.3
Earnings before income taxes	303.9	399.2	327.7
Provision for income taxes	(62.2)	(88.1)	(92.8)
Net earnings from continuing operations	241.7	311.1	234.9
(Loss) Earnings from discontinued operations, net of taxes	(109.8)	77.6	67.6
Net earnings	131.9	388.7	302.5
Less: net earnings attributable to noncontrolling interest	7.9	7.9	6.9
Net earnings attributable to CDK	$ 124.0	$ 380.8	$ 295.6
Net earnings (loss) attributable to CDK per share - basic:			
Continuing operations	$ 1.86	$ 2.23	$ 1.55
Discontinued operations	$ (0.87)	$ 0.57	$ 0.46
Total net earnings attributable to CDK per share - basic	$ 0.99	$ 2.80	$ 2.01
Net earnings (loss) attributable to CDK per share - diluted:			
Continuing operations	$ 1.85	$ 2.21	$ 1.53
Discontinued operations	$ (0.87)	$ 0.57	$ 0.46
Total net earnings attributable to CDK per share - diluted	$ 0.98	$ 2.78	$ 1.99
Weighted-average common shares outstanding:			
Basic	125.5	135.8	146.7
Diluted	126.4	136.8	148.2

See notes to the consolidated financial statements.

CDK Global, Inc.
Consolidated Statements of Comprehensive Income
(In millions)

	Years Ended June 30,		
	2019	2018	2017
Net earnings	$ 131.9	$ 388.7	$ 302.5
Other comprehensive (loss) income:			
Currency translation adjustments	(17.8)	3.5	2.2
Other comprehensive (loss) income	(17.8)	3.5	2.2
Comprehensive income	114.1	392.2	304.7
Less: comprehensive income attributable to noncontrolling interest	7.9	7.9	6.9
Comprehensive income attributable to CDK	$ 106.2	$ 384.3	$ 297.8

See notes to the consolidated financial statements.

CDK Global, Inc.
Consolidated Balance Sheets
(In millions, except per share par value)

	June 30, 2019	June 30, 2018
Assets		
Current assets:		
Cash and cash equivalents	$ 311.4	$ 804.4
Accounts receivable, net of allowances of $9.5 and $7.4, respectively	412.3	374.6
Current assets held for sale	98.6	1.8
Other current assets	164.8	186.5
Total current assets	987.1	1,367.3
Property, plant and equipment, net	144.8	127.6
Long-term assets held for sale	—	267.6
Other assets	284.9	164.3
Goodwill	1,356.3	989.2
Intangible assets, net	225.9	92.4
Total assets	$ 2,999.0	$ 3,008.4
Liabilities and Stockholders' Deficit		
Current liabilities:		
Current maturities of long-term debt and capital lease obligations	$ 270.8	$ 45.2
Accounts payable	57.4	50.5
Accrued expenses and other current liabilities	203.8	197.9
Litigation liability	90.0	—
Accrued payroll and payroll-related expenses	89.2	85.6
Current liabilities held for sale	1.9	3.7
Short-term deferred revenues	124.8	165.5
Total current liabilities	837.9	548.4
Long-term debt and capital lease obligations	2,659.4	2,575.5
Long-term deferred revenues	68.4	110.2
Deferred income taxes	80.5	56.7
Long-term liabilities held for sale	—	0.8
Other liabilities	67.3	64.1
Total liabilities	3,713.5	3,355.7
Commitments and Contingencies (Note 16)		
Stockholders' Deficit:		
Preferred stock, $0.01 par value: Authorized, 50.0 shares; issued and outstanding, none	—	—
Common stock, $0.01 par value: Authorized, 650.0 shares; issued, 160.3 and 160.3 shares, respectively; outstanding, 121.1 and 130.1 shares, respectively	1.6	1.6
Additional paid-in-capital	688.5	679.8
Retained earnings	911.6	753.0
Treasury stock, at cost: 39.2 and 30.2 shares, respectively	(2,324.6)	(1,810.7)
Accumulated other comprehensive income	(6.7)	11.5
Total CDK stockholders' deficit	(729.6)	(364.8)
Noncontrolling interest	15.1	17.5
Total stockholder's deficit	(714.5)	(347.3)
Total liabilities and stockholders' deficit	$ 2,999.0	$ 3,008.4

See notes to the consolidated financial statements.

CDK Global, Inc.
Consolidated Statements of Cash Flows
(In millions)

	Years Ended June 30,		
	2019	2018	2017
Cash Flows from Operating Activities:			
Net earnings	$ 131.9	$ 388.7	$ 302.5
Less: (loss) earnings from discontinued operations, net of taxes	(109.8)	77.6	67.6
Net earnings from continuing operations	241.7	311.1	234.9
Adjustments to reconcile net earnings from continuing operations to cash flows provided by operating activities:			
Depreciation and amortization	89.8	70.8	63.4
Asset impairment	19.3	—	—
Loss from equity method investment	17.0	—	—
Deferred income taxes	(5.1)	(10.1)	20.9
Stock-based compensation expense	30.5	33.4	52.7
Other	11.1	4.6	4.6
Changes in operating assets and liabilities, net of effects of acquisitions:			
Increase in accounts receivable	(20.1)	(10.6)	(5.6)
(Increase) Decrease in other assets	(49.2)	14.0	1.5
(Decrease) Increase in accounts payable	(1.6)	10.5	5.1
Increase (Decrease) in accrued expenses and other liabilities	105.1	(49.8)	(14.8)
Net cash flows provided by operating activities, continuing operations	438.5	373.9	362.7
Net cash flows provided by operating activities, discontinued operations	44.6	92.5	73.0
Net cash flows provided by operating activities	483.1	466.4	435.7
Cash Flows from Investing Activities:			
Capital expenditures	(54.4)	(45.9)	(62.4)
Proceeds from sale of property, plant and equipment	7.4	1.8	0.5
Capitalized software	(37.9)	(30.8)	(28.1)
Acquisitions of businesses, net of cash acquired	(513.0)	(12.8)	—
Contributions to investments	(17.0)	—	(2.1)
Proceeds from investments	0.4	0.8	7.9
Net cash flows used in investing activities, continuing operations	(614.5)	(86.9)	(84.2)
Net cash flows used in investing activities, discontinued operations	(8.7)	(26.6)	(3.7)
Net cash flows used in investing activities	(623.2)	(113.5)	(87.9)
Cash Flows from Financing Activities:			
Proceeds from long-term debt	1,100.0	500.0	1,000.0
Repayments of long-term debt and capital lease obligations	(806.5)	(46.4)	(36.9)
Dividends paid to stockholders	(74.8)	(80.1)	(80.7)
Repurchases of common stock	(524.1)	(623.6)	(700.0)
Proceeds from exercise of stock options	5.0	8.9	14.7
Withholding tax payments for stock-based compensation awards	(15.8)	(10.6)	(12.2)
Dividend payments to noncontrolling owners	(10.3)	(7.4)	(6.3)
Payments of deferred financing costs	(11.7)	(7.9)	(10.6)
Acquisition-related payments	(10.8)	(4.1)	(8.1)
Net cash flows (used in) provided by financing activities, continuing operations	(349.0)	(271.2)	159.9
Effect of exchange rate changes on cash, cash equivalents, and restricted cash	(6.9)	1.4	4.0
Net change in cash, cash equivalents, and restricted cash	(496.0)	83.1	511.7
Cash, cash equivalents, and restricted cash, beginning of period	817.1	734.0	222.3
Cash, cash equivalents, and restricted cash, end of period	$ 321.1	$ 817.1	$ 734.0

Reconciliation of cash, cash equivalents, and restricted cash to the Consolidated Balance Sheets:			
Cash and cash equivalents	$ 311.4	$ 804.4	$ 726.1
Restricted cash in funds held for clients included in other current assets	9.7	12.7	7.9
Total cash, cash equivalents, and restricted cash	$ 321.1	$ 817.1	$ 734.0

	Years Ended June 30,		
	2019	2018	2017
Supplemental Disclosure:			
Cash paid for:			
Income taxes and foreign withholding taxes, net of refunds	$ 124.2	$ 118.9	$ 120.3
Interest	130.0	92.8	49.6
Non-cash transactions:			
Non-cash consideration issued for acquisitions (Note 5)	—	14.5	—

See notes to the consolidated financial statements.

CDK Global, Inc.
Consolidated Statements of Stockholders' (Deficit) Equity
(In millions)

	Common Stock Shares Issued	Common Stock Amount	Additional Paid-in-Capital	Retained Earnings	Treasury Stock	Accumulated Other Comprehensive Income	Total CDK Stockholders' (Deficit) Equity	Non-controlling Interest	Total Stockholders' (Deficit) Equity
Balance as of June 30, 2016	160.3	$ 1.6	$ 640.7	$ 238.3	$ (526.6)	$ 5.8	$ 359.8	$ 16.4	$ 376.2
Net earnings	—	—	—	295.6	—	—	295.6	6.9	302.5
Foreign currency translation adjustments	—	—	—	—	—	2.2	2.2	—	2.2
Stock-based compensation expense and related dividend equivalents	—	—	47.3	(0.5)	—	—	46.8	—	46.8
Common stock issued for the exercise and vesting of stock-based compensation awards, net	—	—	(45.1)	—	47.6	—	2.5	—	2.5
Cash dividends paid to stockholders ($.555 per share)	—	—	—	(80.7)	—	—	(80.7)	—	(80.7)
Repurchases of common stock	—	—	(34.3)	—	(665.7)	—	(700.0)	—	(700.0)
Dividend payments to noncontrolling owners	—	—	—	—	—	—	—	(6.3)	(6.3)
Balance as of June 30, 2017	160.3	1.6	608.6	452.7	(1,144.7)	8.0	(73.8)	17.0	(56.8)
Net earnings	—	—	—	380.8	—	—	380.8	7.9	388.7
Foreign currency translation adjustments	—	—	—	—	—	3.5	3.5	—	3.5
Stock-based compensation expense and related dividend equivalents	—	—	30.5	(0.4)	—	—	30.1	—	30.1
Common stock issued for the exercise and vesting of stock-based compensation awards, net	—	—	(26.2)	—	24.5	—	(1.7)	—	(1.7)
Cash dividends paid to stockholders ($0.59 per share)	—	—	—	(80.1)	—	—	(80.1)	—	(80.1)
Repurchases of common stock	—	—	66.9	—	(690.5)	—	(623.6)	—	(623.6)
Dividend payments to noncontrolling owners	—	—	—	—	—	—	—	(7.4)	(7.4)
Balance as of June 30, 2018	160.3	1.6	679.8	753.0	(1,810.7)	11.5	(364.8)	17.5	(347.3)
Net earnings	—	—	—	124.0	—	—	124.0	7.9	131.9
Foreign currency translation adjustments	—	—	—	—	—	(17.8)	(17.8)	—	(17.8)
Stock-based compensation expense and related dividend equivalents	—	—	29.7	(0.3)	—	—	29.4	—	29.4
Common stock issued for the exercise and vesting of stock-based compensation awards, net	—	—	(34.0)	—	23.2	—	(10.8)	—	(10.8)
Cash dividends paid to stockholders ($0.60 per share)	—	—	—	(74.8)	—	—	(74.8)	—	(74.8)
Repurchases of common stock	—	—	13.0	—	(537.1)	—	(524.1)	—	(524.1)
Dividend payments to noncontrolling owners	—	—	—	—	—	—	—	(10.3)	(10.3)
Cumulative impact of ASC 606	—	—	—	109.7	—	(0.4)	109.3	—	109.3
Balance as of June 30, 2019	160.3	$ 1.6	$ 688.5	$ 911.6	$ (2,324.6)	$ (6.7)	$ (729.6)	$ 15.1	$ (714.5)

See notes to the consolidated financial statements.

Note 1. Basis of Presentation

A. Description of Business

CDK Global, Inc. (the "Company" or "CDK") enables end-to-end automotive commerce across the globe. For over 40 years, the Company has served automotive retailers and original equipment manufacturers ("OEMs") by providing innovative solutions that allow them to better connect, manage, analyze, and grow their businesses. The Company's solutions automate and integrate all parts of the buying process, including the acquisition, sale, financing, insuring, parts supply, repair, and maintenance of vehicles, in more than 100 countries around the world, for approximately 30,000 retail locations and most OEMs.

The Company is organized into two main operating groups, CDK North America ("CDKNA") and CDK International ("CDKI"), which are also reportable segments. In addition, the Company has an Other segment, the primary components of which are corporate allocations and other expenses not recorded in the segment results. Refer to Note 19 - Financial Data by Segment for further information.

The Company previously reported the results of Advertising North America ("ANA") as a reportable segment. During the fourth quarter of fiscal year 2019, the Company committed to a plan to divest: (a) all of the assets of ANA; and (b) certain assets of CDKNA related to mobile advertising solutions and website services (collectively, the "Digital Marketing Business"). The Digital Marketing Business is presented as discontinued operations. Additional information on discontinued operations is contained in Note 4 - Discontinued Operations.

B. Basis of Preparation

The accompanying financial statements have been prepared in accordance with accounting principles generally accepted in the United States ("GAAP"). The preparation of the financial statements in conformity with GAAP requires management to make estimates and assumptions that affect assets, liabilities, revenues, and expenses that are reported in the accompanying financial statements and footnotes thereto. Actual results may differ from those estimates.

Certain prior year amounts have been reclassified to conform to current year presentation. Refer to Note 3 - New Accounting Pronouncements for discussion relating to the impact of adopting Accounting Standards Update ("ASU") 2016-18 on the presentation of changes in restricted cash in the consolidated statement of cash flows, and Note 4 - Discontinued Operations for the impact of presenting Digital Marketing Business as held for sale and discontinued operations.

C. Spin-off

On April 9, 2014, the board of directors of Automatic Data Processing, Inc. ("ADP") approved the spin-off of the Dealer Services business of ADP. On September 30, 2014, the spin-off became effective and ADP distributed 100% of the common stock of CDK to the holders of record of ADP's common stock as of September 24, 2014 (the "spin-off").

Concurrent with the spin-off, the Company and ADP entered into several agreements providing for transition services and governing relationships between the Company and ADP. Refer to Note 10 - Income Taxes and Note 18 - Transactions with ADP for further information.

Note 2. Summary of Significant Accounting Policies

A. Consolidation

The financial statements include the accounts of the Company and its wholly owned subsidiaries. In addition, the financial statements include the accounts of Computerized Vehicle Registration ("CVR") in which CDK holds a controlling financial or management interest. Intercompany transactions and balances between consolidated CDK businesses have been eliminated.

The Company's share of earnings or losses of non-controlled affiliates, over which the Company exercises significant influence (generally a 20% to 50% ownership interest), are included in the consolidated operating results using the equity method of accounting. The carrying value of these equity method investments was not significant as of June 30, 2019 and 2018.

B. Business Combinations

The purchase price allocations for acquisitions are based on estimates of the fair value of tangible and intangible assets acquired and liabilities assumed. The Company engages independent valuation specialists, when necessary, to assist with purchase price allocations and uses recognized valuation techniques, including the income and market approaches, to determine fair value. Management makes estimates and assumptions in determining purchase price allocations and valuation analysis, which may involve significant unobservable inputs. The excess of the purchase price over the estimated fair values of the underlying assets acquired and liabilities assumed is allocated to goodwill. In certain circumstances, the determination of the purchase price and allocation to assets acquired and liabilities assumed are based upon preliminary estimates and assumptions. Accordingly, the allocation may be subject to revision during the measurement period, which may be up to one year from the acquisition date, when the Company receives final information, including appraisals and other analyses. Measurement period adjustments are recorded to goodwill in the reporting period in which the adjustments to the provisional amounts are determined.

Assets acquired and liabilities assumed in business combinations are recorded on the Company's consolidated balance sheets as of the respective acquisition dates based upon their estimated fair values at such dates. The results of operations of businesses acquired by the Company are included in the Company's consolidated statements of operations since their respective acquisition dates.

C. Restructuring

Restructuring expenses consist of employee-related costs, including severance and other termination benefits calculated based on long-standing benefit practices and local statutory requirements, and contract termination costs. Restructuring liabilities are recognized at fair value in the period the liability is incurred. In some jurisdictions, the Company has ongoing benefit arrangements under which the Company records the estimated severance and other termination benefits when such costs are deemed probable and estimable, approved by the appropriate corporate management, and if actions required to complete the termination plan indicate that it is unlikely that significant changes to the plan will be made or the plan will be withdrawn. In jurisdictions where there is not an ongoing benefit arrangement, the Company records estimated severance and other termination benefits when appropriate corporate management has committed to the plan and the benefit arrangement is communicated to the affected employees. A liability for costs to terminate a contract before the end of its term is recognized at fair value when the Company terminates the contract in accordance with its terms. Estimates are evaluated periodically to determine whether an adjustment is required.

D. Revenue Recognition and Deferred Costs

Effective July 1, 2018, the Company adopted the Financial Accounting Standard Board ("FASB") Accounting Standards Update ("ASU") 2014-09, "Revenue from Contracts with Customers," and related ASUs ("ASC 606") using the modified retrospective approach. The comparative information has not been restated and continues to be reported under the accounting standards in effect for the period presented. Refer to Note 6 - Revenue for the required disclosures related to the impact of adopting ASC 606 and a discussion of the Company's updated policy related to revenue recognition and deferred costs. Refer to Note 2 - Summary of Significant Accounting Policies in the Company's Annual Report on Form 10-K for the fiscal year ended June 30, 2018 for the Company's revenue recognition and deferred costs policies prior to adoption of ASC 606.

E. Income Taxes

Income tax expense is recognized for the amount of taxes payable or refundable for the current year. Deferred tax assets and liabilities are recognized for the expected future tax consequences of temporary differences between the financial reporting and tax bases of assets and liabilities, and for operating losses and tax credit carryforwards. Management must make assumptions, judgments, and estimates to determine the provision for income taxes, taxes payable or refundable, and deferred tax assets and liabilities. The Company's assumptions, judgments, and estimates take into consideration the realization of deferred tax assets and changes in tax laws or interpretations thereof. The Company's income tax returns are subject to examination by various tax authorities. A change in the assessment of the outcomes of such matters could materially impact the Company's consolidated financial statements.

The Company records a valuation allowance to reduce deferred tax assets to the amount that is more likely than not to be realized. In determining the need for a valuation allowance, the Company considers future market growth, forecasted earnings, future taxable income, and prudent and feasible tax planning strategies. In the event the Company determines that it is more likely than not that an entity will be unable to realize all or a portion of its deferred tax assets in the future, the Company would increase the valuation allowance and recognize a corresponding charge to earnings in the period in which such a determination is made. Likewise, if the Company later determines that it is more likely than not that the deferred tax assets will be realized, the Company would reverse the applicable portion of the previously recognized valuation allowance. In order to realize deferred tax assets, the Company must be able to generate sufficient taxable income of the appropriate character in the jurisdictions in which the deferred tax assets are located.

