ARC DOCUMENT SOLUTIONS, INC.
Form 10-K
March 05, 2018

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

Form 10-K

(Mark One)
ý ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the Fiscal Year Ended December 31, 2017
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: 001-32407

ARC DOCUMENT SOLUTIONS, INC.
(Exact name of Registrant as specified in its Charter)

Delaware	20-1700361
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

1981 N. Broadway, Suite 385
Walnut Creek, California 94596
(925) 949-5100
(Address, including zip code, and telephone number, including area code, of Registrant's principal executive offices)

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

Title of Each Class	Name of Each Exchange on Which Registered
Common Stock, par value $0.001 per share	New York Stock Exchange

Securities registered pursuant to Section 12(g) of the Act: NONE
Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ¨ No ý
Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ¨ No ý
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 ý 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 ý No ¨

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ¨
Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):
Large accelerated filer ¨ Accelerated filer ý Non-accelerated filer ¨ Smaller reporting company ¨
Emerging growth company ¨ (Do not check if a smaller reporting company)

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ¨
Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).   Yes ¨   No ý
Based on the closing price of $4.16 of the registrant's Common Stock on the New York Stock Exchange on June 30, 2017 (the last business day of the registrant's most recently completed second fiscal quarter), the aggregate market value of the voting common equity held by non-affiliates of the registrant on that date was approximately $169,964,779.
As of February 16, 2018, there were 45,266,008 shares of the Registrant's common stock outstanding.
DOCUMENTS INCORPORATED BY REFERENCE
Portions of the Registrant's definitive Proxy Statement on Form 14A for its April 26, 2018 Annual Meeting of Stockholders are incorporated by reference in this Annual Report on Form 10-K in Part III.

ARC DOCUMENT SOLUTIONS, INC.
ANNUAL REPORT ON FORM 10-K
For the Fiscal Year Ended December 31, 2017
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ARC DOCUMENT SOLUTIONS, INC.
2017 ANNUAL REPORT ON FORM 10-K

In this Annual Report on Form 10-K, “ARC Document Solutions,” “ARC,” “the Company,” “we,” “us,” and “our” refer to AR Document Solutions, Inc., a Delaware corporation, and its consolidated subsidiaries, unless the context otherwise dictates.

FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. When used in this Annual Report on Form 10-K, the words “believe,” “expect,” “anticipate,” “estimate,” “intend,” “plan,” “project,” “target,” “likely,” “will,” “would,” “could,” and variations of such words and similar ex as they relate to our management or to the Company are intended to identify forward-looking statements. These forward-looking statements involve risks and uncertainties that could cause actual results to differ materially from those contemplated herein. We have described in Part I, Item 1A-“Risk Factors” a number of factors that could cause our actual results to differ from our projections or estimates. These factors and other risk factors described in this report are not necessarily all of the important factors that could cause actual results to differ materially from those expressed in any of our forward-looking statements. Other unknown or unpredictable factors also could harm our results. Consequently, there can be no assurance that the actual results or developments anticipated by us will be realized or, even if substantially realized, that they will have the expected consequences to, or effects on, us. Given these uncertainties, you are cautioned not to place undue reliance on such forward-looking statements.

Except where otherwise indicated, the statements made in this Annual Report on Form 10-K are made as of the date we filed this report with the Securities and Exchange Commission and should not be relied upon as of any subsequent date. All future written and verbal forward-looking statements attributable to us or any person acting on our behalf are expressly qualified in their entirety by the cautionary statements contained or referred to in this section. We undertake no obligation, and specifically disclaim any obligation, to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise. You should, however, consult further disclosures we make in future filings of our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, and Current Reports on Form 8-K, and any amendments thereto, as well as our proxy statements.

TRADEMARKS AND TRADE NAMES

We own or have rights to a number of trademarks, service marks, and trade names that we use in conjunction with the operation of our business, including the name and design mark “ARC Document Solutions,” “ABACUS,” “BUILDING INTELLIGENCE,” “DATAPRINT,” “METAPRINT” “PlanWell,” “PlanWell PDS,” “Riot Creative Imaging,” “SKYSITE,” ar various design marks associated therewith. In addition, we own or have rights to various trademarks, service marks, and trade names that we use regionally in conjunction with our operations. This report also includes trademarks, service marks and trade names of other companies.

PART I
Item 1. Business
Our Company
ARC Document Solutions, Inc. (“ARC Document Solutions,” “ARC,” “we,” “us,” or “our”) is a leading document solutions provider to design, engineering, construction, and facilities management professionals, while also providing document solutions to businesses of all types.
Our customers need us to manage the scale, complexity and workflow of their documents. We help them reduce their costs and increase their efficiency by improving their access and control over documents, and we offer a wide variety of ways to access, distribute, collaborate on, and store documents.
Our offerings include:
Managed Print Services (“MPS”) - An onsite service where we place, manage, and optimize print and imaging equipment in our customers' offices, job sites, and other facilities. MPS relieves our customers of the burden of owning and managing print devices and print networks, and shifts their costs to a “per-use” basis typically billed in a single consolidated invoice.
Offsite Services - We operate 175 offsite service centers in major metropolitan markets in the U.S. and internationally which provide local customers with high-volume, project-related printing of construction documents, offer our MPS customers flexibility and overflow capacity during peak workloads, and support our customers’ scanning needs in archive and information management services.
Archive and Information Management (“AIM”) -We store our customers' information and intellectual property in a cloud-based and searchable digital archive. We scan existing paper documents or import digital documents, organize them, and store them in our proprietary content management software.
Specialized Color Printing - Our production centers offer color printing, finishing, and assembly of graphic materials for regional and national retailers, franchises, marketing departments, theme parks, and cultural institutions.
Web-Based Document Management Applications - We develop and offer proprietary tools to our customers, such as SKYSITE®, Planwell® and Abacus™, that facilitate project collaboration, manage print networks, track equipment fleets, create and maintain project document archives, and other document and content management tasks.
Equipment and Supplies Sales - We sell equipment and supplies primarily to customers in the architectural, engineering, construction, and building owner/operator (AEC/O) industry and provide ancillary services such as equipment service and maintenance.