The Company recognizes tax benefits for tax positions that are more likely than not to be sustained upon examination by tax authorities. The amount recognized is measured as the largest amount of benefit that is greater than 50 percent likely to be realized upon ultimate settlement. Unrecognized tax benefits are tax benefits claimed in the Company's income tax returns that do not meet these recognition and measurement standards. Assumptions, judgments, and the use of estimates are required in determining whether the "more likely than not" standard has been met when developing the provision for income taxes.

If certain pending tax matters settle within the next twelve months, the total amount of unrecognized tax benefits may increase or decrease for all open tax years and jurisdictions. Audit outcomes and the timing of audit settlements are subject to significant uncertainty. The Company continually assesses the likelihood and amount of potential adjustments and adjusts the income tax provision, the current taxes payable and deferred taxes in the period in which the facts that give rise to a revision become known.

The Company accounts for the Global Intangible Low Taxed Income (GILTI) tax as a period cost when incurred. The GILTI provision is effective beginning in fiscal year 2019.

The Company accounts for goodwill impairment as a permanent tax difference and as a period cost when incurred effective beginning in fiscal year 2019.

F. Stock-Based Compensation

Certain of the Company's employees (a) have been granted stock options to purchase shares of the Company’s common stock and (b) have been granted restricted stock or restricted stock units under which shares of the Company's common stock vest based on the passage of time or achievement of performance and market conditions. The Company recognizes stock-based compensation expense in net earnings based on the fair value of the award on the date of the grant. The Company records the impact of forfeitures on stock compensation expense in the period the forfeitures occur. The Company determines the fair value of stock options issued using a binomial option-pricing model. The binomial option-pricing model considers a range of assumptions related to volatility, dividend yield, risk-free interest rate, and employee exercise behavior. Expected volatilities utilized in the binomial option pricing model are based on a combination of implied market volatilities and historical volatilities of peer companies. Similarly, the dividend yield is based on historical experience and expected future dividend payments. The risk-free rate is derived from the U.S. Treasury yield curve in effect at the time of grant. The binomial option pricing model also incorporates exercises based on an analysis of historical data. The expected life of a stock option grant is derived from the output of the binomial model and represents the period of time that options granted are expected to be outstanding.

The grant date fair value of restricted stock and restricted stock units that vest upon achievement of service conditions is based on the closing price of the Company's common stock on the date of grant. The Company also grants performance-based awards that vest over a performance period. Certain performance-based awards are further subject to adjustment (increase or decrease) based on a market condition defined as total stockholder return of the Company’s common stock compared to a peer group of companies. The fair value of performance-based awards subject to a market condition is determined using a Monte Carlo simulation model. The principal variable assumptions utilized in determining the grant date fair value of performance-based awards subject to a market condition include the risk-free rate, stock volatility, dividend yield, and correlations between the Company's stock price and the stock prices of the peer group of companies. The probability associated with the achievement of performance conditions affects the vesting of the Company's performance-based awards. Expense is only recognized for those shares expected to vest. The Company adjusts stock-based compensation expense (increase or decrease) when it becomes probable that actual performance will differ from the estimate.

G. Cash and Cash Equivalents

Investment securities with an original maturity of three months or less at the time of purchase are considered cash equivalents.

H. Accounts Receivable, Net

Accounts receivable, net comprises trade receivables and lease receivables, net of allowances. Trade receivables consist of amounts due to the Company in the normal course of business, which are not collateralized and do not bear interest. Lease receivables primarily relate to sales-type leases arising from the sale of hardware elements in bundled DMS or other integrated solutions. Lease receivables represent the current portion of the present value of the minimum lease payments at the beginning of the lease term. The long-term portion of the present value of the minimum lease payments is included within other assets on the consolidated balance sheets. The Company considers lease receivables to be a single portfolio segment.

The accounts receivable allowances for both trade receivables and lease receivables are estimated based on historical collection experience, an analysis of the age of outstanding accounts receivable, and credit issuance experience. Receivables are considered past due if payment is not received by the date agreed upon with the customer. Write-offs are made when management believes it is probable a receivable will not be recovered.

I. Funds Receivable and Funds Held for Clients and Client Fund Obligations

Funds receivable and funds held for clients represent amounts received or expected to be received from clients in advance of performing titling and registration services on behalf of those clients. These amounts are classified within other current assets on the consolidated balance sheets. The total amount due to remit for titling and registration obligations with the department of motor vehicles is recorded to client fund obligations which is classified as accrued expenses and other current liabilities on the consolidated balance sheets. Funds receivable was $32.3 million and $33.1 million, and funds held for clients was $9.7 million and $12.7 million as of June 30, 2019 and 2018, respectively. Client fund obligation was $42.0 million and $45.8 million as of June 30, 2019 and 2018, respectively.

J. Property, Plant and Equipment, Net

Property, plant and equipment, net is stated at cost and depreciated over the estimated useful lives of the assets using the straight-line method. Leasehold improvements are amortized over the shorter of the term of the lease or the estimated useful lives of the improvements. The estimated useful lives of assets are primarily as follows:

Buildings	20 to 40 years
Furniture and fixtures	4 to 7 years
Data processing equipment	2 to 5 years

K. Goodwill

The Company tests goodwill for impairment annually and whenever events or changes in circumstances indicate the carrying value may not be recoverable. The Company tests goodwill for impairment at the reporting unit level. A reporting unit is an operating segment or a component of an operating segment.

The Company tests impairment by first comparing the fair value of each reporting unit to its carrying amount. If the carrying value of the reporting unit exceeds its fair value, the difference, up to the amount of goodwill recorded for the reporting unit, is recognized as an impairment.

The Company estimates the fair value of the Company's reporting units by weighting the results from the income approach, which is the present value of expected cash flows discounted at a risk-adjusted weighted-average cost of capital, and the market approach, which uses market multiples of companies in similar lines of business. These valuation approaches require significant judgment and consider a number of factors including assumptions about the future growth and profitability of the Company's reporting units, the determination of appropriate comparable publicly traded companies in the Company's industry, discount rates, and terminal growth rates. An adverse change to the fair value of the Company's reporting units could result in an impairment charge which could be material to its consolidated earnings.

L. Impairment of Long-Lived Assets

Long-lived assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset group to estimated undiscounted future cash flows expected to be generated by the asset group. If the carrying amount of an asset exceeds its estimated future cash flows, an impairment charge is recognized for the amount by which the carrying amount exceeds the fair value.

M. Internal Use Software and Computer Software to be Sold, Leased, or Otherwise Marketed

The Company's policy provides for the capitalization of external direct costs of materials and services associated with developing or obtaining internal use computer software. In addition, the Company's policy also provides for the capitalization of certain payroll and payroll-related costs for employees who are directly associated with the internal use computer software projects. The amount of capitalizable payroll costs with respect to these employees is limited to the time directly spent on such projects. Costs associated with preliminary project stage activities, training, maintenance, and all other post-implementation stage activities are expensed as incurred. The Company also expenses internal costs related to minor upgrades and enhancements, as it is impracticable to separate these costs from normal maintenance activities. The Company amortizes internal use software typically over a three to five year life.

The Company's policy provides for the capitalization of certain costs of computer software to be sold, leased, or otherwise marketed. The Company's policy provides for the capitalization of all software production costs upon reaching technological feasibility for a specific product. Technological feasibility is attained when software products have a completed working model whose consistency with the overall product design has been confirmed by testing. Costs incurred prior to the establishment of technological feasibility are expensed as incurred. The establishment of technological feasibility requires judgment by management and in many instances is only attained a short time prior to the general release of the software. Maintenance-related costs are expensed as incurred.

Pursuant to these policies, the Company incurred expenses to research, develop, and deploy new and enhanced solutions of $79.5 million, $115.0 million, and $125.1 million for fiscal 2019, 2018, and 2017, respectively. These expenses were classified within cost of revenues on the consolidated statements of operations.

N. Assets Held for Sale

The Company considers assets to be held for sale when management, with appropriate authority, approves and commits to a formal plan to actively market the assets for sale at a price reasonable in relation to their estimated fair value, the assets are available for immediate sale in their present condition, an active program to locate a buyer has been initiated, the sale of the assets is probable and expected to be completed within one year and it is unlikely that significant changes will be made to the plan. Upon designation as held for sale, the Company records the assets at the lower of their carrying value or their estimated fair value, reduced for the cost to dispose the assets, and ceases to record depreciation and amortization expenses on the assets.

Assets and liabilities of a discontinued operation are reclassified for all comparative periods presented in the consolidated balance sheet. For assets and liabilities that meet the held for sale criteria but do not meet the definition of a discontinued operation, the Company reclassifies the assets and liabilities in the period in which the held for sale criteria are met, but does not reclassify prior period amounts. Refer to Note 4 - Discontinued Operations for further information regarding Company's assets and liabilities held for sale.

O. Discontinued Operations

The Company reports financial results for discontinued operations separately from continuing operations to distinguish the financial impact of disposal transactions from ongoing operations. Discontinued operations reporting occurs only when the disposal of a component or a group of components of the Company (i) meets the held-for-sale classification criteria, is disposed of by sale, or other than by sale, and (ii) represents a strategic shift that will have a major effect on the Company's operations and financial results. The results of operations and cash flows of a discontinued operation are restated for all comparative periods presented. Unless otherwise noted, discussion in the Notes to Consolidated Financial Statements refers to the Company's continuing operations. Refer to Note 4 - Discontinued Operations for further information regarding the Company's discontinued operations.

P. Foreign Currency

For foreign subsidiaries where the local currency is the functional currency, net assets are translated into U.S. dollars based on exchange rates in effect for each period, and revenues and expenses are translated at average exchange rates in the periods. Gains or losses from balance sheet translation of such entities are included in accumulated other comprehensive income on the consolidated balance sheets. Currency transaction gains or losses relate to intercompany loans denominated in a currency other than that of the loan counterparty, which do not eliminate upon consolidation. Currency transaction gains or losses are included within other income, net on the consolidated statements of operations.

Q. Fair Value Measurements

Fair value is defined as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. Valuation techniques used to measure fair value must maximize the use of observable inputs and minimize the use of unobservable inputs. A fair value hierarchy has been established based on three levels of inputs, of which the first two are considered observable and the last unobservable.

- Level 1: Inputs that are based upon quoted prices in active markets for identical assets or liabilities.
- Level 2: Inputs, other than quoted prices included within Level 1, which are observable for the asset or liability, either directly or indirectly.
- Level 3: Unobservable inputs where there is little or no market activity for the asset or liability. These inputs reflect management's best estimate of what market participants would use to price the assets or liabilities at the measurement date.

The Company determines the fair value of financial instruments in accordance with ASC 820, "Fair Value Measurements." This standard defines fair value and establishes a framework for measuring fair value in accordance with GAAP. Cash and cash equivalents, accounts receivable, other current assets, accounts payable, and other current liabilities are reflected in the consolidated balance sheets at cost, which approximates fair value due to the short-term nature of these instruments. The carrying value of the Company's term loan facilities (as described in Note 15 - Debt), including accrued interest, approximates fair value based on the Company's current estimated incremental borrowing rate for similar types of arrangements. The approximate aggregate fair value of the Company's senior notes as of June 30, 2019, and 2018, was $2,441.6 million and $1,849.3 million, respectively, based on quoted market prices for the same or similar instruments compared to a carrying value of $2,350.0 million and $1,850.0 million as of June 30, 2019, and 2018. The term loan facilities and the senior notes are considered Level 2 fair value measurements in the fair value hierarchy.

The Company has derivatives not designated as hedges which consisted of foreign currency forward contracts to offset the risks associated with the effects of certain foreign currency exposure on intercompany loans. The Company recognized changes in fair value of the derivative instruments in Other income, net in the consolidated statements of operations.

R. Concentrations

The Company maintains deposits in federally insured financial institutions in excess of federally insured limits. The Company maintains deposits in a diversified group of financial institutions, has not experienced any losses to date, and monitors the credit ratings of the primary depository institutions where deposits reside.

For fiscal 2019, 2018, and 2017, none of the CDKNA and CDKI segment customers accounted for 10% or more of the Company's consolidated revenues. As of June 30, 2019, and 2018, accounts receivable from one customer represented approximately 9% and 11%, respectively, of the Company's accounts receivable. Revenues from this customer were generated by the Digital Marketing Business and are reported in discontinued operations.

Note 3. New Accounting Pronouncements

Recently Adopted Accounting Pronouncements

In January 2017, the FASB issued ASU 2017-04, “Intangibles - Goodwill and Other.” ASU 2017-04 simplifies the accounting for goodwill impairment by eliminating Step 2 of the current goodwill impairment test, which required a hypothetical purchase price allocation. Goodwill impairment will now be the amount by which the reporting unit’s carrying value exceeds its fair value, limited to the carrying value of the goodwill. ASU 2017-04 is effective for financial statements issued for fiscal years, and interim periods beginning after December 15, 2019. The Company adopted this standard on July 1, 2018, and eliminated Step 2 of the goodwill impairment test in calculating goodwill impairment for ANA. Additional information on goodwill impairment for ANA is contained in Note 4 - Discontinued Operations.

In November 2016, the FASB issued ASU 2016-18, “Restricted Cash.” ASU 2016-18 requires that a statement of cash flows explain the change during the period in the total cash, cash equivalents, and amounts generally described as restricted cash or restricted cash equivalents. ASU 2016-18 is effective for financial statements issued for fiscal years, and interim periods beginning after December 15, 2017. The Company adopted ASU 2016-18 retrospectively on July 1, 2018, and as a result included restricted cash with cash and cash equivalents when reconciling the beginning of the period and end of the period total amounts presented on the consolidated statements of cash flows. Accordingly, the consolidated statement of cash flows has been revised to include restricted cash associated with funds held for clients as a component of cash, cash equivalents, and restricted cash.

As a result of the adoption, the Company adjusted the consolidated statements of cash flows from previously reported amounts as follows:

	Year ended June 30, 2018			Year ended June 30, 2017		
	Originally Reported	Adjustments due to ASU 2016-18	As Adjusted	Originally Reported	Adjustments due to ASU 2016-18	As Adjusted
Cash, cash equivalents, and restricted cash, beginning of period	$ 726.1	$ 7.9	$ 734.0	$ 219.1	$ 3.2	$ 222.3
Net cash flows provided by operating activities	461.6	4.8	466.4	431.0	4.7	435.7
Cash, cash equivalents, and restricted cash end of period	804.4	12.7	817.1	726.1	7.9	734.0

In August 2016, the FASB issued ASU 2016-15, “Classification of Certain Cash Receipts and Cash Payments (Topic 230).” ASU 2016-15 addresses eight specific cash flow issues where there is diversity in practice in how these certain cash receipts and cash payments are presented and classified in the statements of cash flows. ASU 2016-15 is effective for financial statements issued for fiscal years, and interim periods beginning after December 15, 2017. The adoption of ASU 2016-15 did not have a material impact on the Company's consolidated statements of cash flows.

In May 2014, the FASB issued ASU 2014-09, “Revenue from Contracts with Customers.” Refer to Note 6, Revenue, for the required disclosures related to the impact of adopting ASC 606.

Recently Issued Accounting Pronouncements

In November 2018, the FASB issued ASU 2018-18, "Collaborative Arrangements (Topic 808): Clarifying the Interaction between Topic 808 and Topic 606" to resolve the diversity in practice concerning the manner in which entities account for transactions based on their assessment of the economics of a collaborative arrangement. ASU 2018-18 is effective for fiscal years, and interim periods beginning after December 15, 2019. Early adoption is permitted. The Company is currently in the process of evaluating the potential impact of the adoption of ASU 2018-18 on its consolidated financial statements.

In August 2018, the FASB issued ASU 2018-15, "Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract," which aligns the accounting for implementation cost incurred in a hosting arrangement that is a service contract with the accounting for implementation costs incurred to develop or obtain internal-use software under ASC 350-40, in order to determine which costs to capitalize and recognize as an asset. ASU 2018-15 is effective for fiscal years, and interim periods beginning after December 15, 2019, and can be applied either prospectively to implementation costs incurred after the date of adoption or retrospectively to all arrangements. Early adoption is permitted. The Company plans to early adopt ASU 2018-15 on July 1, 2019 using the prospective approach and will apply this guidance to all implementation costs incurred after the date of adoption.

In June 2016, the FASB issued ASU 2016-13, "Measurement of Credit Losses on Financial Instruments," which amends the impairment model by requiring entities to use a forward-looking approach based on expected losses to estimate credit losses on certain types of financial instruments, including trade receivables. ASU 2016-13 is effective for fiscal years beginning after December 15, 2019. The Company is currently in the process of evaluating the potential impact of the adoption of ASU 2016-13 on its consolidated financial statements.

In February 2016, the FASB issued ASU 2016-02, "Leases (Topic 842)" and subsequent amendments to the initial guidance: ASU 2017-13, ASU 2018-11 and ASU 2018-20 (collectively, "ASC 842"). ASC 842 requires that lessees recognize right-of-use assets and lease liabilities for any lease classified as either a finance or an operating lease that is not considered short-term. The accounting applied by lessors is largely consistent with the existing lease standard but updated to align with certain changes to the lessee model (e.g., certain definitions, such as substantive substitution rights, have been updated) and the new revenue recognition guidance issued in 2014. The new standard is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2018, and early adoption is permitted. Entities are required to adopt this standard using a modified retrospective transition approach. Under this approach, the standard is implemented either (1) as of the earliest period presented and through the comparative periods in the entity's financial statements or (2) as of the effective date of ASC 842, with a cumulative-effect adjustment to equity.

The Company plans to adopt ASC 842 on July 1, 2019 using the transition method whereby prior comparative periods will not be restated. In addition, the Company plans to elect the package of practical expedients permitted under the transition guidance for all leases (where the Company is a lessee or a lessor), which does not require reassessment of prior conclusions related to contracts containing a lease, lease classification, and initial direct lease costs.

CDK as a Lessee:

The Company has obligations under lease arrangements mainly for facilities, vehicles and equipment, which are classified as operating leases under the existing lease standard. In preparation of adopting this new standard, the Company has implemented a third-party lease management software to capture leases and support the required disclosures, and updated its accounting policies, internal controls, and processes related to this new guidance.

The Company has made the following policy elections:

– The Company will elect to not recognize right-of-use assets and lease liabilities for leases with a term of 12 months or less for all asset classes.
– The Company will elect the practical expedient that allows entities to combine lease components with related non-lease components.

The Company is in the process of finalizing the impact of adopting this standard and currently anticipates recognizing a right-of-use asset, net of prepaids, incentives and impairments, of approximately $65.0 million to $70.0 million, and a lease liability of approximately $70.0 million to $75.0 million in the Company's consolidated balance sheets. The Company’s assessment of the full impact of adoption of the standard is subject to finalization, such that the actual impact of the adoption may differ from the estimated range described above.

CDK as a Lessor:

The Company evaluated its hardware-as-a-service arrangements and concluded that such arrangements will be accounted for as a sales-type lease under the new standard, primarily because they do not contain substantive substitution rights. Since the Company has elected to not reassess prior conclusions related to contracts containing a lease, lease classification, and initial direct costs, only hardware leases that commence or are modified subsequent to our July 1, 2019 adoption will be accounted for under ASC 842. These arrangements provide customers continuous access to CDK owned hardware, such as networking and telephony equipment and laser printers. Historically, the Company has accounted for these arrangements as a distinct performance obligation under the revenue recognition guidance and recognized revenue over the term of the arrangement.

Note 4. Discontinued Operations

In June 2019, the Company committed to a plan to divest Digital Marketing Business which comprises: (a) all of the assets of ANA; and (b) certain assets of CDKNA related to mobile advertising solutions and website services in order to focus on its core suite of SaaS software and technology solutions for the markets it serves through the CDKNA and CDKI segments.

The Company's decision to divest the Digital Marketing Business was the result of a comprehensive strategic review of the Company’s business, undertaken during the fiscal quarter ending June 30, 2019 (the “fourth quarter”). The Company intends to complete its divestiture of the Digital Marketing Business during the next 12 months. This action resulted in the reclassification of the assets and liabilities comprising that business to assets and liabilities held for sale in the accompanying consolidated balance sheets, and a corresponding adjustment to consolidated statements of operations and cash flows to reflect discontinued operations, for all periods presented. The net of assets and liabilities held-for-sale related to discontinued operations are required to be recorded at the lower of carrying value or fair value less costs to sell.

As a result of the Company's decision to sell the business, the Company evaluated ANA reporting unit's goodwill for impairment, which is included in its entirety within the Digital Marketing Business. The impairment test indicated that the carrying value of ANA was higher than its fair value. The decline in ANA's fair value was driven by a decrease in estimated future earnings and an unfavorable change in the discount rate representing management's assessment of increased risk with respect to the business forecasts primarily due to business uncertainty after the public announcement of the planned sale of business and management's shift in focus to customer retention instead of growth. As a result, the Company recorded a goodwill impairment charge of $168.7 million which is included as a component of discontinued operations for the year ended June 30, 2019.

The Company determined the fair value of the Digital Marketing Business and ANA primarily based on third-party valuation analysis, data from sales of comparable businesses, and analysis of current market conditions. The Company did not record any valuation allowance for the Digital Marketing Business as the fair value, less cost to sell, was in excess of its carrying value.

The following table summarizes the comparative financial results of discontinued operations which are presented as (Loss)/Earnings from discontinued operations, net of taxes on the Consolidated Statements of Operations:

	Years Ended June 30,		
	2019	2018	2017
Revenues	$ 418.1	$ 475.2	$ 489.5
Expenses:			
Cost of revenues	307.4	327.5	336.6
Selling, general and administrative expenses	30.5	34.6	44.6
Goodwill impairment	168.7	—	—
Restructuring expenses	1.5	0.3	0.7
Total expenses	508.1	362.4	381.9
(Loss) Earnings before income taxes	(90.0)	112.8	107.6
Provision from income taxes	19.8	35.2	40.0
(Loss) Earnings from discontinued operations, net of taxes	$ (109.8)	$ 77.6	$ 67.6

The total assets and liabilities held for sale related to discontinued operations are stated separately as of June 30, 2019 and 2018, respectively, in the Consolidated Balance Sheets comprised the following items:

	June 30, 2019	June 30, 2018
Assets:		
Prepaid and other current assets	$ 1.1	$ 1.8
Total current assets held for sale*		1.8
Property, plant and equipment, net	2.3	4.3
Goodwill	59.4	228.0
Intangible assets, net	35.6	34.1
Other assets	0.2	1.2
Total long-term assets held for sale*		267.6
Total assets held for sale	$ 98.6	$ 269.4
Liabilities:		
Deferred revenues	$ 0.8	$ 3.5
Accrued expenses and other current liabilities	0.7	0.2
Total current liabilities held for sale*		3.7
Deferred revenues	—	0.2
Other liabilities	0.4	0.6
Total long-term liabilities held for sale*		0.8
Total liabilities held for sale	$ 1.9	$ 4.5

* The assets and liabilities of Digital Marketing Business classified as held for sale are classified as current on the June 30, 2019 balance sheet as it is probable that the sale will occur within one year.

Note 5. Acquisitions

For the year ended June 30, 2019, the Company incurred $13.2 million of costs related to the assessment and integration-related activities of which $6.6 million was recorded within cost of revenue and $6.6 million was recorded within selling, general and administrative expenses. For the year ended June 30, 2018, the Company incurred $15.6 million of costs related to the assessment and integration-related activities of which $0.3 million was recorded within cost of revenue and $15.3 million was recorded within selling, general and administrative expenses.

Fiscal 2019 Acquisitions

ELEAD1ONE

On September 14, 2018, the Company acquired the equity interests of ELEAD1ONE ("ELEAD"). ELEAD's automotive customer relationship management ("CRM") software and call center solutions enable interaction between sales, service and marketing operations to provide dealers with an integrated customer acquisition and retention platform. The acquisition was made pursuant to an equity purchase agreement, which contains customary representations, warranties, covenants, and indemnities by the sellers and the Company. The Company acquired all of the outstanding equity of ELEAD for an initial cash purchase price of $513.0 million, net of cash acquired of $7.0 million.

The acquisition of ELEAD has been accounted for using the acquisition method of accounting, which requires, among other things, the assets acquired and liabilities assumed be recognized at their respective fair values as of the acquisition date. As of June 30, 2019, the Company has finalized the purchase price allocation. The following table summarizes the final amounts recognized for assets acquired and liabilities assumed as of the acquisition date.

Cash and cash equivalents	$	7.0
Accounts receivable		18.9
Other current assets		3.4
Property, plant and equipment		14.8
Intangible assets		132.0
Accrued expenses and other current liabilities		(21.6)
Short-term deferred revenues		(6.6)
Capital lease obligations		(7.3)
Total identifiable net assets		140.6
Goodwill		379.4
Net assets acquired	$	520.0

The amounts in the table above are reflective of measurement period adjustments made during fiscal year 2019, which mainly included an increase of $2.9 million to accrued expenses and other liabilities, $1.7 million to intangible assets, $1.4 million to property, plant and equipment, $1.2 million to capital leases, $1.1 million to goodwill, and $0.1 million to deferred revenue; and a decrease of $0.2 million to accounts receivable. The measurement period adjustments did not have a significant impact on the consolidated statement of operations, balance sheet or cash flows.

The intangible assets acquired primarily relate to customer lists, software, and trademarks, which will be amortized over a weighted-average useful life of 12 years. The goodwill resulting from this acquisition reflects expected synergies resulting from adding ELEAD products and processes to the Company's products and processes. The acquired goodwill is allocated to the CDKNA reportable segment and is deductible for tax purposes.

In December 2018, the Company sold the airplane acquired as part of the ELEAD acquisition for cash less costs to sell of $6.7 million. Given the short time between the ELEAD acquisition and the sale of the acquired airplane, the final purchase price allocated to the airplane was adjusted to equal the cash less costs to sell in accordance with ASC 805, "Business Combinations" and ASC 360, "Property, Plant and Equipment." As such, there was no gain or loss recognized on the sale of the airplane.

The results of operations for ELEAD have been included in the consolidated statements of operations from the date of acquisition. The pro forma effects of this acquisition are not significant to the Company's reported results for any period presented. Accordingly, no pro forma financial statements have been presented herein.

In addition to the acquisition, the Company entered into a joint venture agreement with the sellers. Under the terms of the joint venture agreement, the Company contributed $10.0 million to the venture at the ELEAD acquisition closing, committed to an additional $10.0 million in contributions over time, and acquired 50% ownership in the joint venture. The Company's contributions were expected to fund the initial operations of the joint venture. Under ASC 810 "Consolidation," the joint venture was determined to be a variable interest entity ("VIE"); however, the Company was not considered the primary beneficiary. As such, the joint venture was accounted for as an equity method investment and the initial $10.0 million contribution was recorded as an investment on the consolidated balance sheets. During the fourth quarter of fiscal 2019, the Company entered into a joint venture termination agreement with the former owners of ELEAD in exchange for a termination payment of $7.0 million. The initial $10.0 million contribution and the $7.0 million termination payment were recorded as a loss from equity method investment within the consolidated statements of operations.

For fiscal 2019, the Company incurred $11.9 million of costs in connection with the ELEAD acquisition and integration-related activities of which $6.1 million was recorded within cost of revenues and $5.8 million was recorded within selling, general and administrative expenses.

Fiscal 2018 Acquisitions

Progressus Media LLC

On April 3, 2018, the Company acquired the membership interests of Progressus Media LLC ("Progressus"), a specialty provider of mobile advertising solutions for dealerships, agencies, and automotive marketing companies. The acquisition was made pursuant to a membership interest purchase agreement, which contains customary representations, warranties, covenants, and indemnities by the sellers and the Company. The acquisition date fair value of the total consideration transferred was $22.2 million which consists primarily of an initial cash price of $16.2 million, net of cash acquired, the fair value of the holdback provision of $0.3 million and the fair value of contingent consideration of $5.7 million, which is payable upon achievement of certain milestones and metrics over a three year period ending on March 31, 2021. Prior to the acquisition, a CDK officer had an existing advisory relationship with Progressus which entitled the individual to a portion of the proceeds from a sale of Progressus under a unit appreciation rights agreement. At the time of closing, $0.5 million of the total consideration transferred by CDK was paid to the officer to settle Progressus' obligation under the terms of the officer's unit appreciation rights agreement.

The fair value of acquired intangible assets and other net assets was $8.7 million and $2.2 million, respectively. The excess of the acquisition consideration over the estimated fair value of the acquired net assets of $11.3 million was allocated to goodwill. The goodwill recognized from this acquisition reflects expected synergies resulting from direct ownership of the products and processes, allowing greater flexibility for future product development. The acquired goodwill is deductible for tax purposes. For the holdback provision and contingent consideration as of June 30, 2019 and June 30, 2018, the Company recorded $2.4 million and $1.6 million of accrued expenses and other current liabilities, respectively; and $2.3 million and $4.4 million of other liabilities, respectively.

During the fourth quarter of fiscal year 2019, the Company committed to a plan to divest the Digital Marketing Business, which includes the Progressus business. The Progressus business is presented as discontinued operations. Additional information on discontinued operations is contained in Note 4 - Discontinued Operations.

Dashboard Dealership Enterprises

On October 20, 2017, the Company acquired the outstanding stock of Dashboard Dealership Enterprises, a provider of executive reporting solutions for auto dealers. The acquisition was made pursuant to a stock purchase agreement, which contains customary representations, warranties, covenants, and indemnities by the sellers and the Company. The acquisition date fair value of total consideration to be transferred was $21.3 million, which consists primarily of an initial cash price of $12.8 million, the fair value of the holdback provision of $1.9 million, and the fair value of contingent consideration of $6.6 million, which is payable upon achievement of certain milestones and metrics if achieved by December 31, 2019. For the holdback provision and contingent consideration as of June 30, 2019 and June 30, 2018, the Company recorded $2.7 million and $7.6 million of accrued expenses and other current liabilities, respectively; and other liabilities of $0.9 million as of June 30, 2018.

The fair value of acquired intangibles assets and liabilities assumed, including deferred tax liabilities, was $3.9 million and $1.6 million, respectively. The excess of the acquisition consideration over the estimated fair value of the acquired assets of $19.0 million was allocated to goodwill. The acquired assets and goodwill are included in the CDKNA segment. The intangible assets will be amortized over a weighted-average useful life of approximately 8 years. The goodwill recognized from this acquisition reflects expected synergies resulting from direct ownership of the products and processes, allowing greater flexibility for future product development. The acquired goodwill is not deductible for tax purposes.

The pro forma effects of these acquisitions are not significant to the Company's reported results for any period presented. Accordingly, no pro forma financial statements have been presented herein.

Fiscal 2017 Acquisitions

Auto/Mate Dealership Systems

In May 2017, the Company entered into a definitive agreement to acquire Auto/Mate Dealership Systems, a privately held company that provides a suite of DMS products and solutions. In the third quarter of fiscal 2018, the Company and Auto/Mate Dealership Systems terminated the agreement. This outcome followed the decision of the Federal Trade Commission to oppose the proposed acquisition. There was no termination fee.

Note 6. Revenue

A. Adoption of ASC 606, "Revenue from Contracts with Customers"

On July 1, 2018, the Company adopted ASC 606 applying the modified retrospective method to all contracts that were not completed as of July 1, 2018. For contracts that were modified before the effective date, the Company reflected the aggregate effect of all modifications when identifying performance obligations and allocating transaction price in accordance with the available practical expedient, which did not have a material effect on the adjustment to accumulated deficit. Results for reporting periods beginning after July 1, 2018 are presented under ASC 606, while prior period amounts are not adjusted and continue to be reported under the accounting standards in effect for the prior period.

Upon adoption, recognition of revenue and costs for on-site licenses and installation was changed from recognition ratably over the software license term to recognition upon installation of the software. Additionally, the Company began deferring costs to obtain and costs to fulfill the contract which for the Company consists primarily of direct sales commissions and implementation costs for service arrangements. The cumulative effects of the changes made to the consolidated July 1, 2018 balance sheet for the adoption of ASC 606 were as follows:

	Balance at June 30, 2018	Adjustments due to ASC 606	Balance at July 1, 2018
Assets			
Accounts receivable	$ 374.6	$ 2.4	$ 377.0
Current assets held for sale	1.8	(0.4)	1.4
Other current assets	186.5	(61.2)	125.3
Long-term assets held for sale	267.6	(0.8)	266.8
Other assets	164.3	113.6	277.9
Liabilities			
Accrued expenses and other current liabilities	197.9	0.3	198.2
Current liabilities held for sale	3.7	(0.3)	3.4
Short-term deferred revenues	165.5	(38.0)	127.5
Long-term deferred revenues	110.2	(40.8)	69.4
Deferred income taxes	56.7	23.2	79.9
Long-term liabilities held for sale	0.8	(0.2)	0.6
Other liabilities	64.1	0.1	64.2
Stockholders' Deficit			
Retained earnings	753.0	109.7	862.7
Accumulated other comprehensive income	11.5	(0.4)	11.1

Impact on Consolidated Financial Statements

The following table summarizes the effects of ASC 606 on selected line items within the consolidated statement of operations:

	Year ended June 30, 2019		
	As Reported ASC 606	Impact of ASC 606	ASC 605
Revenues	$ 1,914.8	$ (31.0)	$ 1,945.8
Cost of revenues	899.8	(24.7)	924.5
Selling, general and administrative expenses	444.7	(0.5)	445.2
Total expenses	1,462.5	(25.2)	1,487.7
Operating earnings	452.3	(5.8)	458.1
Earnings before income taxes	303.9	(5.8)	309.7
Provision for income taxes	(62.2)	2.0	(64.2)
Net earnings from continuing operations	241.7	(3.8)	245.5
Loss from discontinued operations, net of taxes	(109.8)	(0.5)	(109.3)
Net earnings	131.9	(4.3)	136.2
Net earnings attributable to CDK	124.0	(4.3)	128.3
Net earnings (loss) attributable to CDK per common share - basic:			
Continuing operations	1.86	(0.03)	1.89
Discontinued operations	(0.87)	—	(0.87)
Net earnings (loss) attributable to CDK per common share - diluted:			
Continuing operations	1.85	(0.03)	1.88
Discontinued operations	(0.87)	(0.01)	(0.86)

The following table summarizes the effects of ASC 606 on selected line items within the balance sheet:

	June 30, 2019		
	As Reported ASC 606	Impact of ASC 606	ASC 605
Assets			
Accounts receivable	$ 412.3	$ (1.8)	$ 410.5
Current assets held for sale	98.6	0.4	99.0
Other current assets	164.8	58.2	223.0
Other assets	284.9	(108.1)	176.8
Liabilities			
Accrued expenses and other current liabilities	203.8	—	203.8
Current liabilities held for sale	1.9	0.6	2.5
Short-term deferred revenues	124.8	22.9	147.7
Long-term deferred revenues	68.4	28.8	97.2
Deferred income taxes	80.5	0.8	81.3
Other liabilities	67.3	(0.1)	67.2
Stockholders' Deficit			
Retained earnings	911.6	(105.5)	806.1
Accumulated other comprehensive loss	(6.7)	1.2	(5.5)

The adoption of ASC 606 had no impact to net cash provided by or (used in) operating, financing, or investing activities on the Company's consolidated statements of cash flows.

B. Revenue Recognition

The Company determines the amount of revenue to be recognized through the following steps:

- Identification of the contract, or contracts, with a customer;
- Identification of the performance obligations in the contract;
- Determination of the transaction price;
- Allocation of the transaction price to the performance obligations in the contract; and
- Recognition of revenue when, or as, the Company satisfies the performance obligations.

The majority of the Company's revenue is generated from contracts with multiple performance obligations. A performance obligation is a promise in a contract to transfer a distinct good or service to the customer, and is the unit of account in ASC 606. A contract's transaction price is allocated to each distinct performance obligation and recognized as revenue when, or as, the performance obligation is satisfied. The Company is required to estimate the total consideration expected to be received from contracts with customers. In limited circumstances, the consideration expected to be received may be variable based on the specific terms of the contract.

The Company rarely licenses or sells products or services on a standalone basis. As such, the Company is required to develop its best estimate of standalone selling price of each distinct good or service as the basis for allocating the total transaction price. The primary method used to estimate standalone selling price is the adjusted market assessment approach, with some product categories using the expected cost plus a margin approach. When establishing standalone selling price, the Company considers various factors which may include geographic region, current market trends, customer class, its market share and position, its general pricing practices for bundled products and services, and recent contract sales data.

The Company applies significant judgment in order to identify and determine the number of performance obligations, estimate the total transaction price, determine the allocation of the transaction price to each identified performance obligation, and determine the appropriate method and timing of revenue recognition.

Taxes collected from customers and remitted to governmental authorities are presented on a net basis; that is, such taxes are excluded from revenues.

The Company generates revenues from the following four categories: subscription, on-site licenses and installation, transaction, and other. The Company does not evaluate a contract for a significant financing component if payment is expected within one year or less from the transfer of the promised items to the customer.

Subscription. In the CDKNA and CDKI segments, CDK provides software and technology solutions for automotive retailers and OEMs, which includes:

- Dealer Management Systems ("DMSs") and layered applications, where the software is hosted and provided on a software-as-a-service ("SaaS") basis;
- Interrelated services such as installation, initial training, and data updates;
- Ongoing maintenance and support related to on-site software; and
- Hardware on a service basis, meaning no specific assets are identified or a substantive right of substitution exists, that provides the customer continuous access to hardware owned by the Company.

SaaS and other hosted service arrangements, which allow the customer continuous access to the software over the contract period without taking possession, are provided on a subscription basis. The Company has concluded that under its SaaS and hosted service arrangements, the customer obtains access to the Company's software which resides and is maintained on its managed servers. The customer does not obtain the right to take possession of the software. As such, the Company has concluded that its SaaS and hosted services arrangements do not include a software license. Furthermore, the Company has concluded that while the support and maintenance and hosting services are capable of being distinct performance obligations, the obligations are not distinct within the context of the contract. In addition, as the support and maintenance and hosting services are provided over the same period and have the same pattern of transfer of control, the support and maintenance and hosting services are combined and recognized as a single performance obligation. The Company may provide new customers with interrelated setup activities such as installation, initial training and data updates that the Company must undertake to fulfill the contract. These are considered fulfillment activities that do not transfer the service to the customer. In addition to the core DMS software application, the customer may also contract for layered applications, which are each considered a distinct performance obligation.