The combination of our services allows us to provide a comprehensive document management ecosystem where any document, anywhere in the enterprise, can be captured, stored, managed, accessed, and distributed anywhere in the world.
Our cloud-based services are hosted and administered by Amazon Web Services.
We believe we are the largest document solutions provider to the AEC/O market in North America, and the only national provider offering onsite, offsite and cloud-based document management solutions for regional, national and global customers. We offer comprehensive services across geographical boundaries and frequently bill under a single monthly invoice, consolidating purchasing, vendor relations, and administration for companies seeking a unified document management platform.
We serve our clients' onsite in their offices in approximately 10,100 locations, and offsite or virtually through a combination of 175 service centers globally, a variety of web-based applications and software, and a global network of service partners. We operate in major metropolitan markets across the U.S., with meaningful operations in China, Canada, and the United Kingdom.
Our origins lie in the reprographics, or “blueprinting,” industry and we still maintain robust reprographics operations. We believe that we are the largest reprographics company in the United States as measured by revenue, number of customers, and number of service centers.
Our base of more than 90,000 customers includes most of the largest design and construction-oriented firms in North America, and the world. Our legacy as the largest reprographics company in the U.S. has allowed us to leverage our relationships, domain expertise, and national presence as we have evolved into a technology-enabled document

solutions company.

Our largest customers are served by a corporate sales force called Global Solutions. This sales force is focused on large regional and national customers. Our diverse customer base results in no individual customer accounting for more than 2% of our overall revenue.

We are a Delaware corporation operating under a single brand, “ARC,” in order to highlight the scope and scale of our business, and to generate synergies in our overall national marketing efforts to the consolidating AEC/O market. Our corporate name is “ARC Document Solutions, Inc.,” and our New York Stock Exchange ticker symbol is “ARC.” We conduct our operations through our wholly-owned subsidiary, ARC Document Solutions, LLC, a Texas limited liability company, and its affiliates.

Principal Products and Services

We report revenues from our service and product offerings under the following categories:

Construction Document and Information Management (CDIM), which consists of software services and professional services to manage and distribute documents and information primarily related to construction projects. CDIM sales include software services such as SKYSITE®, our cloud-based project communication application, as well as providing document and information management services that are often technology-enabled. The bulk of our current revenue from CDIM comes from large-format and small-format printing services we provide in both black and white and in color.

Software services are a smaller part of overall CDIM. The sale of services addresses a variety of customer needs including the provision of project communication tools, project information management, building information modeling, digital document distribution services, printing services, and others.

Managed Print Services (MPS), consists of placement, management, and optimization of print and imaging equipment in our customers' offices, job sites, and other facilities. MPS relieves our customers of the burden of owning and managing print devices and print networks, and shifts their costs to a “per-use” basis. MPS is supported by our proprietary technology, Abacus™, which allows our customers to capture, control, manage, print, and account for their documents. MPS Services revenue is derived from two sources: 1) an engagement with the customer to place primarily large-format equipment, that we own or lease, at a construction site or in our customers’ offices, and 2) an arrangement by which our customers outsource their printing function to us, including all office printing, copying, and reprographics printing. In both cases this is recurring, contracted revenue with most contracts ranging from 3 to 5 years and we are paid a single cost per unit of material used, often referred to as a “click charge.” MPS sales are driven by the ongoing print needs of our customers at their facilities.

Archiving and Information Management (AIM), combines software and professional services to facilitate the capture, management, access and retrieval of documents and information that have been produced in the past. AIM includes our SKYSITE® software to organize, search and retrieve documents, as well as the provision of services that include the capture and conversion of hardcopy and electronic documents, and their cloud-based storage and maintenance. AIM sales are driven by the need to leverage past intellectual property for present or future use, facilitate cost savings and efficiency improvements over current hardcopy and digital storage methods, as well as comply with regulatory and records retention requirements.

Equipment and Supplies, which consists of reselling printing, imaging, and related equipment to customers primarily to architectural, engineering and construction firms.

Each of our service offerings is enabled through a suite of supporting proprietary technology and a wide variety of value-added services.

Operations

Our products and services are available from any of our 175 service centers around the world, and nearly all of our services can be made available in our customers’ offices. Our geographic presence is concentrated in the U.S., with additional service centers in Canada, China, India, and the United Kingdom. Our corporate headquarters are located in Walnut Creek, California.

Historically, our business grew through acquisitions to expand our share of the reprographics market and enhance our geographic footprint to serve our larger customers. Since our inception we have acquired more than 140 companies. As we have consolidated, diversified our service offerings, and optimized our operations during the past several years, we have limited acquisition activity in order to focus on organic sales growth. Our origin as a company was in California, and our early acquisition activity was concentrated there. We still derive approximately 34% of our total revenue from California.

We operate a technology center in Silicon Valley with approximately 20 employees who develop, maintain, and support our software. We operate a similar facility in Kolkata, India, with approximately 179 employees who, in addition to supporting our Silicon Valley team, also support our research and development efforts. All of our production facilities are connected via a high-performance, dedicated, wide-area network, to facilitate data transmissions to and from our customers, our operating facilities and the cloud hosted by Amazon. We employ a combination of proprietary and industry-leading technologies to provide redundancy, backup and security of all data in our systems.

Historically, the majority of our revenue has been derived from customers engaged in the seasonal, non-residential construction market. While our traditional reprographics business, included in the CDIM revenue category, is still influenced by the non-residential seasonality and building cycles, our other CDIM offerings are less so. Color printing services are affected by retail marketing calendars, advertising campaigns, as well as the marketing needs of our architectural and real estate development clients. Our software services are influenced primarily by the desire for document workflow improvements and our ability to market our technology-based solutions. MPS is driven by the generation of office documents and our customers' desire to improve business processes and reduce print-related costs. Equipment and Supplies Sales are driven by purchasing cycles of individual customers, as well as by new features and advancements by manufacturers.

As of December 31, 2017, the Company employed approximately 2,500 employees.

Our Customers and Markets

We serve both the enterprise and project content management needs of companies primarily within the AEC/O industry. Our customers include senior management teams, IT and procurement departments, project architects, engineers, general contractors, facilities managers, and others.

The mix of services demanded by the AEC/O industry continues to shift toward services provided at customer locations (represented primarily by our MPS revenues), and away from its historical emphasis on producing prints in our service centers (included in our CDIM revenue line). We believe the market forces of the recent recession and its aftermath are causing our customers in the construction industry to emphasize efficiency in their production and distribution of printed documents, to reduce their dependence on print as it relates to construction projects, and to improve access and control over all the documents related to their business. We also believe that consolidation in the AEC/O industry is contributing to this trend as companies seek to reduce costs, eliminate redundant business practices, and procure products and services from vendors who can centrally serve their business with a comprehensive offering.