Revenues for SaaS and other hosted service arrangements, are recognized ratably over the duration of the contract. The Company has determined its obligation under these arrangements is to stand ready to perform the underlying services as required by the customer. The customer receives the benefit of the services and the Company has the right to payment as the services are performed. A time-elapsed output method is used to measure progress as the Company transfers control evenly over the duration of the contract.

On-site licenses and installation. In the CDKNA and CDKI segments, on-site software arrangements include a license of intellectual property as the customer has the contractual right to take possession of the software and the customer can either run the software on its own hardware or contract with another party unrelated to the Company to host the software. The customer receives the right to use the software license upon its installation for the term of the arrangement. As such, the Company has concluded that the software license is a distinct performance obligation and recognizes the transaction price allocated to on-site software upon installation. The Company also provides maintenance and support of the software applications. Such maintenance and support services may include server and desktop support, bug fixes, and support resolving other issues a customer may encounter in utilizing the software. Revenue allocated to support and maintenance is generally recognized ratably over the contract period as customers simultaneously consume and receive benefits, given the support and maintenance comprise distinct performance obligations that are satisfied ratably over time. A time-elapsed output method is used to measure progress as the Company transfers control evenly over the duration of the contract.

Transaction. The Company receives fees per transaction for providing auto retailers interfaces with third parties to process credit reports, vehicle registrations, and automotive equity mining. Transaction revenues are variable based on the volume of transactions processed. For these transaction revenues, the Company has a right to payment as the transactions are performed in an amount that corresponds directly with the value to the customer. As such, the Company recognizes transaction revenues as the services are rendered and in the amount to which it has the right to invoice. Transaction revenues for credit report processing and automotive equity mining are recorded in revenues gross of costs incurred when the Company is substantively and contractually responsible for providing the service, software, and/or connectivity to the customer, and controls the specified good or service before it is transferred to the customer. The Company recognizes vehicle registration revenues net of the state registration fee when it is acting as an agent and does not control the related goods and services before they are transferred to the customer.

Other. The Company provides consulting and professional services, including marketing campaign solutions, and sells hardware such as laser printers, networking and telephony equipment, and related items. Consulting and professional services are either billed on a time and materials basis or on a fixed monthly, quarterly or semi-annual basis based on the amount of services contracted. Revenue from these services are recorded when the Company’s obligation is satisfied. Where the Company’s obligation is to provide continuous services throughout the contract period and the customer receives the benefit of those services as they are performed, the Company recognizes these services revenues over time using a time-elapsed output method as the Company believes the passage of time faithfully depicts the transfer of services to its customers. Where the professional service represents a single performance obligation, the customer receives the benefit of the services only upon their completion, and the Company does not have the right to payment as the services are performed, such services revenue are recognized upon completion.

The Company often sells hardware bundled with maintenance services and has concluded that these bundles include two distinct performance obligations. The first performance obligation is to transfer the hardware product and the second performance obligation is to provide maintenance on the hardware and its embedded software. As such, the transaction price allocated to the sold hardware is recognized upon delivery at which point the customer is able to direct the use of, and obtain substantially all of the remaining benefits of the hardware. Upon delivery of the hardware, the Company generally has the right to payment, the customer has legal title, physical possession of, and control of the hardware. The transaction price allocated to the maintenance of hardware and its embedded software is recognized ratably over the duration of the contract as the customer simultaneously consumes and receives the benefit of this maintenance. The Company has determined its obligation under these arrangements is to stand ready to perform the underlying services as required by the customer. A time-elapsed output method is used to measure progress as the Company transfers control evenly over the duration of the contract. Hardware maintenance is included in subscription revenues.

C. Disaggregation of Revenue

The following table presents segment revenues by revenue category:

	Year ended June 30, 2019		
	CDKNA	CDKI	Total
Revenues:			
Subscription	$ 1,283.3	$ 257.3	$ 1,540.6
On-site licenses and installation	7.9	47.1	55.0
Transaction	162.5	—	162.5
Other	139.3	17.4	156.7
Total revenues	$ 1,593.0	$ 321.8	$ 1,914.8

D. Contract Balances

The Company receives payments from customers based upon contractual billing schedules. Payment terms can vary by contract but the period between invoicing and when payments are due is not significant. The timing of revenue recognition may differ from the timing of invoicing to customers and these timing differences result in unbilled receivables, contract assets, or contract liabilities, on the Company's consolidated balance sheet. Unbilled receivables are recorded when the right to consideration becomes unconditional based only on the passage of time. Contract assets include amounts related to the contractual right to consideration for completed performance when the right to consideration is conditional. The Company records contract liabilities when cash payments are received or due in advance of performance. Contract assets and contract liabilities are recognized at the contract level.

The following table provides information about accounts receivables, contract assets, and contract liabilities from contracts with customers:

	June 30, 2019	July 1, 2018
Accounts receivable (including unbilled receivables)	$ 412.3	$ 377.0
Short-term contract assets (included in other current assets)	29.9	28.0
Long-term contract assets (included in other assets)	20.2	26.0
Short-term contract liabilities (included in short-term deferred revenue)	(124.8)	(127.5)
Long-term contract liabilities (included in long-term deferred revenue)	(68.4)	(69.4)
Net contract assets/(liabilities)	$ (143.1)	$ (142.9)

During fiscal year ended June 30, 2019, the Company recognized $172.8 million of revenue upon satisfaction of performance obligations and invoiced $26.0 million to accounts receivable. These amounts were included in the net contract assets or (liabilities) balance as of July 1, 2018. The Company had no asset impairment charges related to contract assets in the period.

The Company may occasionally recognize an adjustment in revenue in the current period for performance obligations partially or fully satisfied in the previous periods resulting from changes in estimates for the transaction price, including any changes to the Company's assessment of whether an estimate of variable consideration is constrained. For the fiscal year ended June 30, 2019, the impact on revenue recognized in the current period, from performance obligations partially or fully satisfied in the previous period, was not significant.

E. Remaining Performance Obligations

As of June 30, 2019, the Company had $3.0 billion of remaining performance obligations which represent contracted revenue that has not yet been recognized, including contracted revenue where the contracts original expected duration is one year or less. The Company expects to recognize approximately $1.1 billion of the remaining performance obligation as revenue for fiscal year ended June 30, 2020, $790.0 million for the fiscal year ended June 30, 2021, $570.0 million for the fiscal year ended June 30, 2022, and $340.0 million for the fiscal year ended June 30, 2023. The Company expects to recognize the remaining $210.0 million as revenue thereafter. The remaining performance obligations exclude future transaction revenue where revenue is recognized as the services are rendered and in the amount to which the Company has the right to invoice.

F. Costs to Obtain and Fulfill a Contract

In connection with the adoption of ASC 606, the Company capitalizes certain contract acquisition costs consisting primarily of commissions incurred when contracts are signed. The Company does not capitalize commissions related to contracts with a duration of less than one year; such commissions are expensed within selling, general and administrative expenses when incurred. Costs to fulfill contracts are capitalized when such costs are direct, incremental, and related to transition or installation activities for hosted software solutions. Capitalized costs to fulfill primarily include travel and employee compensation and benefit related costs for the Company's implementation and training teams. Capitalized costs to obtain a contract and most costs to fulfill a contract are amortized over a period of five years which represents the expected period of benefit of these costs. In instances where the contract term is significantly less than five years, costs to fulfill are amortized over the contract term which the Company believes best reflects the period of benefit of these costs.

As of July 1, 2018 and June 30, 2019, the Company capitalized contract acquisition and fulfillment costs from continuing operations of $192.7 million and $200.4 million, respectively. The Company expects that incremental commission fees incurred as a result of obtaining contracts and fulfillment costs are recoverable. During the fiscal 2019, the Company recognized cost amortization of $78.7 million, and there were no significant impairment losses.

Note 7. Restructuring

During fiscal year ended June 30, 2015, the Company initiated a three-year business transformation plan designed to increase operating efficiency and improve the Company's cost structure within its global operations. The business transformation plan produced significant benefits in the Company's long-term business performance. As the Company executed the business transformation plan, the Company continually monitored, evaluated and refined its structure, including its design, goals, term and estimate and allocation of total restructuring expenses. As part of this ongoing review process, during fiscal 2017, the Company extended the business transformation plan by one year through the fiscal year ending June 30, 2019 ("fiscal 2019"). The Company incurred $182.5 million of cost from continuing operations and $11.9 million of cost from discontinued operations to execute the plan through its completion at the end of fiscal 2019.

Restructuring expenses associated with the business transformation plan included employee-related costs, which represent severance and other termination-related benefits calculated based on long-standing benefit practices and local statutory requirements, and contract termination costs, which include costs to terminate facility leases. The Company recognized $28.0 million, $20.6 million, and $17.7 million of restructuring expenses from continuing operations for fiscal 2019, 2018 and 2017, respectively. Restructuring expenses from continuing operations are presented separately on the consolidated statements of operations and are recorded in the Other segment, as these initiatives are predominantly centrally directed and are not included in internal measures of segment operating performance. The Company also recorded $1.5 million, $0.3 million, and $0.7 million of restructuring expenses from discontinued operations for fiscal 2019, 2018 and 2017, respectively, which are presented within Loss (Earnings) from discontinued operations, net of taxes line on the consolidated statements of operations. Since the inception of the business transformation plan in fiscal 2015 through its completion at the end of fiscal 2019, the Company has recognized cumulative restructuring expenses of $87.8 million from continuing operations and $3.6 million from discontinued operations.

Accruals for restructuring expenses were included within accrued expenses and other current liabilities on the consolidated balance sheets as of June 30, 2019 and 2018. The following table summarizes the fiscal 2019 and 2018 activity for the restructuring accrual:

	Employee-Related Costs	Contract Termination Costs	Total
Balance as of June 30, 2017	$ 6.4	$ 2.4	$ 8.8
Charges	20.8	1.8	22.6
Cash payments	(21.5)	(3.0)	(24.5)
Adjustments	(1.3)	(0.4)	(1.7)
Balance as of June 30, 2018	4.4	0.8	5.2
Charges	31.1	0.7	31.8
Cash payments	(25.1)	(1.7)	(26.8)
Adjustments	(0.9)	(1.4)	(2.3)
Foreign exchange	(0.1)	—	(0.1)
Non-cash items	—	1.7	1.7
Balance as of June 30, 2019	$ 9.4	$ 0.1	$ 9.5

Note 8. Stock-Based Compensation

Incentive Equity Awards Granted by the Company

The Company's 2014 Omnibus Award Plan ("2014 Plan") provides for the granting of incentive stock options, nonqualified stock options, stock appreciation rights, restricted stock, restricted stock units, other stock-based awards, and performance compensation awards to employees, directors, officers, consultants, advisors, and those of the Company's affiliates. The 2014 Plan provides for an aggregate of 12.0 million shares of the Company's common stock to be reserved for issuance and is effective for a period of ten years. As of June 30, 2019, there were 6.1 million shares available for issuance under the 2014 Plan after considering awards granted by the Company and converted as a result of the spin-off from ADP. The Company reissues treasury stock to satisfy issuances of common stock upon option exercise, equity vesting, or grants of restricted stock.

On October 1, 2014, Automatic Data Processing, Inc. (“ADP”) distributed 100% of the common stock of the Company to the holders of record of ADP common stock as of September 24, 2014 (the "spin-off"). Prior to the spin-off, all employee equity awards (stock options and restricted stock) were granted by ADP. All subsequent awards, including all incentive equity awards converted from ADP awards, were granted under the 2014 Plan. The Company recognizes stock-based compensation expense associated with employee equity awards in net earnings based on the fair value of the awards on the date of grant. Effective July 1, 2016, the Company adopted ASU 2016-09 "Compensation—Stock Compensation (Topic 718): Improvement to Employee Share-Based Payment Accounting." Upon adoption, the Company made an accounting policy election to account for forfeitures as they occur rather than apply an estimated forfeiture rate. Stock-based compensation primarily consisted of the following:

Time-Based Stock Options and Performance-Based Stock Options. Time-based stock options and performance-based stock options have a term of ten years. Upon termination of employment, unvested stock options are evaluated for forfeiture or modification, subject to the terms of the awards and Company policies.

Time-based stock options are granted to employees at an exercise prices equal to the fair market value of the Company's common stock on the date of grant and are generally issued under a three or four-year graded vesting schedule.

Performance-based stock options are granted to the CEO at an exercise price equal to the fair market value of the Company's stock on the date of grant. These awards vest, subject to the Company's stock price performance and the CEO's continued employment with the Company, over a three-year performance period.

Time-Based Restricted Stock and Time-Based Restricted Stock Units. Time-based restricted stock and restricted stock units generally vest over a two to five-year period. Upon termination of employment, unvested time-based awards are evaluated for forfeiture or modification, subject to the terms of the awards and Company policies.

Time-based restricted stock cannot be transferred during the vesting period. Compensation expense related to the issuance of time-based restricted stock is measured based on the fair value of the award on the grant date and recognized on a straight-line basis over the vesting period. Employees are eligible to receive cash dividends on the CDK shares awarded under the time-based restricted stock program during the restricted period.

Time-based restricted stock units are primarily settled in cash for non-U.S. recipients and may be settled in stock or cash for U.S. recipients at the discretion of the Company and cannot be transferred during the restriction period. Compensation expense related to the issuance of time-based restricted stock units is recorded over the vesting period and is initially based on the fair value of the award on the grant date. Cash-settled, time-based restricted stock units are subsequently remeasured at each reporting date during the vesting period to the current stock value. For grants made prior to September 6, 2018, no dividend equivalents are paid on units awarded during the restricted period. For grants made on or subsequent to September 6, 2018, U.S. recipients are credited with dividend equivalents on units awarded during the restricted period, and no dividend equivalents are paid or credited on units awarded to non-U.S. recipients during the restricted period.

Performance-Based Restricted Stock Units. Performance-based restricted stock units generally vest over a three-year performance period. Under these programs, the Company communicates "target awards" at the beginning of the performance period with possible payouts at the end of the performance period ranging from 0% to 260% of the "target awards." Certain performance-based awards are further subject to adjustment (increase or decrease) based on a market condition, defined as total stockholder return of the Company's common stock compared to a peer group of companies. The probability associated with the achievement of performance conditions affects the vesting of the Company's performance-based awards. Expense is only recognized for those shares expected to vest. Upon termination of employment, unvested awards are evaluated for forfeiture or modification, subject to the terms of the awards and Company policies.

Performance-based restricted stock units are settled in either cash or stock for employees whose home country is the U.S. at the discretion of the Company, and are settled in cash for all other employees and cannot be transferred during the vesting period. Compensation expense related to the issuance of performance-based restricted stock units settled in cash is recorded over the vesting period, is initially based on the fair value of the award on the grant date and is subsequently remeasured at each reporting date to the current stock value during the performance period, based upon the probability that the performance target will be met. Compensation expense related to the issuance of performance-based restricted stock units settled in stock is recorded over the vesting period based on the fair value of the award on the grant date. Prior to settlement, dividend equivalents are earned on "target awards" under the performance-based restricted stock unit program.

The following table represents stock-based compensation expense and the related income tax benefits for fiscal 2019, 2018, and 2017, respectively:

	June 30,		
	2019	2018	2017
Cost of revenues	$ 3.5	$ 4.0	$ 5.5
Selling, general and administrative expenses	27.0	29.4	47.2
Total pre-tax stock-based compensation expense	$ 30.5	$ 33.4	$ 52.7
Income tax benefit	$ 5.9	$ 10.5	$ 19.4

Stock-based compensation expense for fiscal 2019 consisted of $28.2 million of expense related to equity-classified awards and $2.3 million of expense related to liability-classified awards. Total stock-based compensation expense for fiscal 2019 includes $11.2 million of additional expense for a cumulative adjustment in the fourth quarter related to the achievement of financial performance metrics for performance based restricted stock, and a net $2.9 million benefit for awards that were forfeited or expense recognition that was accelerated related to certain officer transitions during fiscal 2019.

Stock-based compensation expense for fiscal 2018 consisted of $27.9 million of expense related to equity-classified awards and $5.5 million of expense related to liability-classified awards. This includes $1.5 million of incremental stock-based compensation expense for awards that were modified or expense recognition that was accelerated relating to an officer transition in fiscal 2018.

Stock-based compensation expense for fiscal 2017 consisted of $44.2 million of expense related to equity-classified awards and $8.5 million of expense related to liability-classified awards. Stock-based compensation expense for fiscal 2017 includes $11.7 million of expense due to a cumulative adjustment in the fourth quarter based on management's assessment that it is probable CDK's performance metrics for fiscal 2018 associated with performance-based restricted stock units will exceed the target. Additionally, there was $3.1 million of incremental stock-based compensation expense for awards that were modified or expense recognition that was accelerated relating to an officer transition in fiscal 2017.

As of June 30, 2019, the total unrecognized compensation cost related to non-vested stock options, restricted stock units, and restricted stock awards was $3.2 million, $24.9 million, and $1.2 million, respectively, which will be amortized over the weighted-average remaining requisite service periods of 2.5 years, 1.7 years, and 0.8 years, respectively.

The activity related to the Company's incentive equity awards for fiscal 2019, including amounts attributable to the Company's discontinued operations, consisted of the following:

Time-Based Stock Options

	Number of Options (in thousands)	Weighted-Average Exercise Price (in dollars)	Weighted-Average Remaining Contractual Life (in years)	Aggregate Intrinsic Value (in millions)
Options outstanding as of June 30, 2018	957	$ 44.25		
Options granted	170	51.37		
Options exercised	(179)	28.85		
Options canceled	(154)	58.35		
Options outstanding as of June 30, 2019	794	$ 46.47	6.6	$ 2.4
Exercisable as of June 30, 2019	510	$ 42.13	5.5	$ 3.7

The Company received proceeds from the exercise of stock options of $5.0 million, $8.9 million, and $14.7 million during fiscal 2019, 2018, and 2017, respectively. The aggregate intrinsic value of stock options exercised during fiscal 2019, 2018, and 2017 was approximately $5.0 million, $14.0 million, and $26.0 million, respectively.

Performance-Based Stock Options

	Number of Options (in thousands)	Weighted Average Exercise Price (in dollars)
Options outstanding as of June 30, 2018	—	$ —
Options granted	152	50.77
Options outstanding as of June 30, 2019	152	$ 50.77

The Monte Carlo simulation model used to determine the grant date fair value of the three-year performance-based stock options granted in the second quarter of fiscal 2019 used an expected volatility based on the average of implied volatility and historical stock price volatility for the Company, the average of which was 23.21%, a risk-free interest rate of 3.09%, an expected dividend yield of 1.18%, and weighted average expected life of 6.5 years.

Time-Based Restricted Stock and Time-Based Restricted Stock Units

	Restricted Stock		Restricted Stock Units	
	Number of Shares (in thousands)	Weighted-Average Grant Date Fair Value (in dollars)	Number of Units (in thousands)	Weighted-Average Grant Date Fair Value (in dollars)
Non-vested restricted shares/units as of June 30, 2018	379	$ 60.14	142	$ 58.55
Restricted shares/units granted	2	60.59	423	57.71
Restricted shares/units vested	(179)	58.46	(95)	53.97
Restricted shares/units forfeited	(57)	61.59	(62)	57.51
Non-vested restricted shares/units as of June 30, 2019	145	$ 62.68	408	$ 58.52

Performance-Based Restricted Stock Units

	Restricted Stock Units	
	Number of Units (in thousands)	Weighted-Average Grant Date Fair Value (in dollars)
Non-vested restricted units as of June 30, 2018	411	$ 63.26
Restricted units granted	503	56.19
Restricted units vested	(389)	58.86
Restricted units forfeited	(111)	59.07
Non-vested restricted units as of June 30, 2019	414	$ 56.05

The Monte Carlo simulation model used to determine the grant date fair value of the 106 thousand units of the three-year performance-based restricted stock units granted in the first quarter of fiscal 2019 used an expected volatility based on historical stock price volatility for the Company and the peer companies, the average of which was 20.40% and a risk-free interest rate of 2.68%. Because these awards earn dividend equivalents, the model did not assume an expected dividend yield.

The Monte Carlo simulation model used to determine the grant date fair value of the 196 thousand units of the three-year performance-based restricted stock units granted in the second quarter of fiscal 2019 used an expected volatility based on historical stock price volatility for the Company and the peer companies, the average of which was 20.53% and a risk-free interest rate of 2.96%. Because these awards earn dividend equivalents, the model did not assume an expected dividend yield.

The following table presents the assumptions used to determine the fair value of the stock options granted by the Company:

	Fiscal 2019	Fiscal 2018	Fiscal 2017
Risk-free interest rate	3.1%	2.0%	1.4%
Dividend yield	1.2%	0.9%	0.9%
Weighted-average volatility factor	23.2%	24.5%	24.5%
Weighted-average expected life (in years)	6.0	6.3	6.3
Weighted-average fair value (in dollars)	$ 12.72	$ 15.65	$ 13.90

Note 9. Employee Benefit Plans

Defined Contribution Savings Plan. The Company's Board of Directors approved a CDK-sponsored defined contribution plan covering eligible full-time domestic employees of the Company after the spin-off date. This plan provides company matching contributions on a portion of employee contributions. In addition, this plan includes a transitional contribution for certain employees who were previously eligible to participate under ADP's domestic defined benefit plan since the Company did not adopt a similar plan. The costs recorded by the Company for this plan were $15.4 million, $16.9 million, and $18.7 million for fiscal 2019, 2018, and 2017, respectively.

International Benefit Plans. The Company’s foreign subsidiaries have benefit plans that cover certain international employees. To the extent required by local statutory laws, the Company funds these benefit plans through periodic contributions under statutorily prescribed formulas. The Company’s expense for these plans was approximately $14.5 million, $15.8 million, and $14.8 million for fiscal 2019, 2018, and 2017, respectively.

Note 10. Income Taxes

Provision for Income Taxes

Earnings before income taxes presented below is based on the geographic location to which such earnings were attributable.

	June 30,		
	2019	2018	2017
Earnings before income taxes:			
U.S.	$ 182.7	$ 265.5	$ 228.0
Foreign	121.2	133.7	99.7
	$ 303.9	$ 399.2	$ 327.7

The provision (benefit) for income taxes consisted of the following components:

	June 30,		
	2019	2018	2017
Current:			
Federal	$ 25.2	$ 49.8	$ 37.6
Foreign	31.6	32.8	24.7
State	10.5	15.6	9.6
Total current	67.3	98.2	71.9
Deferred:			
Federal	(1.3)	(14.7)	17.0
Foreign	(1.8)	2.9	2.0
State	(2.0)	1.7	1.9
Total deferred	(5.1)	(10.1)	20.9
Total provision for income taxes	$ 62.2	$ 88.1	$ 92.8

A reconciliation between the Company’s effective tax rate from continuing operations and the U.S. federal statutory rate is as follows:

	June 30,					
	2019	%	2018	%	2017	%
Provision for taxes at U.S. statutory rate	$ 63.8	21.0 %	$ 112.2	28.1 %	$ 114.7	35.0 %
Increase (decrease) in provision from:						
State taxes, net of federal benefit	8.6	2.8 %	13.4	3.4 %	7.5	2.3 %
Stock compensation - excess tax benefits	(1.6)	(0.5)%	(4.9)	(1.2)%	(12.0)	(3.7)%
Noncontrolling interest	(1.4)	(0.5)%	(1.8)	(0.5)%	(2.0)	(0.6)%
Foreign tax rate differential	2.9	1.0 %	(2.0)	(0.5)%	(11.5)	(3.4)%
U.S. tax on foreign earnings	13.4	4.4 %	19.0	4.8 %	1.1	0.3 %
Foreign tax credits	(15.5)	(5.1)%	(18.3)	(4.6)%	(1.9)	(0.6)%
Foreign withholding taxes	—	— %	4.5	1.1 %	—	— %
U.S. tax reform deferred tax re-measurement	—	— %	(27.3)	(6.8)%	—	— %
Valuation allowances	(10.9)	(3.6)%	(3.6)	(0.9)%	0.8	0.2 %
Domestic production activities deduction	—	— %	(4.0)	(1.0)%	(4.2)	(1.3)%
Pre spin-off tax return adjustments	—	— %	0.1	— %	—	— %
Other	2.9	1.0 %	0.8	0.2 %	0.3	0.1 %
Provision for income taxes	$ 62.2	20.5 %	$ 88.1	22.1 %	$ 92.8	28.3 %

Tax Cuts and Jobs Act of 2017

On December 22, 2017, the Tax Cuts and Jobs Act ("Tax Reform Act") was enacted into law. The Tax Reform Act significantly revises the U.S. corporate income tax laws by, among other things, reducing the corporate income tax rate from 35.0% to 21.0% and implementing a modified territorial tax system.

The modified territorial tax system includes a new anti-deferral provision, referred to as global intangible low taxed income (“GILTI”), which subjects certain foreign income to current U.S. tax. The Company accounts for the GILTI tax as a period cost when incurred. The GILTI provision is effective beginning in fiscal year 2019 and therefore, will have an impact on future period annual effective tax rates. In fiscal 2019, the Company recorded $2.9 million of GILTI tax expense net of foreign tax credits. The Company also recorded $1.5 million tax benefit from foreign derived intangible income ("FDII").

The ultimate impact of the Tax Reform Act may differ from the Company's estimates due to the issuance of additional regulatory guidance, the interpretation of the Tax Reform Act evolving over time and actions taken by the Company as a result of the Tax Reform Act.

The effective tax rate was impacted by $2.8 million of net expenses in fiscal 2019 and $18.5 million of net benefit in fiscal 2018 for one-time adjustments related to the Tax Reform Act. The fiscal 2019 amount is comprising a $0.6 million benefit due to a true-up to the one-time transition tax initially recorded in fiscal 2018 associated with the Tax Reform Act, and a $3.4 million deferred tax charge associated with executive compensation limitations. The fiscal 2018 amount is comprising a $26.2 million for the re-measurement of the Company’s net deferred tax liability, partially offset by tax expense of $3.4 million from the one-time transition tax and $4.3 million for foreign withholding taxes. The impact of the Tax Reform Act is reflected within the following lines in the effective tax rate reconciliation above: U.S. tax reform deferred tax re-measurement, U.S. tax on foreign earnings, foreign tax credits, foreign withholding taxes and state taxes, net of federal benefit.

The balance sheet classification and significant components of deferred income tax assets and liabilities are as follows:

	June 30,	
	2019	2018
Classification:		
Long term deferred tax assets (included in other assets)	$ 14.6	$ 21.9
Long term deferred tax liabilities (included in deferred income taxes)	(80.5)	(56.7)
Net deferred tax liabilities	$ (65.9)	$ (34.8)
Components:		
Deferred tax assets:		
Accrued expenses	$ 24.5	$ 8.3
Compensation and benefits	24.9	32.7
Deferred revenue	25.0	44.4
Net operating losses	4.2	5.5
Capital losses	22.7	18.8
	101.3	109.7
Less: valuation allowances	(10.3)	(21.6)
Net deferred tax assets	91.0	88.1
Deferred tax liabilities:		
Deferred expenses	58.5	46.7
Property, plant and equipment and intangible assets	95.1	70.1
Prepaid expenses	0.8	2.0
Undistributed foreign earnings	1.6	2.8
Other	0.9	1.3
Deferred tax liabilities	156.9	122.9
Net deferred tax liabilities	$ (65.9)	$ (34.8)

In the second quarter of fiscal 2018, the Company concluded that $244.0 million of unremitted foreign earnings as of December 31, 2017 were no longer indefinitely reinvested. In response to recently issued guidance from the Internal Revenue Service (IRS) related to the Tax Reform Act, the Company changed its assertion with respect to certain unremitted foreign earning. As of June 30, 2019, the Company plans to distribute approximately $32.0 million of unremitted foreign earnings. As of June 30, 2019, the Company intends to indefinitely reinvest the aggregate of approximately $329.0 million of undistributed foreign earnings to cover local working capital needs and restrictions and to fund future investments, including potential acquisitions. If circumstances change, and it becomes apparent that earnings currently considered indefinitely reinvested will be distributed, the Company does not expect to incur significant additional tax.

As of June 30, 2019, the Company had federal capital losses of $92.3 million which expire in 2020 through 2024 and state capital losses of $92.3 million which expire in 2020 through 2034. The Company had foreign net operating loss carryforwards of approximately $15.1 million as of June 30, 2019, of which $0.9 million expires in 2020 through 2023 and $14.2 million has an indefinite carryforward period.

Valuation Allowance

The Company recorded valuation allowances of $10.3 million and $21.6 million as of June 30, 2019 and 2018, respectively, because the Company has concluded it is more likely than not that it will be unable to utilize net operating and capital loss carryforwards of certain subsidiaries to offset future taxable earnings. As of each reporting date, the Company's management considers all available evidence, both positive and negative, which could impact management's determination with regard to future realization of deferred tax assets.

During fiscal 2019, the valuation allowance balance decreased by $10.9 million, including a $14.8 million decrease related to the capital gain the Company expects to recognize in conjunction with the sale of the of the assets of the Digital Marketing Business which were classified as held for sale in the fourth quarter of fiscal 2019, a $4.3 million increase related to a new capital loss generated in the fourth quarter of 2019 resulting from the termination of a joint venture agreement and $0.4 million net decrease due to certain non-U.S. tax loss carryforwards. In addition, there was a $0.4 million decrease in the valuation allowance due to the adoption of ASC 606.

During fiscal 2018, the valuation allowance balance decreased by $13.5 million, including a $10.0 million reduction for the tax rate impact on a capital loss carryforward and $3.5 million for the expiration of certain non-U.S. tax loss carryforwards.

Income tax payments, net of refunds were $124.2 million, $118.9 million, and $120.3 million for fiscal 2019, 2018, and 2017, respectively.

Unrecognized Income Tax Benefits

As of June 30, 2019, 2018, and 2017, the Company had unrecognized income tax benefits of $7.8 million, $6.2 million, and $6.4 million, respectively, of which $7.0 million, $5.3 million, and $4.8 million, respectively, would impact the effective tax rate, if recognized. The remainder, if recognized, would principally affect deferred taxes.

A roll-forward of unrecognized tax benefits is as follows:

	June 30,		
	2019	2018	2017
Beginning of the year balance	$ 6.2	$ 6.4	$ 4.7
Additions for current year tax positions	1.6	1.3	1.0
Additions for tax positions of prior years	0.8	0.7	1.2
Reductions for tax positions of prior years	—	(0.8)	—
Settlement with tax authorities	(0.1)	(0.6)	(0.2)
Expiration of the statute of limitations	(0.7)	(0.8)	(0.2)
Impact of foreign exchange rate fluctuations	—	—	(0.1)
End of year balance	$ 7.8	$ 6.2	$ 6.4

The Company's net unrecognized income tax benefits were impacted by an increase of $1.6 million, decrease of $0.2 million, and an increase of $1.7 million during fiscal 2019, 2018, and 2017, respectively. For all fiscal years, changes were based on information which indicated the extent to which certain tax positions were more likely than not to be sustained. Penalties and interest expense associated with uncertain income tax positions have been recorded in the provision for income taxes on the consolidated statements of operations. Penalties and interest incurred during fiscal 2019, 2018, and 2017 were not significant. As of June 30, 2019 and 2018, the Company had an insignificant amount of accrued penalty and interest associated with uncertain tax positions, which was included within other liabilities on the consolidated balance sheets.

The Company conducts business globally and, as a result, files income tax returns in the U.S. federal jurisdiction and various state, local, and foreign jurisdictions. In the normal course of business, the Company is subject to examination by taxing authorities. The tax years currently under examination vary by jurisdiction. The Company regularly considers the likelihood of assessments in each of the jurisdictions resulting from examinations. The Company has established a liability for unrecognized income tax benefits, which it believes to be adequate in relation to the potential assessments. Once established, the liability for unrecognized tax benefits is adjusted when there is more information available, when an event occurs necessitating a change, or the statute of limitations for the relevant taxing authority to examine the tax position has expired.

Income tax-related examinations currently in progress in which the Company has significant business operations are as follows:

Tax Jurisdictions	Fiscal Years Ended
United States (IRS)	6/30/2016
New Jersey	6/30/2008 thru 6/30/2011
Oregon	6/30/2015 thru 6/30/2018
Michigan	6/30/2015 thru 6/30/2017
Massachuetts	6/30/2015 thru 6/30/2017
New York	6/30/2015 thru 6/30/2017
Belgium	6/30/2016 thru 6/30/2017
Kuwait	6/30/2017 thru 6/30/2018
India	6/30/2015 thru 6/30/2016
Italy	6/30/2018
Malaysia	06/30/2016 thru 6/30/2017
Spain	6/30/2011
UK	6/30/2017 thru 6/30/2018
Canada	6/30/2012 & 6/30/2014

Based on the possible outcomes of the Company's tax audits and expiration of the statute of limitations, it is reasonably possible that the liability for uncertain tax positions will change within the next twelve months. The associated net tax impact on the effective tax rate is estimated to be a $2.4 million tax benefit, with minimal cash payments.

Although the final resolution of the Company's tax disputes is uncertain, based on current information, the resolution of tax matters is not expected to have a material effect on the Company's consolidated financial condition, liquidity, or results of operations. However, an unfavorable resolution could have a material impact on the Company’s consolidated financial condition, liquidity, or results of operations in the periods in which the matters are ultimately resolved.

Tax Matters Agreement

The Company and ADP entered into a tax matters agreement as part of the spin-off that governs the rights and obligations of both parties after the spin-off with respect to taxes for both pre and post spin-off periods. Under this agreement, ADP is generally required to indemnify the Company for any income taxes attributable to ADP's operations or the Company's operations and for any non-income taxes attributable to ADP's operations, in each case for all pre spin-off periods as well as any taxes arising from transactions effected to consummate the spin-off, and the Company generally is required to indemnify ADP for any non-income taxes attributable to the Company's operations for all pre spin-off periods and for any income taxes attributable to the Company's operations for post spin-off periods.

The Company is generally required to indemnify ADP against any tax resulting from the spin-off (and against any claims made against ADP in respect of any tax imposed on its stockholders), in each case if that tax results from (i) an issuance of a significant amount of the Company's equity securities, a redemption of a significant amount of the Company's equity securities or the Company's involvement in other significant acquisitions of the Company's equity securities (excluding the spin-off), (ii) other actions or failures to act by the Company, or (iii) any of the Company's representations or undertakings referred to in the tax matters agreement being incorrect or violated. ADP will generally be required to indemnify the Company for any tax resulting from the spin-off if that tax results from (a) ADP's issuance of its equity securities, redemption of its equity securities, or involvement in other acquisitions of its equity securities, (b) other actions or failures to act by ADP, or (c) any of ADP's representations or undertakings referred to in the tax matters agreement being incorrect or violated.

The Company recognized receivables from ADP of $0.5 million and $0.5 million as of June 30, 2019 and 2018, respectively, and payables to ADP of $0.8 million and $0.9 million as of June 30, 2019 and 2018, respectively, under the tax matters agreement.

Note 11. Earnings per Share

The numerator for both basic and diluted earnings per share is net earnings attributable to CDK. The denominator for basic and diluted earnings per share is based upon the number of weighted-average shares of the Company's common stock outstanding during the reporting periods. Diluted earnings per share also reflects the dilutive effect of unexercised in-the-money stock options and unvested restricted stock.

Holders of certain stock-based compensation awards are eligible to receive dividends as described in Note 8. Net earnings allocated to participating securities were not significant for fiscal 2019, 2018, and 2017.

The following table summarizes the components of basic and diluted earnings per share.

	June 30, 2019	June 30, 2018	June 30, 2017
Net earnings from continuing operations attributable to CDK	$ 233.8	$ 303.2	$ 228.0
(Loss) Earnings from discontinued operations, net of taxes	(109.8)	77.6	67.6
Net earnings attributable to CDK	$ 124.0	$ 380.8	$ 295.6
Weighted-average shares outstanding:			
Basic	125.5	135.8	146.7
Effect of employee stock options	0.2	0.3	0.7
Effect of employee restricted stock	0.7	0.7	0.8
Diluted	126.4	136.8	148.2
Net earnings (loss) attributable to CDK per share - basic:			
Continuing operations	$ 1.86	$ 2.23	$ 1.55
Discontinued operations	(0.87)	0.57	0.46
Total net earnings attributable to CDK per share - basic	$ 0.99	$ 2.80	$ 2.01
Net earnings (loss) attributable to CDK per share - diluted:			
Continuing operations	$ 1.85	$ 2.21	$ 1.53
Discontinued operations	(0.87)	0.57	0.46
Total net earnings attributable to CDK per share - diluted	$ 0.98	$ 2.78	$ 1.99

The weighted-average number of shares outstanding used in the calculation of diluted earnings per share does not include the effect of the following anti-dilutive securities.

	June 30, 2019	June 30, 2018	June 30, 2017
Stock-based awards	0.5	0.2	0.3

Note 12. Accounts Receivable, Net

Accounts receivable, net from continuing operations comprised the following:

	June 30, 2019	June 30, 2018
Trade receivables	$ 414.3	$ 373.1
Unbilled receivables	4.0	1.4
Lease receivables	3.5	7.5
Accounts receivable, gross	421.8	382.0
Less: allowances	9.5	7.4
Account receivable, net	$ 412.3	$ 374.6

The investment in lease receivables consisted of the following:

	June 30,	
	2019	2018
Lease receivables, gross:		
Minimum lease payments	$ 4.0	$ 11.9
Unearned income	(0.1)	(0.6)
	3.9	11.3
Less: lease receivables, current (included in accounts receivable, net)	3.5	7.5
Lease receivables, long-term (included in other assets)	$ 0.4	$ 3.8

Scheduled minimum payments on lease receivables as of June 30, 2019 were as follows:

	Amount
Fiscal year ending 2020	$ 3.6
Fiscal year ending 2021	0.3
Fiscal year ending 2022	0.1
Fiscal year ending 2023	—
Fiscal year ending 2024	—
	$ 4.0

The Company recognized interest income on sales-type leases of $0.5 million, $1.0 million, and $1.8 million, in fiscal 2019, 2018, and 2017, respectively, within other income, net on the consolidated statements of operations.