We believe that these trends are advantageous to us for four reasons: first, we are well-positioned to provide our customers with web applications and cloud-based offerings to meet their demand for technology-enabled content management services; second, our diversification into services such as MPS and AIM allow us to capture long-term contracted revenue streams that are less exposed to the volatility and cyclicality of project-related printing; third, as our customers merge, consolidate, and grow larger, we believe ARC becomes a more compelling choice because of our extensive geographic reach and ability to act as a single-source supplier of document solutions; and fourth, our market-leading presence as a traditional reprographer in major metropolitan areas allows us to capture large-format printing and document management work associated with local building projects.

In addition to the AEC/O industry, we also provide document management and printing services to customers in the retail, technology, entertainment, and healthcare industries, among others. A significant portion of our non-AEC/O revenues are derived from supplying color printing services to customers with short-run, high quality, frequently updated promotional, advertising and marketing materials. We market these services under a separate brand known as Riot Creative Imaging. Likewise, our digital tools and services appeal to companies outside of the construction industry, but with similar document management needs, including manufacturers, airlines, and healthcare/hospital companies.

In general, we address customers based on size and geographic reach. Local markets tend to be highly fragmented with a wide variety of specialized, geographically differentiated business practices. We serve smaller customers in these markets with service offerings aligned with local market expectations. Larger regional, national and international customers often consolidate purchasing and the acquisition of services through a single corporate department, and seek centralized management of document solutions. We serve these customers through our corporate sales force called Global Solutions.

Competition

The level of competition varies in each of the areas in which we provide services. Further, we believe we are unique; that no other company provides the complete portfolio of services and products we provide. We compete with different firms in our different business lines that can provide a portion of our services. However, we do not know of any other firm that can provide a full suite of physical and digital content management services similar to our offering. We believe service levels, breadth of offering, terms and conditions, price, quality, responsiveness, and convenience to the customer are competitive elements in each of the industry segments in which we compete.

In addressing larger local and regional customers, there are several companies that provide MPS and reprographic print services, but in general these companies cannot provide or integrate software or technology that enables the digital management of documents and centralized cost control management that we provide. In our CDIM services businesses, local copy shops and self-serve franchises are often aggressive competitors for printing business, but rarely offer the breadth of document management and logistics services we do.

With regard to large national and international customers, there are no other document solutions companies in the U.S. with the national presence and global reach that we have established, but we often compete against equipment manufacturers and businesses who offer some of the same products and services we do. Related services are offered by large printing/multifunctional device manufacturers such as Xerox, Canon, Konica Minolta, Ricoh, and Sharp, but most offerings from these companies are focused on selling equipment as opposed to ARC's offering of comprehensive document management services for both project and enterprise documents. Further, our deep knowledge of the AEC/O industry document workflows, which are incorporated into our software, provides us an advantage against local printers and national equipment manufacturers.

We believe that we have a strong competitive position in the marketplace for the following reasons:

Strong domain expertise: No other national vendor/service provider possesses the document management and technology expertise that we have in the AEC/O market. Construction professionals have highly specialized needs in document capture, short-term storage, management, fulfillment, distribution, and archival services. We believe our domain expertise is unmatched thanks to our legacy in reprographics and software development.

Customer relationships in AEC/O industry: Our relationships with our local customers frequently span generations, and we do business with nearly all of the top 100 companies in the U.S. construction industry. In addition, our Global Solutions sales force has established long-term contract relationships with 27 of the largest 100 AEC/O firms. We believe this provides a competitive advantage by leveraging our success through referrals.

Service center footprint: We possess an extensive national network of service centers creating a distribution and customer service solution that can cater to both large and small customers. We operate service centers in more than 130 cities in the U.S., and in 37 states. We also have a market presence in Canada and China, and operations in India and the U.K. We are not aware of any other provider of MPS that has as extensive a network to supplement its MPS services and provide overflow and remote document management and printing capabilities.

Equipment agnostic: We are not required to sell or use any particular brands of equipment, nor do we manufacture equipment. We are free to place the products best suited for the required task in our own service centers or in our customers' offices, regardless of manufacturer. Additionally, with respect to our MPS Services, as our customers' document management needs evolve over their respective contract terms, we have the ability to replace the equipment previously deployed to ensure that the equipment placed at our customers' sites is best suited for the required tasks. We believe that this, combined with the competitive market for printing and imaging products, provides us with an advantage relative to MPS providers owned by equipment manufacturers.

Capabilities in a wide variety of formats: Several equipment manufacturers who also market managed print services do not produce the full range of large- and small-format equipment demanded by the AEC/O, manufacturing, and building industries. In addition, we are not aware of any manufacturers that provide the breadth of services and technology related to large- and small-format document production that we possess.

Unique combination of Onsite, Offsite, and Cloud-based offerings: We are the only national company that integrates (1) document production at customer sites (Onsite), (2) document production at company service centers (Offsite), and (3) digital management of documents in the cloud. We have proprietary technology built by our own development team that interacts with our production machines. We believe we are the only company that both develops document management software and manages the equipment that produces documents.

Suppliers and Vendors

We purchase or lease equipment for use in our production facilities and at our customers' sites. We also purchase paper, toner and other consumables for the operation of our and our customers' production equipment. As a high-volume purchaser, we believe we receive favorable prices as compared to other service providers, and price increases have been historically passed on to customers.

Our primary vendors of equipment, maintenance services, and reprographics supplies include Hewlett Packard, Canon Solutions America (Océ), and Xerox. Purchases from these vendors during 2017 comprised approximately 46% of our total purchases of inventory and supplies. Although there are a limited number of suppliers that could supply our inventory, we believe any shortfalls from existing suppliers could be filled by other suppliers on comparable terms.

Research and Development
We conduct research and development to support the design and testing of new technology or enhancements and maintenance to existing technology. Such costs are expensed as incurred and primarily recorded to cost of sales. In total, research and development costs amounted to $6.9 million, $6.2 million, and $5.8 million during 2017, 2016, and 2015, respectively.
Proprietary Rights
We rely on a combination of copyright, trademark and trade secret laws, license agreements, nondisclosure and non-competition agreements, reseller agreements, customer contracts, and technical measures to establish and protect our rights in our proprietary technology. We also rely on a variety of technologies that are licensed from third parties to perform key functions.

We have registered “ARC Document Solutions,” as well as our historical name and logo, “ARC American Reprographics Company,” as service marks in the U.S. with the United States Patent and Trademark Office (USPTO). We have registered “PlanWell”, “PlanWell PDS”, “Riot Creative Imaging”, “ABACUS” and "SKYSITE” as trademarks with the USPTO and in other countries. We do not own any other registered trademarks or service marks, or any patents, that are material to our business.
For a discussion of the risks associated with our proprietary rights, see Item 1A — “Risk Factors — Our failure to adequately protect the proprietary aspects of our technology, including SKYSITE, PlanWell, and Abacus, may cause us to lose market share.”
Executive Officers of the Registrant
The following sets forth certain information regarding all of our executive officers as of February 28, 2017:

Name	Age	Position
Kumarakulasingam Suriyakumar	64	Chairman, President and Chief Executive Officer Director
Jorge Avalos	42	Chief Financial Officer
Rahul K. Roy	58	Chief Technology Officer
Dilantha Wijesuriya	56	Chief Operating Officer
D. Jeffery Grimes	54	Vice President, Senior Corporate Counsel and Corporate Secretary

Kumarakulasingam (“Suri”) Suriyakumar has served as our President and Chief Executive Officer since June 1, 2007, and he served as the Company’s President and Chief Operating Officer from 1991 until his appointment as Chief Executive Officer. On July 24, 2008, Mr. Suriyakumar was appointed Chairman of our Board of Directors.
Mr. Suriyakumar served as an advisor of Holdings from March 1998 until his appointment as a director of the Company in October 2004. Mr. Suriyakumar joined Micro Device, Inc. (our predecessor company) in 1989. He became the Vice President of Micro Device, Inc. in 1990. Prior to joining the Company, Mr. Suriyakumar was employed with Aitken Spence & Co. LTD, a highly diversified conglomerate and one of the five largest corporations in Sri Lanka.

Jorge Avalos was appointed Chief Financial Officer of the Company on February 1, 2015. Prior to his appointment to Chief Financial Officer, Mr. Avalos served as Chief Accounting Officer and Vice President of Finance of the Company, positions he held since April 14, 2011. Mr. Avalos joined the Company in June 2006 as the Company’s Director of Finance, and became the Company’s Corporate Controller in December 2006, and Vice President, Corporate Controller in December 2010. From March 2005 through June 2006, Mr. Avalos was employed with Vendare Media Group, an online network and social media company, as its Controller. From September 1998 through March 2005, Mr. Avalos was employed with PricewaterhouseCoopers LLP, a global professional services firm focusing on audit and assurance, tax and advisory services.
Rahul K. Roy joined Holdings as its Chief Technology Officer in September 2000. Prior to joining the Company, Mr. Roy was the founder, President and Chief Executive Officer of MirrorPlus Technologies, Inc., which developed software for the reprographics industry, from August 1993 until it was acquired by the Company in 1999. Mr. Roy also served as the Chief Operating Officer of InPrint, a provider of printing, software, duplication, packaging,

assembly and distribution services to technology companies, from 1993 until it was acquired by the Company in 1999. Dilantha ("Dilo") Wijesuriya joined Ford Graphics, a former division of the Company, in January 1991. He subsequently became president of that division in 2001, and became a Company regional operations head in 2004, which position he retained until his appointment as the Company's Senior Vice President, National Operations in August 2008. Mr. Wijesuriya was appointed Chief Operating Officer of the Company on February 25, 2011. Prior to his employment with the Company, Mr. Wijesuriya was a divisional manager with Aitken Spence & Co. LTD, a highly diversified conglomerate and one of the five largest corporations in Sri Lanka.

D. Jeffery Grimes was appointed Vice President, Senior Corporate Counsel and Corporate Secretary in March 2014. Prior to joining the Company, Mr. Grimes was Vice President, Legal Affairs, General Counsel and Corporate Secretary of Aradigm Corporation, a publicly traded specialty pharmaceutical company focused on the development and commercialization of drug products for severe respiratory diseases. From 1997 to 2013, Mr. Grimes worked as in-house counsel for medical device, specialty pharmaceutical, and technology companies serving in various senior corporate legal roles. Mr. Grimes received joint J.D./M.B.A. degrees and a Bachelor's degree in Finance, from University of Colorado at Boulder.

Available Information

ARC Document Solutions, Inc. uses its corporate website, www.e-arc.com, as a channel for routine distribution of important information, including news releases, analyst presentations and financial information. The information on our website is not incorporated by reference into this Annual Report on Form 10-K or in any other report or document we file with the Securities and Exchange Commission. The company files with or furnishes to the SEC Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and any amendments to those reports, as well as proxy statements and annual reports to shareholders, and, from time to time, other documents. The reports and other documents filed with or furnished to the SEC are available to investors on or through our corporate website free of charge as soon as reasonably practicable after we electronically file them with or furnish them to the SEC. In addition, the public may read and copy any of the materials we file with the SEC at the SEC’s Public Reference Room at 100 F Street, NE, Washington D.C. 20549. The public may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. The SEC maintains an internet site located at http://www.sec.gov that contains reports, proxy and information statements and other information regarding issuers, such as ARC, that file electronically with the SEC. ARC’s SEC filings and other documents pertaining to the conduct of its business can be found on the “Investors” page of its website. These documents are available in print to any shareholder who requests a copy by writing or by calling ARC Document Solutions.

Item 1A. Risk Factors

Our business faces significant risks. The following risk factors could adversely affect our results of operations and financial condition and the price of our common stock. We may encounter risks in addition to those described below. Additional risks and uncertainties not currently known to us or that we currently deem immaterial may also impair or adversely affect our results of operations and financial condition.

We are highly dependent on the architectural, engineering, construction and building owner/operator (AEC/O) industry and any decline in that industry could adversely affect our future revenue and profitability.

We estimate that customers in the AEC/O industry accounted for approximately 78% of our net sales in 2017; therefore, our results largely depend on the strength of that industry. Our historical operating results reflect the cyclical and variable nature of the AEC/O industry. We believe that the industry generally experiences downturns several months after a downturn in the general economy, and that there may be a similar delay in the recovery of the AEC/O industry following a recovery of the general economy. A downturn in the AEC/O industry would diminish demand for some of our products and services, and would therefore negatively affect our revenues and have a material adverse effect on our business, operating results and financial condition.

Adverse domestic and global economic conditions and disruption of financial and commercial real estate markets could have a material adverse effect on our business and results of operations.