Note 13. Property, Plant and Equipment, Net

Depreciation expense for property, plant and equipment was $56.7 million, $45.6 million, and $38.6 million for fiscal 2019, 2018, and 2017, respectively. Property, plant and equipment at cost and accumulated depreciation consisted of the following:

	June 30,	
	2019	2018
Property, plant and equipment:		
Land and buildings	$ 38.9	$ 38.7
Data processing equipment	278.7	235.1
Furniture and fixtures, leasehold improvements and other	78.0	63.4
Total property, plant and equipment	395.6	337.2
Less: accumulated depreciation	250.8	209.6
Property, plant and equipment, net	$ 144.8	$ 127.6

During the third quarter of fiscal 2019, the Company assessed the recoverability of certain long-lived assets upon exiting certain facilities and concluded that that the carrying amount of these assets were not recoverable. As a result, the Company recorded an impairment charge of $3.3 million within the Other segment, of which $2.6 million was included in cost of revenues and $0.7 million was recorded in selling, general and administrative expense within the consolidated statement of operations.

Note 14. Goodwill and Intangible Assets, Net

Changes in goodwill were as follows:

	CDK North America		CDK International		Total	
Balance as of June 30, 2017	$	602.2	$	362.3	$	964.5
Additions (Note 5)		19.0		—		19.0
Currency translation adjustments		(0.3)		6.0		5.7
Balance as of June 30, 2018		620.9		368.3		989.2
Additions (Note 5)		379.3		—		379.3
Currency translation adjustments		0.1		(12.3)		(12.2)
Balance as of June 30, 2019	$	1,000.3	$	356.0	$	1,356.3

Components of intangible assets, net from continuing operations were as follows:

	June 30,											
	2019						2018					
	Original Cost		Accumulated Amortization		Intangible Assets, net		Original Cost		Accumulated Amortization		Intangible Assets, net	
Customer lists	$	196.6	$	(100.2)	$	96.4	$	115.1	$	(92.5)	$	22.6
Software		250.8		(126.7)		124.1		176.9		(110.3)		66.6
Trademarks		7.5		(3.1)		4.4		2.6		(2.2)		0.4
Other intangibles		3.2		(2.2)		1.0		6.8		(4.0)		2.8
	$	458.1	$	(232.2)	$	225.9	$	301.4	$	(209.0)	$	92.4

Other intangibles consist primarily of purchased rights, covenants, and patents (acquired directly or through acquisitions). All of the intangible assets have finite lives and, as such, are subject to amortization. The weighted-average remaining useful life of intangible assets is 8 years (13 years for customer lists, 3 years for software and software licenses, and 6 years for trademarks). Amortization of intangible assets from continuing operations was $33.1 million, $25.2 million, and $24.8 million for fiscal 2019, 2018, and 2017, respectively.

During the second quarter of fiscal 2019, the Company identified indicators requiring assessment of certain intangible assets within the CDKNA segment. The identified indicators primarily consisted of abandonment of a project relating to the Company's inventory solutions intended to address evolving market conditions. As a result, the Company analyzed these intangible assets and recorded impairment charges of $13.2 million for software and $1.7 million for customer lists. Of the total$14.9 million impairment charge, the Company recorded $12.0 million in cost of revenues and $2.9 million in selling, general and administrative expenses within its consolidated statements of operations.

Estimated amortization expenses of the Company's existing intangible assets from continuing operations as of June 30, 2019 were as follows:

	Amount	
Fiscal year ending 2020	$	43.7
Fiscal year ending 2021		40.6
Fiscal year ending 2022		35.7
Fiscal year ending 2023		21.2
Fiscal year ending 2024		15.5
Thereafter		69.2
	$	225.9

Note 15. Debt

Debt comprised the following:

	June 30,	
	2019	2018
Revolving credit facility	$ —	$ —
Three year term loan facility, due 2021	300.0	—
Five year term loan facility, due 2023	288.8	—
2019 term loan facility	—	203.1
2020 term loan facility	—	218.8
2021 term loan facility	—	370.0
3.30% senior notes, due 2019	250.0	250.0
4.50% senior notes, due 2024	500.0	500.0
5.875% senior notes due 2026	500.0	500.0
4.875% senior notes, due 2027	600.0	600.0
5.250% senior notes, due 2029	500.0	—
Capital lease obligations	19.9	0.2
Unamortized debt financing costs	(28.5)	(21.4)
Total debt and capital lease obligations	2,930.2	2,620.7
Current maturities of long-term debt and capital lease obligations	270.8	45.2
Total long-term debt and capital lease obligations	$ 2,659.4	$ 2,575.5

Revolving Credit Facility

On August 17, 2018, the Company entered into a five-year senior unsecured revolving credit facility (the "revolving credit facility") which was undrawn as of June 30, 2019. The revolving credit facility replaced the previous unsecured revolving credit facility agreement, which was undrawn as of June 30, 2018. The revolving credit facility provides up to $750.0 million of borrowing capacity and includes a sub-limit of up to $100.0 million for loans in Euro, Pound Sterling, and, if approved by the revolving lenders, other currencies. In addition, the revolving credit facility contains an accordion feature that allows for an increase in the available borrowing capacity of up to $100.0 million, subject to the agreement of lenders under the revolving credit facility or other financial institutions that become lenders to extend commitments as part of the increased revolving credit facility. Borrowings under the revolving credit facility are available for general corporate purposes. The revolving credit facility will mature on August 17, 2023, subject to no more than two one-year extensions if lenders holding a majority of the revolving commitments approve such extensions.

The revolving credit facility is unsecured and loans thereunder bear interest, at the Company's option, at (a) the rate at which deposits in the applicable currency are offered in the London interbank market (or, in the case of borrowings in Euro, the European interbank market) plus margins varying from 1.250% to 2.375% per annum based on the Company's senior, unsecured non-credit-enhanced, long-term debt ratings from Standard & Poor's Ratings Group and Moody's Investors Services Inc. (the "Ratings") or (b) solely in the case of U.S. dollar loans, (i) the highest of (A) the prime rate of Bank of America, N.A., (B) a rate equal to the average of the overnight federal funds rate with a maturity of one day plus a margin of 0.500% per annum, and (C) the rate at which dollar deposits are offered in the London interbank market for a one-month interest period plus 1.000% plus (ii) margins varying from 0.250% to 1.375% per annum based on the Ratings. The unused portion of the revolving credit facility is subject to commitment fees ranging from 0.150% to 0.350% per annum based on the Ratings.

Term Loan Facilities

On August 17, 2018, the Company entered into a term loan agreement which provided the Company an aggregate of $600.0 million under term loans comprising a $300.0 million term loan that will mature on August 17, 2021 (the "three year term loan facility"), and a $300.0 million term loan that will mature on August 17, 2023 (the "five year term loan facility"). The aggregate principal amount of the three year term loan facility will be repayable in full on the maturity date. The five year term loan facility is subject to amortization in equal quarterly installments of 1.25% of the aggregate principal amount of the term loan made on the closing date, with any unpaid principal amount due and payable on the maturity date. The interest rate per annum on the three year term loan facility and the five year term loan facility was 3.91% and 4.04%, respectively, as of June 30, 2019.

The three year term loan facility and the five year term loan facility are unsecured and bear interest (a) with respect to the three year term loan facility, (i) at the rate at which deposits in the applicable currency are offered in the London interbank market plus margins varying from 1.125% to 2.250% per annum based on the Company’s senior, unsecured, non-credit-enhanced, long-term debt ratings from the Ratings or (ii) the highest of (X) a rate equal to the average of the overnight federal funds rate with a maturity of one day plus a margin of 0.50% per annum, (Y) the prime rate of Bank of America, N.A. and (Z) the rate at which dollar deposits are offered in the London interbank market for a one-month interest period plus 1.00%, plus margins varying from 0.125% to 1.250% per annum based on the Ratings, and (b) with respect to the five year term loan facility (i) at the rate at which deposits in the applicable currency are offered in the London interbank market plus margins varying from 1.250% to 2.375% per annum based on the Company’s Ratings or (ii) the highest of (X) a rate equal to the average of the overnight federal funds rate with a maturity of one day plus a margin of 0.50% per annum, (Y) the prime rate of Bank of America, N.A. and (Z) the rate at which dollar deposits are offered in the London interbank market for a one-month interest period, plus 1.00%, plus margins varying from 0.250% to 1.375% per annum based on the Ratings.

As of June 30, 2018, the Company had two $250.0 million senior unsecured term loan facilities (the "2019 term loan facility" and the "2020 term loan facility") and a five-year $400.0 million senior unsecured term loan facility (the "2021 term loan facility") outstanding. The interest rate per annum on both the 2019 term loan facility, the 2020 term loan facility, and the 2021 term loan facility was 3.85% as of June 30, 2018. The Company utilized the borrowings under the three year term loan facility and the five year term loan facility to pay-off all of the outstanding principal, interest and related fees with respect to each of the 2019 term loan facility, the 2020 term loan facility, and the 2021 term loan facility.

London Interbank Market (“LIBOR”) Transition

LIBOR is the subject of recent national, international and other regulatory guidance and proposals for reform. These reforms and other pressure may cause LIBOR to disappear entirely or to perform differently than in the past. It is expected that certain banks will stop reporting information used to set LIBOR at the end of 2021 when their reporting obligations cease. This will effectively end the usefulness of LIBOR and may end its publication. The consequences of these developments cannot be entirely predicted but, as noted above, could impact the interest rates of the revolving credit facility and the five year term loan. If LIBOR is no longer widely available, the Company will pursue alternative interest rate calculations in its revolving credit facility and five year term loan agreements. However, if no alternative rate can be determined, the LIBOR rate component will no longer be utilized in determining the rates. As of June 30, 2019 and 2018, the hypothetical impact to the Company’s interest rates without utilizing the LIBOR rate component would not have had a material effect on either rate, thus we do not believe the discontinuation of LIBOR will have a material impact on the Company's financial position and results of operations.

Restrictive Covenants and Other Matters

The revolving credit facility, the three year term loan facility, and the five year term loan facility are together referred to as the "credit facilities." The credit facilities contain various covenants and restrictive provisions that limit the Company's subsidiaries' ability to incur additional indebtedness, the Company's ability to consolidate or merge with other entities, and the Company's subsidiaries' ability to incur liens, enter into sale and leaseback transactions, and enter into agreements restricting the ability of the Company's subsidiaries to pay dividends. If the Company fails to perform the obligations under these and other covenants, the revolving credit facility could be terminated and any outstanding borrowings, together with accrued interest, under the credit facilities could be declared immediately due and payable. The credit facilities also have, in addition to customary events of default, an event of default triggered by the acceleration of the maturity of any other indebtedness the Company may have in an aggregate principal amount in excess of $75.0 million.

The credit facilities also contain financial covenants that will provide that (i) the ratio of total consolidated indebtedness to consolidated EBITDA shall not exceed 3.75 to 1.00 and (ii) the ratio of consolidated EBITDA to consolidated interest expense shall be a minimum of 3.00 to 1.00.

Senior Notes

On October 14, 2014, the Company completed an offering of 3.30% unsecured senior notes with a $250.0 million aggregate principal amount due in 2019 (the "2019 notes") and 4.50% unsecured senior notes with a $500.0 million aggregate principal amount due in 2024 (the "2024 notes"). The issuance price of the 2019 and 2024 notes was equal to the stated value. Interest is payable semi-annually on April 15 and October 15 of each year, and payment commenced on April 15, 2015. The interest rate payable on each applicable series of 2019 and 2024 notes is subject to adjustment from time to time if the credit ratings assigned to any series of 2019 and 2024 notes by the rating agencies is downgraded (or subsequently upgraded). The 2019 notes will mature on October 15, 2019, and the 2024 notes will mature on October 15, 2024. The 2019 and 2024 notes are redeemable at the Company's option prior to September 15, 2019 for the 2019 notes and prior to July 15, 2024 for the 2024 notes at a redemption price equal to the greater of (i) 100% of the aggregate principal amount of the 2019 or 2024 notes to be redeemed, and (ii) the sum of the present value of the remaining scheduled payments (as defined in the agreement), plus in each case, accrued and unpaid interest thereon. Subsequent to September 15, 2019 and July 15, 2024, the redemption price for the 2019 notes and the 2024 notes, respectively, will equal 100% of the aggregate principal amount of the notes redeemed, plus accrued and unpaid interest thereon.

On June 18, 2018, the Company completed an offering of 5.875% unsecured senior notes with a $500.0 million aggregate principal amount due in 2026 (the "2026 notes"). The issuance price of the 2026 notes was equal to the stated value. Interest is payable semi-annually on June 15 and December 15 of each year, and payment will commence on December 15, 2018. The 2026 notes will mature on June 15, 2026. The 2026 notes are redeemable at the Company's option prior to June 15, 2021 in whole or in part at a redemption price equal to 100% of the aggregate principal amount thereof plus accrued and unpaid interest, if any, plus the applicable "make-whole" premium. Subsequent to June 15, 2021, the Company may redeem the 2026 notes at a price equal to: (i) 102.938% of the aggregate principal amount of the 2026 notes redeemed prior to June 15, 2022; (ii) 101.958% of the aggregate principal amount of the notes redeemed on or after June 15, 2022 but prior to June 15, 2023; (iii) 100.979% of the aggregate principal amount of the 2026 notes redeemed on or after June 15, 2023 but prior to June 15, 2024; and (iv) 100.000% of the aggregate principal amount of the 2026 notes redeemed thereafter.

On May 15, 2017, the Company completed an offering of 4.875% unsecured senior notes with a $600.0 million aggregate principal amount due in 2027 (the "2027 notes"). The issuance price of the 2027 notes was equal to the stated value. Interest is payable semi-annually on June 1 and December 1 of each year, and payment commenced on December 1, 2017. The 2027 notes will mature on June 1, 2027. The 2027 notes are redeemable at the Company's option prior to June 1, 2022 in whole or in part at a redemption price equal to 100% of the aggregate principal amount thereof plus accrued and unpaid interest, if any, plus the applicable "make-whole" premium. Subsequent to June 1, 2022, the Company may redeem the 2027 notes at a price equal to: (i) 102.438% of the aggregate principal amount of the 2027 notes redeemed prior to June 1, 2023; (ii) 101.625% of the aggregate principal amount of the notes redeemed on or after June 1, 2023 but prior to June 1, 2024; (iii) 100.813% of the aggregate principal amount of the 2027 notes redeemed on or after June 1, 2024 but prior to June 1, 2025; and (iv) 100.000% of the aggregate principal amount of the 2027 notes redeemed thereafter.

On May 2, 2019, the Company completed an offering of 5.250% unsecured senior notes with a $500.0 million aggregate principal amount due in 2029 (the "2029 notes," together with the "2027 notes," "2026 notes," "2024 notes," and "2019 notes" are the "senior notes"). The issuance price of the 2029 notes was equal to the stated value. Interest is payable semi-annually on March 15 and September 15 of each year, and payment will commence on September 15, 2019. The 2029 notes will mature on May 15, 2029. The 2029 notes are redeemable at the Company's option prior to May 15, 2024 in whole or in part at a redemption price equal to 100% of the aggregate principal amount thereof plus accrued and unpaid interest, if any, plus the applicable "make-whole" premium. Subsequent to May 15, 2024, the Company may redeem the 2029 notes at a price equal to: (i) 102.625% of the aggregate principal amount of the 2029 notes redeemed prior to May 15, 2025; (ii) 101.750% of the aggregate principal amount of the notes redeemed on or after May 15, 2025 but prior to May 15, 2026; (iii) 100.875% of the aggregate principal amount of the 2029 notes redeemed on or after May 15, 2026 but prior to May 15, 2027; and (iv) 100.000% of the aggregate principal amount of the 2029 notes redeemed thereafter.

The senior notes are general unsecured obligations of the Company and are not guaranteed by any of the Company's subsidiaries. The senior notes rank equally in right of payment with the Company's existing and future unsecured unsubordinated obligations, including the credit facilities. The senior notes contain covenants restricting the Company's ability to incur additional indebtedness secured by liens, engage in sale/leaseback transactions, and merge, consolidate, or transfer all or substantially all of the Company's assets.

The senior notes are also subject to a change of control provision whereby each holder of the senior notes has the right to require the Company to purchase all or a portion of such holder's senior notes at a purchase price equal to 101% of the principal amount thereof plus accrued and unpaid interest upon the occurrence of both a change of control and a decline in the rating of the senior notes.

In November 2016, Moody's and S&P lowered their credit ratings on the senior notes to Ba1 (Stable Outlook) from Baa3 (Negative Outlook) and to BB+ (Stable Outlook) from BBB- (Negative Outlook), respectively. The downgrades triggered interest rate adjustments for the 2019 and 2024 notes. Interest rates for the 2019 notes and 2024 notes increased to 3.80% from 3.30% and to 5.00% from 4.50%, respectively, effective October 15, 2016.

Capital Lease Obligations

The Company has lease agreements for equipment, which are classified as capital lease obligations. The Company recognized the capital lease obligations and related leased equipment assets based on the present value of the minimum lease payments at lease inception.

Unamortized Debt Financing Costs

As of June 30, 2019 and 2018, gross debt issuance costs related to debt instruments were $41.3 million and $29.6 million, respectively. Accumulated amortization was $12.8 million and $8.2 million as of June 30, 2019 and 2018, respectively. Additional debt issuance costs of $11.7 million were capitalized in fiscal 2019. Debt financing costs are amortized over the terms of the related debt instruments to interest expense on the consolidated statement of operations.

The Company's aggregate scheduled maturities of the long-term debt and capital lease obligations as of June 30, 2019 were as follows:

	Amount
Fiscal year ending 2020	$ 270.8
Fiscal year ending 2021	20.9
Fiscal year ending 2022	320.1
Fiscal year ending 2023	17.9
Fiscal year ending 2024	229.0
Thereafter	2,100.0
Total debt and capital lease obligations	2,958.7
Unamortized deferred financing costs	(28.5)
Total debt and capital lease obligations, net of unamortized deferred financing costs	$ 2,930.2

Note 16. Commitments and Contingencies

The Company has obligations under various operating lease agreements for facilities and equipment. Total expense from continuing operations under these agreements was approximately $25.4 million, $36.6 million, and $43.7 million in fiscal 2019, 2018, and 2017, respectively, with minimum commitments as of June 30, 2019 as follows:

	Amount
Fiscal year ending 2020	$ 16.7
Fiscal year ending 2021	13.9
Fiscal year ending 2022	12.5
Fiscal year ending 2023	8.9
Fiscal year ending 2024	6.9
Thereafter	15.8
	$ 74.7

In addition to fixed rentals, certain leases require payment of maintenance and real estate taxes and contain escalation provisions based on future adjustments in price indices.