A prolonged economic downturn may adversely affect the ability of our customers and suppliers to obtain financing and to perform their obligations under agreements with us. These restrictions could result in a decrease in, or cancellation of, existing business, could limit new business, and could negatively affect our ability to collect on our accounts receivable on a timely basis, if at all. These events may, in the aggregate, have a material adverse effect on our results of operations and financial condition.

Because a significant portion of our overall costs are fixed, our earnings are highly sensitive to changes in revenue.

Our network of service centers, equipment and related support activities involves substantial fixed costs which cannot be adjusted quickly to respond to declines in demand for our services. We estimate approximately 36% of our overall costs were fixed in 2017. As a consequence, our results of operations are subject to relatively high levels of volatility and our earnings could deteriorate rapidly in the face of declining revenues because our ability to reduce fixed costs in the short-term is limited. If we fail to manage our fixed costs appropriately, or to maintain adequate cash reserves to cover such costs, we may suffer material adverse effects on our results of operations and financial condition.

Impairment of goodwill may adversely affect future results of operations.

We have intangible assets, including goodwill and other identifiable acquired intangibles on our balance sheet due to prior acquisitions. Based on our 2017 annual goodwill impairment assessment, we determined that goodwill was impaired and we recorded an impairment of $17.6 million.

The results of our impairment analysis are as of a particular point in time. If our assumptions regarding future forecasted revenue or profitability of our reporting units are not achieved, we may be required to record additional goodwill impairment charges in future periods, if any such change constitutes a triggering event prior to the quarter in which we perform our annual goodwill impairment test.

Competition in our industry and innovation by our competitors may hinder our ability to execute our business strategy and adversely affect our profitability.

The markets for our products and services are highly competitive, with competition primarily at local and regional levels. We compete primarily based on the level and quality of customer service, technological leadership, and price. Our future success depends, in part, on our ability to continue to improve our service and product offerings, and develop and integrate new technology solutions. In addition, current and prospective customers may decide to perform certain services themselves instead of outsourcing these services to us. These competitive pressures could adversely affect our sales and consolidated results of operations.

We also face the possibility that competition will continue to increase, particularly if copy and printing or business services companies choose to compete in lines of business similar to ours. Many of these companies are substantially larger and have significantly greater financial resources than us, which could place us at a competitive disadvantage. In addition, we could encounter competition in the future from large, well-capitalized companies such as equipment dealers and system integrators that can produce their own technology and leverage their existing distribution channels. Any such future competition could adversely affect our business and reduce our future revenue and profitability.

If we are unable to charge for our value-added services to offset declines in print volumes, our long-term revenue could decline.

Our customers value the ability to view and order prints over the internet and print to output devices in their own offices and other locations throughout the country and the world. In 2017, our CDIM sales, which consists of the management, distribution, and production of documents and information related to construction projects, including large-format construction drawings, black and white and color signage, specification documents, and marketing material represented approximately 52% of our total net sales, and our MPS represented approximately 33% of our total net sales. Both categories of revenue are generally derived from a charge per square foot of printed material. Future technology advances may further facilitate and improve our customers' ability to reduce print and the associated costs thereof. As technology continues to improve, this trend toward printing on an "as needed" basis could result in further decreased printing volumes and sales decline in the longer term. Failure to offset these declines in printing volumes by changing how we charge for our services and develop additional revenue sources could significantly affect our business and reduce our long term revenue, resulting in an adverse effect on our results of operations and financial condition.

We derive a significant percentage of net sales from within the State of California and our business could be disproportionately harmed by an economic downturn or natural disaster affecting California.

We derived approximately 34% of our net sales in 2017 from our operations in California. As a result, we are dependent to a large extent upon the AEC/O industry in California and, accordingly, are sensitive to economic factors affecting AEC/O activity in California, including general and local economic conditions, macroeconomic trends, political factors affecting commercial and residential real estate development and natural disasters (including drought, earthquakes and wildfires). Any adverse developments affecting California could have a disproportionately negative effect on our results of operations and financial condition.

Our growth strategy depends, in part, on our ability to successfully market and execute several different, but related, service offerings. Failure to do so could impede our future growth and adversely affect our competitive position.

As part of our growth strategy, we intend to continue to offer and grow a variety of service offerings that are relatively new to the company. Our efforts will be affected by our ability to acquire new customers for our new service offerings as well as sell the new service offerings to existing customers. If we fail to procure new customers, our growth may be adversely affected and we may incur operating losses as a result of a failure to realize revenue from investments made in new service offerings.

We are dependent upon our vendors to continue to supply us equipment, parts, supplies, and services at comparable terms and price levels as the business grows.

Our access to equipment, parts, supplies, and services depends upon our relationships with, and our ability to purchase these items on competitive terms from our principal vendors. These vendors are not required to use us to distribute their equipment and are generally free to change the prices and other terms at which they sell to us. In addition, we compete with the selling efforts of some of these vendors. Significant deterioration in relationships with, or in the financial condition of, these significant vendors could have an adverse effect on our ability to sell equipment as well as our ability to provide effective service and technical support. If one of these vendors terminates or significantly curtails its relationship with us, or if one of these vendors ceases operations, we would be forced to expand our relationships with our other existing vendors or seek out new relationships with previously unused vendors.

Our failure to adequately protect the proprietary aspects of our technology, including SKYSITE®, PlanWell®, and Abacus™ may cause us to lose market share.

Our success depends on our ability to protect and preserve the proprietary aspects of our technology products. We rely on a combination of copyright, trademark and trade secret protection, confidentiality agreements, license agreements, non-competition agreements, reseller agreements, customer contracts, and technical measures to establish and protect our rights in our proprietary technologies. These protections, however, may not be adequate to remedy harm we suffer due to misappropriation of our proprietary rights by third parties. In addition, the laws of certain countries may not protect our proprietary rights to the same extent as the laws of the United States and we may be unable to protect our proprietary technology adequately against unauthorized third-party copying or use, which could adversely affect our competitive position. It is also possible that our intellectual property rights could be challenged, invalidated or circumvented, allowing others to use our intellectual property to our competitive detriment. We also must ensure that all of our products comply with existing and newly enacted regulatory requirements in the countries in which they are sold. Furthermore, we may, from time to time, be subject to intellectual property litigation which can be expensive, a burden on management’s time and our Company’s resources, and the outcome of any such litigation may be uncertain.

Our computer hardware and software and telecommunications systems are susceptible to damage, breach or interruption.

The management of our business is aided by the uninterrupted operation of our computer and telecommunication systems. These systems are vulnerable to security breaches, natural disasters or other catastrophic events, computer viruses, or other interruptions or damage stemming from power outages, equipment failure or unintended usage by employees. In particular, our employees may have access or exposure to personally identifiable or otherwise confidential information and customer data and systems, the misuse of which could result in legal liability. In addition, we rely on information technology systems to process, transmit and store electronic information and to communicate among our locations around the world and with our clients, partners and consultants, including through cloud-based platforms often provided by third parties. The breadth and complexity of this infrastructure increases the potential risk of security breaches. Security breaches, including cyber-attacks or cyber-intrusions by computer hackers, foreign governments, cyber terrorists or others with grievances against the industry in which we operate or us in particular, may disable or damage the proper functioning of our networks and systems. It is possible that our security controls, or those of the third parties with whom we partner, over personal and other data may not prevent unauthorized access to, or destruction, loss, theft, misappropriation or release of personally identifiable or other proprietary, confidential, sensitive or valuable information of ours or others; this access could lead to potential unauthorized disclosure of confidential Company or client information that others could use to compete against us or for other disruptive, destructive or harmful purposes and outcomes. Any such disclosure or damage to our networks, or those of the third parties with whom we partner, and systems could subject us to third party claims against us and reputational harm. If these events occur, our ability to attract new clients may be impaired or we may be subjected to damages or penalties. In addition, system-wide or local failures of these information technology systems could have a material adverse effect on our business, financial condition, results of operations or cash flows.

In performing our document management services, we handle customers’ confidential information. Our failure to protect our customers’ confidential information against security breaches could damage our reputation, harm our business and adversely affect our results of operations.

Our document management services involve the handling of our customers' confidential information. Any compromise of security, accidental loss or theft of customer data in our possession could damage our reputation and expose us to risk of liability, which could harm our business and adversely affect our consolidated results of operation.

Added risks are associated with our international operations.

We have international operations in China, India, the United Kingdom, Canada, Hong Kong, United Arab Emirates, and Australia. Approximately 14% of our revenues for 2017 were derived from our international operations, with approximately 8% derived from China. Our future revenues, costs of operations and net income could be adversely affected by a number of factors related to our international operations, including changes in economic conditions from country to country, currency fluctuations, changes in a country's political condition, trade protection measures, licensing and other legal requirements and local tax issues.

A large percentage of our cash and cash equivalents are held outside of the United States, and we could be subject to repatriation delays and costs which could reduce our financial flexibility.

Approximately 52% of our cash and cash equivalents are currently held outside the United States. Repatriation of some of the funds could be subject to delay for local country approvals and could have potential adverse tax consequences. As a result of holding cash and cash equivalents outside of the U.S., our financial flexibility may be reduced.

Our business could suffer if we fail to attract, retain, and successfully integrate skilled personnel.
We believe that our ability to attract, retain, and successfully integrate qualified personnel is critical to our success. As we continue to place more emphasis on document management and storage technology, our need to hire and retain software and other technology focused personnel has and can be expected to continue to increase. Competition for such personnel, particularly in the San Francisco Bay Area, is intense. If we lose key personnel and/or are unable to recruit qualified personnel, our ability to manage and grow our business will be adversely affected. In addition, the loss of the services of one or more members of our senior management team would disrupt our business and impede our ability to successfully execute our business strategy.
The market prices of our common stock may be volatile, which could cause the value of an investment in our stock to decline.
The market price of our common stock may fluctuate substantially due to a variety of factors, many of which are beyond our control. Between January 1, 2017 and December 31, 2017, the closing price of our common stock has fluctuated from a low of $2.41 to a high of $5.44 per share. Factors that may contribute to fluctuations in the market prices of our common stock include:
- failure to sustain an active, liquid trading market for our shares;
- changes in financial estimates or recommendations by securities analysts or failure to meet analysts' performance expectations;
- changes in market valuations of similar companies;
- changes in our capital structure, such as future issuances of securities or the incurrence of debt;
- sales of our capital stock by our directors or executive officers;
- the gain or loss of significant customers;
- actual or anticipated developments in our business or our competitors' businesses, such as announcements by us or our competitors of significant contracts, acquisitions or strategic alliances, or in the competitive landscape generally;
- litigation involving us, our industry or both;
- additions or departures of key personnel;
- investors' general perception of us;
- our stock repurchase program; and
- changes in general economic, industry and market conditions.

The stock markets in general have experienced substantial volatility that has often been unrelated to the operating performance of particular companies. These types of broad market fluctuations may adversely affect the trading price of our common stock.
In the past, stockholders have sometimes instituted securities class action litigation against companies following periods of volatility in the market price of their securities. Any similar litigation against us could result in substantial costs, divert management's attention as well as our other resources and could have a material adverse effect on our business, results of operations and financial condition.
Damage or disruption to our facilities, including our technology center, could impair our ability to effectively provide our services and may have a significant effect on our revenues, expenses and financial condition.

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Our IT systems are an important part of our operations. We currently store customer data at servers hosted by Amazon and at our technology center located in Silicon Valley near known earthquake fault zones. Although we have redundant systems and offsite backup procedures in place, interruption in service, damage to or destruction of our technology center or a disruption of our data storage processes resulting from sustained process abnormalities, human error, acts of terrorism, violence, war or a natural disaster, such as fire, earthquake or flood, could result in delays, in reduced levels of customer service and have a material adverse effect on the markets in which we operate and on our business operations.

Although we currently maintain general property damage insurance, if we incur losses from uninsured events, we could incur significant expenses which would adversely affect our results of operations and financial condition.

Results of tax examinations may adversely affect our future results of operations.

We are subject to various tax examinations on an ongoing basis. Adverse results of tax examinations for income, payroll, value added, sales-based and other taxes may require future material tax payments if we are unable to sustain our position with the relevant jurisdiction. Where appropriate, we have made accruals for these matters which are reflected in our Consolidated Balance Sheets and Statements of Operations.

Changes in tax laws and interpretations could adversely affect our business.

We are subject to income and other taxes in the U.S. and in numerous foreign jurisdictions. Our domestic and foreign tax provisions are dependent on the jurisdictions in which profits are determined to be earned and taxed. Additionally, the amount of tax provision is subject to our interpretation of applicable tax laws in the jurisdictions in which we operate. A number of factors influence our effective tax rate, including changes in tax laws and treaties as well as the interpretation of existing laws and rules. Federal, state, and local governments and administrative bodies within the U.S., which represents a majority of our operations, and other foreign jurisdictions have implemented, or are considering, a variety of broad tax, trade, and other regulatory reforms that may impact us. For example, the Tax Cuts and Jobs Act (the "TCJA") enacted on December 22, 2017 resulted in changes in our federal corporate tax rate, our deferred income taxes, and the taxation of foreign earnings. It is not currently possible to accurately determine the potential impact of proposed or future changes, but such changes could have a material impact on our business.