As of June 30, 2019, the Company had purchase commitments and obligations related to the Company's software, equipment, and other assets.

	Amount
Fiscal year ending 2020	$ 6.2
Fiscal year ending 2021	7
Fiscal year ending 2022	7.7
Fiscal year ending 2023	8.1
Fiscal year ending 2024	2.7
	$ 31.7

In the normal course of business, the Company may enter into contracts in which it makes representations and warranties that relate to the performance of the Company's services and products. The Company does not expect any material losses related to such representations and warranties.

Legal Proceedings

From time to time, the Company is subject to various claims and is involved in various legal, regulatory, and arbitration proceedings concerning matters arising in connection with the conduct of its business activities, including those noted in this section. Although management at present has no basis to conclude that the ultimate outcome of these proceedings, individually and in the aggregate, will materially harm the Company's financial position, results of operations, cash flows, or overall trends, legal proceedings and related government investigations are subject to inherent uncertainties, and unfavorable rulings or other events could occur. Unfavorable resolutions could include substantial monetary damages. In addition, in matters for which injunctive relief or other conduct remedies are sought, unfavorable resolutions could include an injunction or other order prohibiting us from selling one or more products at all or in particular ways, precluding particular business practices, or requiring other remedies. An unfavorable outcome may result in a material adverse impact on the Company's business, results of operations, financial position, and overall trends. The Company might also conclude that settling one or more such matters is in the best interests of its stockholders, employees, and customers, and any such settlement could include substantial payments.

Competition Matters

The Company is involved in the following antitrust lawsuits that set forth allegations of anti-competitive agreements between the Company and The Reynolds and Reynolds Company ("Reynolds and Reynolds") relating to the manner in which the defendants control access to, and allow integration with, their respective DMS, and that seek, among other things, treble damages and injunctive relief. These lawsuits have been transferred to, or filed in, the U.S. District Court for the Northern District of Illinois for consolidated and coordinated pretrial proceedings as part of a multi-district litigation proceeding ("MDL").

- Motor Vehicle Software Corporation ("MVSC") brought a suit against the CDK Global, LLC (after initially naming the Company), Reynolds and Reynolds, and Computerized Vehicle Registration ("CVR"), a majority owned joint venture of the Company. MVSC's suit was originally filed on February 3, 2017, in the U.S. District Court for the Central District of California. Defendants' motions to dismiss MVSC's second amended complaint were denied, and Defendants answered MVSC's complaint on November 7, 2018.
- Authenticom, Inc. brought a suit against CDK Global, LLC and Reynolds and Reynolds. Authenticom's suit was originally filed on May 1, 2017, in the U.S. District Court for the Western District of Wisconsin. Defendants' motions to dismiss were granted in part, and denied in part. Defendants filed answers to Authenticom's complaint and asserted counterclaims against Authenticom on June 30, 2018; Authenticom filed motions to dismiss those Counterclaims. Authenticom Inc.'s motion to dismiss CDK Global, LLC's counterclaims were granted in part and denied in part; its motion to dismiss one of Reynolds and Reynolds's Counterclaims was granted. On February 15, 2019, Authenticom filed an answer to both Defendants' Counterclaims.
- Teterboro Automall, Inc. d/b/a Teterboro Chrysler Dodge Jeep Ram ("Teterboro") brought a putative class action suit on behalf of itself and all similarly situated automobile dealerships against CDK Global, LLC and Reynolds and Reynolds. Teterboro's suit was originally filed on October 19, 2017, in the U.S. District Court for the District of New Jersey. Since that time, several more putative class actions were filed in a number of Federal District Courts, with substantively similar allegations; all of them have been consolidated with the MDL proceeding. On June 4, 2018, a Consolidated Class Action Complaint was filed on behalf of a putative class made up of all dealerships in the United States that directly purchased DMS and/or allegedly indirectly purchased DMS or data integration services from CDK Global, LLC or Reynolds and Reynolds ("Putative Dealership Class Plaintiffs"). CDK Global, LLC moved to dismiss the complaint, or in the alternative, compel arbitration of certain of the cases while staying the remainder pending the outcome of those arbitration proceedings; its motion to dismiss was granted in part and denied in part, while its motion to compel arbitration was denied. On February 22, 2019, CDK Global, LLC filed an answer to the remaining claims in Putative Dealership Class Plaintiffs' complaint and asserted counterclaims against the Putative Dealership Class Plaintiffs. The Putative Dealership Class Plaintiffs filed a motion to dismiss CDK Global, LLC's counterclaims; that motion has been fully briefed and remains pending before the Court. On October 23, 2018, the Putative Dealership Class Plaintiffs and Reynolds and Reynolds filed a Motion for Preliminary

Approval of Settlement and for Conditional Certification of the Proposed Settlement Class. The Court approved that settlement on January 22, 2019.

- Cox Automotive, along with multiple subsidiaries ("Cox"), brought suit against CDK Global, LLC. Cox's suit was originally filed on December 11, 2017, in the U.S. District Court for the Western District of Wisconsin. CDK Global, LLC's motion to dismiss was granted in part and denied in part on January 25, 2019. CDK Global, LLC filed an Answer to the remainder of Cox's complaint and asserted counterclaims against Cox on February 15, 2019. Cox filed an Answer to CDK Global, LLC's counterclaims on March 8, 2019. On July 10, 2019, CDK Global, LLC and Cox entered into a settlement agreement that resulted in a dismissal of all claims brought by the affiliated parties in the MDL, and CDK Global, LLC making a one-time cash payment to Cox.

- Loop LLC d/b/a AutoLoop ("AutoLoop") brought suit against CDK Global, LLC on April 9, 2018, in the U.S. District Court for the Northern District of Illinois, but reserved its rights with respect to remand to the U.S. District Court for the Western District of Wisconsin at the conclusion of the MDL proceedings. On June 5, 2018, AutoLoop amended its complaint to sue on behalf of itself and a putative class action of all other automotive software vendors in the United States that purchased data integration services from CDK Global, LLC or Reynolds and Reynolds. CDK Global, LLC moved to compel arbitration of AutoLoop's claims, or in the alternative, to dismiss those claims; that motion was denied on January 25, 2019. CDK Global, LLC filed an answer to AutoLoop's complaint and asserted counterclaims against AutoLoop on February 15, 2019. AutoLoop filed an Answer to CDK Global, LLC's counterclaims on March 8, 2019.

- i3 Brands, Inc. and PartProtection LLC ("i3 Brands") brought suit against CDK Global, LLC and Reynolds and Reynolds. i3 Brand's suit was originally filed on February 4, 2019, in the U.S. District Court for the Southern District of California; it was subsequently transferred to the N.D. Illinois and consolidated as part of the MDL. On April 1, 2019, Reynolds and Reynolds filed a motion to dismiss i3 Brands' suit in favor of arbitration, or in the alternative, for failure to state a claim, and CDK Global, LLC filed a motion to stay this case pending the outcome of the proposed arbitration proceedings between Reynolds and Reynolds with i3 Brands, or in the alternative, to dismiss certain of its claims for failure to state a claim. These motions are fully briefed and remain pending before the Court.

The Company believes that the remaining unsettled cases are without merit and will continue to vigorously contest all asserted claims. Nonetheless, in light of the Company's settlement with Cox and its continued expenditure of legal costs to contest the claims, the Company has determined that a loss of some measure is probable and can be reasonably estimated. Accordingly, the Company has established a litigation provision of $90 million in the fourth quarter of fiscal 2019 for both the settlement and the remaining unsettled cases. This estimated loss is based upon currently available information and represents the Company's best estimate of such loss. Estimating the value of this estimated loss involved significant judgment given the uncertainty that still exists with respect to the remaining unsettled cases due to a variety of factors typical of complex, large scale litigation, including, among others: (i) formative issues, including: (a) the causes of action the plaintiffs can pursue; (b) the definition of the class(es) of plaintiffs; (c) the types of damages that can be recovered; and (d) whether plaintiffs can establish loss causation as a matter of law, all of which have yet to be determined pending the outcome of dispositive motions (e.g., motions for class certification and motions for summary judgment); (ii) discovery is ongoing and significant factual issues remain to be resolved; (iii) expert discovery with respect to, among other things, alleged antitrust injury and damages is not sufficiently advanced; (iv) the absence of productive settlement discussions to date with plaintiffs other than Cox; and (v) the novel or uncertain nature of the legal issues presented. For these same reasons, the Company cannot reasonably estimate a maximum potential loss exposure at this time. In addition, the Company's estimate does not incorporate or reflect the potential value of the Company's counterclaims against certain of the plaintiffs in the ongoing cases. The legal proceedings underlying the estimated litigation liability will change from time to time and actual results may vary significantly from the estimate. As noted above, an adverse result in any of the remaining cases could have a material adverse effect on the Company's business, results of operations, financial condition, or liquidity.

On June 22, 2017, the Company received from the FTC a Civil Investigative Demand consisting of specifications calling for the production of documents relating to any agreements between the Company and Reynolds and Reynolds. Parallel document requests have been received from certain states' Attorneys General. Since 2017, the Company has engaged in continuing communication with and received subsequent requests from the FTC related to its investigation. The Company is responding to the requests and no proceedings have been instituted. The Company believes there has not been any conduct by the Company or its current or former employees that would be actionable under the antitrust laws in connection with the agreements between the Company and Reynolds and Reynolds or otherwise. At this time, the Company does not have sufficient information to predict the outcome of, or the cost of responding to or resolving, these investigations.

Other Commitments and Contingencies

In the normal course of business, the Company may enter into contracts in which the Company makes representations and warranties that relate to the performance of the Company’s services and products. The Company does not expect any material losses related to such representations and warranties.

The Company has provided approximately $27.6 million of guarantees as of June 30, 2019 in the form of surety bonds issued to support certain licenses and contracts which require a surety bond as a guarantee of performance of contractual obligations. In general, the Company would only be liable for the amount of these guarantees in the event the Company defaulted in performing the obligations under each contract, of which, the probability is remote.

The Company had a total of $2.2 million in letters of credit outstanding as of June 30, 2019 primarily in connection with insurance programs and its foreign subsidiaries.

Note 17. Share Repurchase Transactions

In December 2015, the Board of Directors authorized the Company to repurchase up to $1.0 billion of its common stock as part of its $1.0 billion return of capital plan. In December 2016, the company completed its $1.0 billion return of capital plan. In January 2017, the Board of Directors terminated this authorization and replaced it with an authorization for the Company to repurchase up to $2.0 billion of its common stock as part of a new return of capital plan. Under the authorization, the Company may purchase its common stock in the open market or in privately negotiated transactions from time to time as permitted by federal securities laws and other legal requirements. The actual timing, number, and price of any shares to be repurchased is determined at management's discretion and depends on a number of factors, including the market price of the shares, general market and economic conditions, and other potential uses for free cash flow including, but not limited to, potential acquisitions.

In December 2016, the Company entered into an accelerated share repurchase agreement ("December 2016 ASR") to purchase $330.0 million of the Company's common stock. Under the terms of the December 2016 ASR, the Company made a $330.0 million payment in December 2016 and received an initial delivery of approximately 4.5 million shares of the Company's common stock. In May 2017, the Company received an additional 0.7 million shares of common stock in final settlement of the December 2016 ASR, for a total of 5.2 million shares. The value reflected in treasury stock upon completion of the December 2016 ASR represents the value of the shares received based on the closing price of the Company's stock on the respective settlement dates, which is less than the $330.0 million cash paid by $21.2 million.

In May 2017, the Company entered into an accelerated share repurchase agreement ("May 2017 ASR") to purchase $350.0 million of the Company's common stock. Under the terms of the May 2017 ASR, the Company made a $350.0 million payment in May 2017 and received initial delivery of approximately 4.5 million of the Company's common stock. In September 2017, the Company received an additional 1.1 million shares of common stock in final settlement of the May 2017 ASR, for a total of 5.6 million shares. The value reflected in treasury stock upon completion of the May 2017 ASR represents the value of the shares received based on the closing price of the Company's stock on the respective settlement dates, which is less than the $350.0 million cash paid by $3.1 million.

In November 2018, the Company entered into an accelerated share repurchase agreement ("November 2018 ASR") to purchase $260.0 million of the Company's common stock. Under the terms of the November 2018 ASR, the Company made a $260.0 million payment in November 2018 and received initial delivery of approximately 4.1 million of the Company's common stock. In February 2019, the Company received an additional 1.1 million shares of common stock in final settlement of the November 2018 ASR, for a total of 5.2 million shares. The value reflected in treasury stock upon completion of the November 2018 ASR represents the value of the shares received based on the closing price of the Company's stock on the respective settlement dates, which is higher than the $260.0 million cash paid by $13.0 million.

Additionally, the Company made open market repurchases of 4.4 million shares of the Company's common stock during fiscal 2019 for a total cost of $264.1 million and 9.4 million shares of the Company's common stock during fiscal 2018 for a total cost of $623.6 million.

Note 18. Transactions with ADP

Prior to the spin-off, the Company entered into a transition services agreement with ADP to provide for an orderly transition to being an independent company. The Company entered into a data services agreement with ADP prior to the spin-off under which ADP will provide the Company with certain data center sharing services relating to the provision of information technology, platform support, hosting and network services. The term of the agreement expired on September 30, 2016, two years after the spin-off date.

The Company entered into an intellectual property transfer agreement with ADP prior to the spin-off under which ADP assigned to the Company certain patents, trademarks, copyrights, and other intellectual property developed or owned by ADP or certain of its subsidiaries and with respect to which the Company is the primary or exclusive user today or the anticipated primary or exclusive user in the future. The term of the agreement is perpetual after the spin-off date.

The Company recorded $3.4 million of expenses related to the data services agreement in the accompanying financial statements for fiscal 2017.

Refer to Note 10 for further information on the tax matters agreement with ADP.

Note 19. Financial Data by Segment

The Company is organized into two main operating groups, CDK North America and CDK International, which are also reportable segments. The Company's previously reported Advertising North America segment has been classified as discontinued operations for all periods presented. Discontinued operations also includes the Company's mobile advertising and website services businesses, the results of which were previously reported within the CDKNA segment. Additional information on discontinued operations is contained in Note 4 - Discontinued Operations.

The primary components of the Other segment are corporate allocations and other expenses not recorded in the segment results, such as stock-based compensation expense, corporate costs, interest expense, costs attributable to the business transformation plan, results of the captive insurance company and certain unallocated expenses. Certain expenses are charged to the reportable segments at a standard rate for management reasons. Other costs are recorded based on management responsibility.

	CDK North America		CDK International		Other*		Total
Year ended June 30, 2019							
Revenues	$	1,593.0	$	321.8	$	—	$ 1,914.8
Earnings before income taxes		517.5		77.1		(290.7)	303.9
Loss from equity method investment		(17.0)		—		—	(17.0)
Assets		1,881.4		497.7		619.9	2,999.0
Capital expenditures		49.3		5.1		—	54.4
Depreciation and amortization		73.9		9.3		6.6	89.8
Year ended June 30, 2018							
Revenues	$	1,441.7	$	356.3	$	—	$ 1,798.0
Earnings before income taxes		576.4		97.7		(274.9)	399.2
Assets		1,203.2		509.6		1,295.6	3,008.4
Capital expenditures		40.1		5.8		—	45.9
Depreciation and amortization		54.0		11.7		5.1	70.8
Year ended June 30, 2017							
Revenues	$	1,418.8	$	311.9	$	—	$ 1,730.7
Earnings before income taxes		534.2		75.0		(281.5)	327.7
Assets		1,174.9		538.9		1,169.3	2,883.1
Capital expenditures		54.6		7.8		—	62.4
Depreciation and amortization		44.3		11.4		7.7	63.4

* Includes assets held for sale of $98.6 million, $269.4 million, and $245.1 million as of June 30, 2019, 2018, and 2017, respectively.

Revenues and property, plant and equipment, net by geographic area were as follows:

	United States		Europe		Canada		Other		Total
Year ended June 30, 2019									
Revenues	$	1,500.3	$	235.4	$	92.7	$	86.4	$ 1,914.8
Property, plant and equipment, net		122.7		11.2		4.3		6.6	144.8
Year ended June 30, 2018									
Revenues	$	1,347.9	$	253.3	$	93.8	$	103.0	$ 1,798.0
Property, plant and equipment, net		101.6		14.1		3.9		8.0	127.6
Year ended June 30, 2017									
Revenues	$	1,330.2	$	221.0	$	88.6	$	90.9	$ 1,730.7
Property, plant and equipment, net		99.1		16.3		3.7		10.5	129.6

Note 20. Quarterly Financial Results (Unaudited)

Summarized quarterly results of operations for the fiscal 2019 and 2018 were as follows:

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
Year ended June 30, 2019				
Revenues [1]	$ 446.3	$ 478.7	$ 501.2	$ 488.6
Gross profit [1] [2]	243.0	248.1	271.9	252.0
Earnings before income taxes [1]	106.5	96.6	120.7	(19.9)
Net earnings from continuing operations	76.5	72.6	89.3	3.3
(Loss) Earnings from discontinued operations, net of taxes	15.8	18.3	12.3	(156.2)
Net earnings	92.3	90.9	101.6	(152.9)
Net earnings attributable to noncontrolling interest	2.0	1.9	1.9	2.1
Net earnings attributable to CDK	90.3	89.0	99.7	(155.0)
Net earnings (loss) attributable to CDK per share - basic:				
Continuing operations	$ 0.58	$ 0.56	$ 0.70	$ 0.01
Discontinued operations	0.12	0.14	0.10	(1.28)
Total net earnings attributable to CDK per share - basic	$ 0.70	$ 0.70	$ 0.80	$ (1.27)
Net earnings (loss) attributable to CDK per share - diluted:				
Continuing operations	$ 0.57	$ 0.56	$ 0.70	$ 0.01
Discontinued operations	0.12	0.14	0.10	(1.28)
Total net earnings attributable to CDK per share - diluted	$ 0.69	$ 0.70	$ 0.80	$ (1.27)
Year ended June 30, 2018				
Revenues [1]	$ 441.1	$ 441.7	$ 461.2	$ 454.0
Gross profit [1] [2]	219.7	232.3	246.3	245.2
Earnings before income taxes [1]	90.6	90.8	107.7	110.1
Net earnings from continuing operations	64.8	84.1	79.0	83.2
Earnings from discontinued operations, net of taxes	18.2	22.2	18.7	18.5
Net earnings	83.0	106.3	97.7	101.7
Net earnings attributable to noncontrolling interest	1.8	2.2	1.6	2.3
Net earnings attributable to CDK	81.2	104.1	96.1	99.4
Net earnings attributable to CDK per share - basic:				
Continuing operations	$ 0.45	$ 0.60	$ 0.57	$ 0.67
Discontinued operations	0.13	0.16	0.14	0.15
Total net earnings attributable to CDK per share - basic	$ 0.58	$ 0.76	$ 0.71	$ 0.82
Net earnings attributable to CDK per share - diluted:				
Continuing operations	$ 0.44	$ 0.59	$ 0.57	$ 0.66
Discontinued operations	0.13	0.16	0.14	0.15
Total net earnings attributable to CDK per share - diluted	$ 0.57	$ 0.75	$ 0.71	$ 0.81

(1) Amounts differ from previously reported in the Quarterly Reports on Form 10-Q as a result of the Digital Marketing Business being classified as discontinued operations. See Note 15, "Discontinued Operations" for additional information.