Our debt instruments impose certain restrictions on our ability to operate which in turn could negatively affect our ability to respond to business and market conditions and therefore could have an adverse effect on our business and results of operations.

As of December 31, 2017, we had $144.4 million in outstanding short and long-term borrowings under term loans, revolver, and capital leases, excluding trade payables. The terms of the agreements under which this indebtedness was incurred may limit or restrict, among other things, our ability to incur certain additional debt, make certain restricted payments, consummate certain asset sales, and enter into certain transactions with affiliates.

We are also required to maintain a total leverage ratio and fixed charge coverage ratio under our credit agreement. Our inability to meet these ratios could result in the acceleration of the repayment of the outstanding obligations under the Credit Agreement, the termination of the lenders' commitment to provide our revolving line of credit thereunder, the increase in our effective cost of funds or the cross-default of other credit arrangements. As a result, our ability to operate may be restricted and our ability to respond to business and market conditions may be limited, which could have an adverse effect on our business and operating results.

If the interest rates on our borrowings increase, our access to capital and net income could be adversely affected.

Our Credit Agreement and capital leases are variable-rate instruments which expose us to interest rate risks. If interest rates increase, debt service obligations and our interest expense will increase even though the amount borrowed remains the same. Our net income and cash flows, including cash available for servicing indebtedness, will correspondingly decrease.

An increase in interest rates may increase our future borrowing costs and restrict our access to capital. Additionally, current market conditions, the recovering global economy, and overall credit conditions could limit our availability of capital, which could cause increases in interest margin spreads over underlying indices, effectively increasing the cost of our borrowing. While some of our debt instruments have contractually negotiated spreads, any changes to these spreads in connection with renegotiation of our Credit Agreement or capital leases could adversely affect our results of operations.

We had previously entered into interest rate caps with a financial institution to effectively convert a portion of our floating rate debt to a fixed interest rate to manage our exposure to fluctuations in interest rates. However, those interest rate caps have expired.

We may be exposed to employment-related claims and costs and periodic litigation that could adversely affect our business and results of operations.

We are subject to a number of risks inherent to our status as an employer including without limitation:
- claims of misconduct or negligence on the part of our employees, discrimination or harassment claims against our employees, or claims by our employees of discrimination or harassment by our clients;
- claims relating to violations of wage, hour and other workplace regulations;
- claims relating to employee benefits, entitlements to employee benefits, or errors in the calculation or administration of such benefits; and
- possible claims relating to misuse of customer confidential information, misappropriation of assets or other similar claims.

If we experience significant incidents involving any of the above-described risk areas we could face substantial out-of-pocket losses, or fines. In addition, such claims may give rise to litigation, which may be time consuming, distracting and costly, and could have a material adverse effect on our business.

We cannot guarantee that our stock repurchase program will enhance long-term shareholder value, and stock repurchases could increase the volatility of the price of our stock.

In February 2016, our board of directors authorized us to repurchase up to $15.0 million of the Company's common stock. The Company repurchased approximately $8.8 million of the Company's outstanding common stock through December 31, 2017 pursuant to the approved program. The stock repurchase program does not obligate the Company to repurchase any specific dollar amount or to acquire any specific number of shares. The stock repurchase program could affect the price of our stock and increase volatility, which may result in a decrease in the trading price of our stock. For example, the existence of a stock repurchase program could cause our stock price to be higher than it would be in the absence of such a program and could potentially reduce the market liquidity for our stock. There can be no assurance that any stock repurchases will enhance stockholder value because the market price of our common stock may decline below the levels at which we determine to repurchase our stock. Although our stock repurchase program is intended to enhance long-term stockholder value, there is no assurance that it will do so and short-term stock price fluctuations could reduce the program’s effectiveness. The amount of stock we are permitted to repurchase is also limited by the terms of our Credit Agreement.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

At the end of 2017, we operated 175 service centers, of which 155 were in the United States, 8 were in Canada, 7 were in China, 2 were in London, England, 1 was in Hong Kong, 1 was in India and 1 was in United Arab Emirates. We also occupied technology centers in Silicon Valley, California and Kolkata, India, as well as other facilities, including our executive offices located in Walnut Creek, California.

In total the Company occupied approximately 1.2 million square feet as of December 31, 2017.

We lease nearly all of our service centers, each of our administrative facilities and our technology centers. In addition to the facilities that are owned, our fixed assets are comprised primarily of machinery and equipment, vehicles, and computer equipment. We believe that our facilities are adequate and appropriate for the purposes for which they are currently used in our operations and are well maintained.

Item 3. Legal Proceedings

We are involved in various additional legal proceedings and other legal matters from time to time in the normal course of business. We do not believe that the outcome of any of these matters will have a material effect on our consolidated financial position, results of operations or cash flows.

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

Our common stock, par value $0.001, is listed on the New York Stock Exchange (“NYSE”) under the stock symbol “ARC”. The following table sets forth for the fiscal periods indicated the high and low sales prices per share of our common stock as reported by the NYSE.

	2017		2016	
	High	Low	High	Low
First Quarter	$5.55	$3.41	$4.53	$3.17
Second Quarter	$4.55	$3.17	$4.49	$3.74
Third Quarter	$4.26	$3.33	$4.31	$3.06
Fourth Quarter	$4.84	$2.30	$5.10	$3.25

Performance Graph

The following graph compares the cumulative 5-year total return to shareholders of ARC Document Solutions' common stock relative to the cumulative total returns of (a) the Russell 2000 index, (b) a customized group of 12 companies identified as: (1) having a business-to-business focus, (2) offering outsourced/managed services, (3) having a digital or technology service that is significant to their customer offering, and (4) involved in print publishing.

The graph assumes that the value of the investment in the Company's common stock, in the peer group, and the index (including reinvestment of dividends) was $100 on December 31, 2012 and tracks it through December 31, 2017.

	2012	2013	2014	2015	2016	2017
ARC Document Solutions, Inc.	100.00	321.09	399.22	172.66	198.44	99.61
Russell 2000	100.00	138.82	145.62	139.19	168.85	193.58
Managed Services & Publishing Peer Group	100.00	141.58	155.82	150.07	171.70	186.18

The stock price performance included in the graph above is not necessarily indicative of future stock price performance.