(2) Gross profit is calculated as revenues less cost of revenues.

CDK Global, Inc.
Schedule II - Valuation and Qualifying Accounts
(In millions)

Column A	Column B	Column C		Column D	Column E
		Additions			
	Balance at beginning of period	Charged (credited) to costs and expenses	Charged (credited) to other accounts	Deductions	Balance at end of period
Year ended June 30, 2019 (1)					
Accounts receivable allowances	$ 4.0	$ 8.2	$ 0.7 (2)	$ (3.4) (3)	$ 9.5
Deferred tax valuation allowance	21.2	—	—	(10.9) (4)	10.3
Year ended June 30, 2018					
Accounts receivable allowances	$ 6.3	$ 3.7	$ —	$ (2.6) (3)	$ 7.4
Deferred tax valuation allowance	35.1	—	—	(13.5) (5)	21.6
Year ended June 30, 2017					
Accounts receivable allowances	$ 7.1	$ 1.7	$ —	$ (2.5) (3)	$ 6.3
Deferred tax valuation allowance	34.3	1.9	—	(1.1)	35.1

(1) Effective July 1, 2018, the Company adopted ASC 606 using the modified retrospective approach. The comparative information has not been restated and continues to be reported under the accounting standards in effect for the period presented. (2) Represents amount for ELEAD as of the acquisition date.
(3) Doubtful accounts written off, less recoveries on accounts previously written off.
(4) Includes $14.8 million reduction related to the capital gain the Company expects to recognize in conjunction with the sale of the assets of the Digital Marketing Business which were classified as held for sale in the fourth quarter of fiscal 2019, $4.3 million increase related to capital loss resulting from termination of a joint venture contract, and a $0.4 million net decrease due to certain non-U.S. tax loss carryforwards.
(5) Includes $10.0 million reduction for the tax rate impact on a capital loss carryforward and $3.5 million for the expiration of certain non-U.S. tax loss carryforwards.

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

None.

Item 9A. Controls and Procedures

Management's Evaluation of Disclosure Controls and Procedures

The Company carried out an evaluation, under the supervision and with the participation of the Company's management, including its Chief Executive Officer and Chief Financial Officer, of the effectiveness of the Company's disclosure controls and procedures, as defined in Rules 13a-15(e) and 15d-15(e) of the Exchange Act (the "evaluation"). Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by the Company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the Company's management, including its Chief Executive Officer and Chief Financial Officer, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure. Based on the evaluation, the Company's Chief Executive Officer and Chief Financial Officer have concluded that the Company's disclosure controls and procedures were effective as of June 30, 2019 in ensuring that (i) information required to be disclosed by the Company in reports that it files or submits under the Exchange Act is accumulated and communicated to the Company's management, including its Chief Executive Officer and Chief Financial Officer, to allow timely decisions regarding required disclosure, and (ii) such information is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and forms.

Internal Control Over Financial Reporting

Management's Annual Report on Internal Control Over Financial Reporting. Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rules 13a-15(f) and 15d-15(f). Under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting as of June 30, 2019 based on the guidelines established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on the results of our evaluation, our management has concluded that our internal control over financial reporting was effective as of June 30, 2019.

Deloitte & Touche LLP, an independent registered public accounting firm, has audited the effectiveness of our internal control over financial reporting as of June 30, 2019. Their report is included in this Annual Report on Form 10-K.

Changes in Internal Control Over Financial Reporting. In the fourth quarter of fiscal 2019, we assessed and added new controls due to the adoption of new lease accounting standard effective July 1, 2019. There was no other change 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 quarter ended June 30, 2019 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the stockholders and the Board of Directors of
CDK Global, Inc.
Hoffman Estates, Illinois

Opinion on Internal Control over Financial Reporting

We have audited the internal control over financial reporting of CDK Global, Inc. and subsidiaries (the "Company") as of June 30, 2019, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of June 30, 2019, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by COSO.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated financial statements as of and for the year ended June 30, 2019, of the Company and our report dated August 13, 2019, which expresses an unqualified opinion and includes an explanatory paragraph relating to the Company's adoption of Financial Accounting Standards Board Accounting Standards Codification 606, *Revenue from Contracts with Customers*.

Basis for Opinion

The Company's management is responsible 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 Annual Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the 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 audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

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.

/s/ DELOITTE & TOUCHE LLP
Chicago, Illinois
August 13, 2019

Item 9B. Other Information

None.

Part III

Item 10. Directors, Executive Officers and Corporate Governance

The information required by this item will be set forth under the captions "Proposal 1: Election of Directors," “Section 16(a) Beneficial Ownership Reporting Compliance,” “Code of Business Conduct and Ethics,” and “Board and Committee Governance” in the Proxy Statement to be filed with the SEC no later than 120 days after the close of our fiscal year ended June 30, 2019. If the Proxy Statement is not filed with the SEC by such time, such information will be included in an amendment to this Annual Report by such time. Also see “Information about our Executive Officers” in Part I of this Annual Report on Form 10-K.

Item 11. Executive Compensation

The information required by this item will be set forth under the captions "Compensation of Named Executive Officers" and "Compensation Discussion and Analysis" in the Proxy Statement to be filed with the SEC no later than 120 days after the close of our fiscal year ended June 30, 2019. If the Proxy Statement is not filed with the SEC by such time, such information will be included in an amendment to this Annual Report by such time.

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

The information required by this item will be set forth under the caption "Security Ownership of Certain Beneficial Owners and Management" in the Proxy Statement to be filed with the SEC no later than 120 days after the close of our fiscal year ended June 30, 2019. If the Proxy Statement is not filed with the SEC by such time, such information will be included in an amendment to this Annual Report by such time.

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

The information required by this item will be set forth under the caption "Certain Relationships and Related Party Transactions" in the Proxy Statement to be filed with the SEC no later than 120 days after the close of our fiscal year ended June 30, 2019. If the Proxy Statement is not filed with the SEC by such time, such information will be included in an amendment to this Annual Report by such time.

Item 14. Principal Accounting Fees and Services

The information required by this item will be set forth under the caption "Fees of Independent Accounting Firm" in the Proxy Statement to be filed with the SEC no later than 120 days after the close of our fiscal year ended June 30, 2019. If the Proxy Statement is not filed with the SEC by such time, such information will be included in an amendment to this Annual Report by such time.

Part IV
Item 15. Exhibits, Financial Statement Schedules

The following documents are included in "Financial Statements and Supplementary Data" in Part II, Item 8 of this Annual Report on Form 10-K:

1. Financial Statements

   Reports of Independent Registered Public Accounting Firm

   Consolidated Statements of Operations for the years ended June 30, 2019, 2018, and 2017

   Consolidated Statements of Comprehensive Income for the years ended June 30, 2019, 2018, and 2017

   Consolidated Balance Sheets as of June 30, 2019 and 2018

   Consolidated Statements of Cash Flows for the years ended June 30, 2019, 2018, and 2017

   Consolidated Statements of Stockholders' (Deficit) Equity for the years ended June 30, 2019, 2018, and 2017

   Notes to the Consolidated Financial Statements

2. Financial Statement Schedule

   Schedule II - Valuation and Qualifying Accounts.

The following exhibits are filed with this Annual Report on Form 10-K or incorporated herein by reference to the document set forth next to the exhibit in the list below:

			Incorporated by Reference			
Exhibit Number	Exhibit Description	Form	File No.	Exhibit	Filing Date	Filed Herewith
3.1	Certificate of Incorporation of CDK Global, Inc.	8-K	1-36486	3.1	10/1/2014	
3.2	Amended and Restated By-Laws of CDK Global, Inc., dated March 7, 2017	8-K	1-36486	3.1	3/9/2017	
4.1	Indenture, dated as of October 14, 2014, among CDK Global, Inc. and U.S. Bank National Association, as trustee, pursuant to which the 3.30% Senior Notes due 2019 were issued	8-K	1-36486	4.1	10/17/2014	
4.2	Indenture, dated as of October 14, 2014, among CDK Global, Inc. and U.S. Bank National Association, as trustee, pursuant to which the 4.50% Senior Notes due 2024 were issued	8-K	1-36486	4.2	10/17/2014	
4.3	Indenture, dated as of May 15, 2017, between CDK Global, Inc. and U.S. Bank National Association, as trustee, pursuant to which the 4.875% senior notes due 2027 were issued	8-K	1-36486	4.1	5/15/2017	
4.4	Base Indenture, dated as of June 18, 2018, between CDK Global, Inc. and U.S. Bank National Association, as trustee	8-K	1-36486	4.1	6/18/2018	
4.5	Officer's Certificate, dated as of June 18, 2018 (including the form of the Company's 5.875% Senior Notes due 2026)	8-K	1-36486	4.2	6/18/2018	
4.6	Indenture, dated as of May 15, 2019, between CDK Global, Inc. and U.S. Bank National Association, as trustee, pursuant to which the 5.25% senior notes due 2029 were issued	8-K	1-36486	4.1	5/15/2019	
10.3	Form of Indemnification Agreement	8-K	1-36486	10.1	6/7/2018	
10.4	Amended and Restated Corporate Officer Severance Plan (Management Compensatory Plan)	8-K	1-36486	10.1	9/7/2017	
10.5	Third Amended and Restated Change in Control Severance Plan for Corporate Officers (Management Compensatory Plan)	10-K	1-36486	10.11	8/8/2017	

10.6	CDK Global Inc., Amended and Restated Deferred Compensation Plan, effective November 6, 2018	10-Q	1-36486	10.7	11/7/2018	
10.7	CDK Global, Inc., Amended and Restated Retirement and Savings Restoration Plan, effective November 6, 2018 (Management Compensatory Plan)	10-Q	1-36486	10.8	11/7/2018	
10.8	CDK Global, Inc. 2014 Omnibus Award Plan (Management Compensatory Plan)	DEF 14A	1-36486	Appendix A	9/22/2015	
10.9	First Amendment to the CDK Global, Inc. 2014 Omnibus Award Plan (Management Compensatory Plan)	10-K	1-36486	10.6	8/8/2017	
10.10	UK Tax Advantaged Sub-Plan (Management Compensatory Plan)	8-K	1-36486	10.1	1/26/2015	
10.11	Form of Deferred Unit Award Agreement under the 2014 Omnibus Award Plan (Form for Non-Employee Director) (Management Compensatory Plan)	10-Q	1-36486	10.18	11/13/2014	
10.12	Form of Restricted Stock Unit Award Agreement under the 2014 Omnibus Award Plan (Form for Non-Employee Director) (Management Compensatory Plan)	10-Q	1-36486	10.7	11/3/2015	
10.13	Form of Stock Option Grant Agreement under the 2014 Omnibus Award Plan (Form for Non-Employee Director) (Management Compensatory Plan)	10-Q	1-36486	10.8	11/3/2015	
10.14	Form of Stock Option Grant Agreement under the 2014 Omnibus Award Plan (Form for Corporate Officers) (Management Compensatory Plan)	10-Q	1-36486	10.8	2/3/2016	
10.15	Form of Performance Based Stock Option Award Agreement under the 2014 Omnibus Award Plan (Form for Corporate Officers) (Management Compensatory Plan)	10-Q	1-36486	10.5	11/7/2018	
10.16	Form of Performance Based Stock Option Award Agreement under the 2014 Omnibus Award Plan (Form for Corporate Officers) (Management Compensatory Plan)	10-Q	1-36486	10.6	11/7/2018	
10.17	UK Tax Advantaged Sub-Plan Form of Stock Option Grant Agreement under the 2014 Omnibus Award Plan (Form for Corporate Officers) (Management Compensatory Plan)	10-Q	1-36486	10.9	2/3/2016	
10.18	Form of Restricted Unit Award Agreement under the 2014 Omnibus Award Plan (Form for Corporate Officers) (Management Compensatory Plan)	10-Q	1-36486	10.10	2/3/2016	
10.19	Form of Restricted Stock Unit Award Agreement under the 2014 Omnibus Award Plan (Form for Corporate Officers) (Management Compensatory Plan)	8-K	1-36486	10.1	9/6/2018	
10.20	Form of Restricted Stock Award Agreement under the 2014 Omnibus Award Plan (Form for Corporate Officers) (Management Compensatory Plan)	10-Q	1-36486	10.11	2/3/2016	
10.21	Form of Performance Stock Unit Award Agreement under the 2014 Omnibus Award Plan (Form for Corporate Officers) (Management Compensatory Plan)	10-Q	1-36486	10.12	2/3/2016	
10.22	Form of Performance Stock Unit Award Agreement under the 2014 Omnibus Award Plan (Form for Corporate Officers) (Management Compensatory Plan)	8-K	1-36486	10.2	9/6/2018	
10.23	Employment Agreement, dated as of November 5, 2018, by and between the Company and Brian Krzanich	8-K	1-36486	10.9	11/7/2018	
10.24	Transition and Release Agreement, dated as of November 5, 2018, by and between the Company and Brian P. MacDonald	8-K	1-36486	10.10	11/7/2018	
10.25	Term Loan Credit Agreement, dated as of August 17, 2018, among the Company, the Lenders party thereto, and Bank of America, N.A., as Administrative Agent	8-K	1-36486	10.1	8/23/2018	
10.26	Revolving Credit Agreement, dated as of August 17, 2018, among the Company, the Lenders party thereto, and Bank of America, N.A., as Administrative Agent	8-K	1-36486	10.2	8/23/2018	
21.1	Subsidiaries of the Registrant					X
23.1	Consent of Deloitte & Touche LLP, independent registered public accounting firm					X
31.1	Certification by Brian Krzanich pursuant to Rule 13a-14(a) of the Securities Exchange Act of 1934					X

31.2	Certification by Joseph A. Tautges pursuant to Rule 13a-14(a) of the Securities Exchange Act of 1934	X
32.1	Certification by Brian Krzanich pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	X
32.2	Certification by Joseph A. Tautges pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	X
101.INS	XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.	X
101.SCH	XBRL taxonomy extension schema document	X
101.CAL	XBRL taxonomy extension calculation linkbase document	X
101.LAB	XBRL taxonomy label linkbase document	X
101.PRE	XBRL taxonomy extension presentation linkbase document	X
101.DEF	XBRL taxonomy extension definition linkbase document	X

SIGNATURES

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

CDK GLOBAL, INC.

By: /s/ Joseph A. Tautges

Joseph A. Tautges

Executive Vice President, Chief Financial Officer

August 13, 2019

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

Signature	Title	Date
/s/ Brian Krzanich Brian Krzanich	President, Chief Executive Officer and Director (principal executive officer)	August 13, 2019
/s/ Joseph A. Tautges Joseph A. Tautges	Executive Vice President, Chief Financial Officer (principal financial officer)	August 13, 2019
/s/ Jennifer A.Williams Jennifer A. Williams	Vice President, Corporate Controller and Chief Accounting Officer (principal accounting officer)	August 13, 2019
/s/ Leslie A. Brun Leslie A. Brun	Director	August 13, 2019
/s/ Willie A. Deese Willie A. Deese	Director	August 13, 2019
/s/ Amy J. Hillman Amy J. Hillman	Director	August 13, 2019
/s/ Stephen A. Miles Stephen A. Miles	Director	August 13, 2019
/s/ Robert E. Radway Robert E. Radway	Director	August 13, 2019
/s/ Stephen F. Schuckenbrock Stephen F. Schuckenbrock	Director	August 13, 2019
/s/ Frank S. Sowinski Frank S. Sowinski	Director	August 13, 2019
/s/ Eileen J. Voynick Eileen J. Voynick	Director	August 13, 2019

Exhibit 21.1

Name of Subsidiary	Jurisdiction of Incorporation
CDK Global Holdings, LLC	Delaware
CDK Global Holdings II, LLC	Delaware
CDK Global, LLC	Delaware
CDK Global International Holdings, Inc.	Delaware
CDK Global (UK) LP	United Kingdom
CDK Global Holdings (UK) Limited	United Kingdom
CDK Global (UK) Limited	United Kingdom
CDK Global (Netherland) BV	Netherlands
CDK Global (Canada) Holding Co.	Nova Scotia
CDK Global (Canada) Limited	Canada
CDK Data Services, Inc.	Texas
CDK Vehicle Registration, Inc.	California
Computerized Vehicle Registration	California

In accordance with Item 601(b)(21) of Regulation S-K, the Company has omitted the names of particular subsidiaries because the unnamed subsidiaries would not have constituted a significant subsidiary as of June 30, 2019.

Exhibit 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in Registration Statement No. 333-199078 on Form S-8 and Registration Statement No. 333-224580 on Form S-3 of our reports dated August 13, 2019, relating to the consolidated financial statements and financial statement schedule of CDK Global, Inc. (the “Company”) (which report expresses an unqualified opinion and includes an explanatory paragraph relating to the Company’s adoption of Financial Accounting Standards Board Accounting Standards Codification 606, *Revenue from Contracts with Customers*) and the effectiveness of CDK Global, Inc.'s internal control over financial reporting, appearing in this Annual Report on Form 10-K of CDK Global, Inc. for the year ended June 30, 2019.

/s/ DELOITTE & TOUCHE LLP
Chicago, Illinois
August 13, 2019

EXHIBIT 31.1

Certification Pursuant to Rule 13a-14(a) of the Securities Exchange Act of 1934

I, Brian Krzanich, certify that:

1. I have reviewed this Annual Report on Form 10-K of CDK Global, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 13, 2019

/s/ Brian Krzanich
Brian Krzanich
President, Chief Executive Officer
(principal executive officer)

EXHIBIT 31.2

Certification Pursuant to Rule 13a-14(a) of the Securities Exchange Act of 1934

I, Joseph A. Tautges, certify that:

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

Date: August 13, 2019

/s/ Joseph A. Tautges
Joseph A. Tautges
Executive Vice President, Chief Financial Officer
(principal financial officer)

EXHIBIT 32.1

CERTIFICATION OF CHIEF EXECUTIVE OFFICER

CERTIFICATION PURSUANT TO

18 U.S.C. SECTION 1350,

AS ADOPTED PURSUANT TO

SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of CDK Global, Inc. (the "Company") on Form 10-K for the fiscal year ended June 30, 2019 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Brian Krzanich, President, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: August 13, 2019

/s/ Brian Krzanich
Brian Krzanich
President, Chief Executive Officer
(principal executive officer)

EXHIBIT 32.2

CERTIFICATION OF CHIEF FINANCIAL OFFICER

CERTIFICATION PURSUANT TO

18 U.S.C. SECTION 1350,

AS ADOPTED PURSUANT TO

SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of CDK Global, Inc. (the "Company") on Form 10-K for the fiscal year ended June 30, 2019 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Joseph A. Tautges, Executive Vice President, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: August 13, 2019

/s/ Joseph A. Tautges
Joseph A. Tautges
Executive Vice President, Chief Financial Officer
(principal financial officer)