Holders

As of February 16, 2018, the approximate number of stockholders of record of our common stock was 112, and the closing price of our common stock was $2.19 per share as reported by the NYSE. Because many of the shares of our common stock are held by brokers and other institutions on behalf of stockholders, we are unable to estimate the total number of beneficial owners represented by these stockholders of record.

Dividends

We have never declared or paid cash dividends on our common stock. We currently intend to retain all available funds and any future earnings for use in the operation of our business and do not anticipate paying any cash dividends in the foreseeable future. Any future determination to declare cash dividends will be made at the discretion of our board of directors, subject to compliance with Delaware corporate law, certain covenants under our debt instruments which restrict or limit our ability to declare or pay dividends, and will depend on our financial condition, results of operations, capital requirements, general business conditions, and other factors that our board of directors may deem relevant.

Securities Authorized for Issuance Under Equity Compensation Plans

Information regarding the securities authorized for issuance under our equity compensation plans can be found under Item 12 of this Annual Report on Form 10-K.

Issuer Purchases of Equity Securities

(In thousands, except for price per share)	(a) Total Number of Shares Purchased	(b) Average Price Paid per Share ($)	(c) Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	(d) Approximate Dollar Value of Shares That May Yet Be Purchased Under The Plans or Programs ($)
Period				
October 1, 2017—October 31, 2017	—	$ —	—	$ 9,614
November 1, 2017—November 30, 2017	731	$ 2.91	731	$ 7,488
December 1, 2017—December 31, 2017	477	$ 2.64	477	$ —
Total	1,208		1,208	

On February 8, 2016, the Company's Board of Directors approved a stock repurchase program that authorized the Company to purchase up to $15.0 million of the Company's outstanding common stock through December 31, 2017. Under the repurchase program, purchases of shares of common stock were made in the open market in compliance with applicable state and federal securities laws. The timing and amounts of any purchases were based on market conditions and other factors including price, regulatory requirements, and capital availability.

The Company repurchased approximately $8.8 million of the Company's outstanding common stock from February 8, 2016 through December 31, 2017 pursuant to the approved program. The stock repurchase program approved by the Company's Board of Directors expired on December 31, 2017.

Item 6. Selected Financial Data

The selected historical financial data presented below is derived from the audited consolidated financial statements of ARC Document Solutions for 2017, 2016, 2015, 2014, and 2013. The selected historical financial data does not purport to represent what our financial position or results of operations might be for any future period or date. The financial data set forth below should be read in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our audited consolidated financial statements included elsewhere in this report.

	Year Ended December 31,				
	2017	2016	2015	2014	2013
	(In thousands)				
Statement of Operations Data:					
Service Sales	$347,326	$358,341	$378,638	$371,884	$355,358
Equipment and Supplies Sales	47,253	47,980	50,027	51,872	51,837
Total net sales	394,579	406,321	428,665	423,756	407,195
Cost of sales	270,556	273,078	280,541	279,478	272,858
Gross profit	124,023	133,243	148,124	144,278	134,337
Selling, general and administrative expenses	101,889	100,214	107,280	107,672	96,800
Amortization of intangibles	4,280	4,833	5,642	5,987	6,612
Goodwill impairment	17,637	73,920	—	—	—
Restructuring expense	—	7	89	777	2,544
Income (loss) from operations	217	(45,731)	35,113	29,842	28,381
Other income, net	(81)	(72)	(99)	(96)	(106)
Loss on extinguishment and modification of debt	230	208	282	5,599	16,339
Interest expense, net	6,179	5,996	6,974	14,560	23,737
(Loss) income before income tax provision (benefit)	(6,111)	(51,863)	27,956	9,779	(11,589)
Income tax provision (benefit)	15,244	(4,364)	(69,432)	2,348	2,986
Net (loss) income	(21,355)	(47,499)	97,388	7,431	(14,575)
Income attributable to noncontrolling interest	(156)	(366)	(348)	(156)	(748)
Net (loss) income attributable to ARC Document Solutions	$(21,511)	$(47,865)	$97,040	$7,275	$(15,323)

	Year Ended December 31,				
	2017	2016	2015	2014	2013
	(In thousands, except per share amounts)				
(Loss) earnings per share attributable to ARC shareholders:					
Basic	$(0.47)	$(1.04)	$2.08	$0.16	$(0.33)
Diluted	$(0.47)	$(1.04)	$2.04	$0.15	$(0.33)
Weighted average common shares outstanding:					
Basic	45,669	45,932	46,631	46,245	45,856
Diluted	45,669	45,932	47,532	47,088	45,856

	Year Ended December 31,				
	2017	2016	2015	2014	2013
	(In thousands)				
Other Financial Data:					
Depreciation and amortization	$33,323	$31,751	$33,661	$34,135	$34,745
Capital expenditures	$9,106	$12,097	$14,245	$13,269	$18,191
Interest expense, net	$6,179	$5,996	$6,974	$14,560	$23,737

	As of December 31,				
	2017	2016	2015	2014	2013
	(In thousands)				
Balance Sheet Data:					
Cash and cash equivalents	$28,059	$25,239	$23,963	$22,636	$27,362
Total assets	$339,425	$369,281	$438,605	$411,628	$406,680
Long term obligations	$126,916	$145,548	$159,796	$210,397	$229,816
Total ARC stockholders' equity	$130,237	$149,916	$202,114	$102,775	$91,690
Working capital	$39,583	$44,892	$40,031	$20,664	$28,705

Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations
Business Summary
ARC Document Solutions, Inc. (“ARC Document Solutions,” “ARC,” “we,” “us,” or “our”) is a leading document solutions provider to design, engineering, construction, and facilities management professionals, while also providing document solutions to businesses of all types.
Our customers need us to manage the scale, complexity and workflow of their documents. We help them reduce their costs and increase their efficiency by improving their access and control over documents, and we offer a wide variety of ways to access, distribute, collaborate on, and store documents.
Each of our service offerings is enabled through a suite of supporting proprietary technology and a wide variety of value-added services. We have categorized our service and product offerings to report distinct sales recognized from:

Construction Document and Information Management (CDIM), which consists of software services and professional services to manage and distribute documents and information primarily related to construction projects. CDIM sales include software services such as SKYSITE®, our cloud-based project communication application, as well as providing document and information management services that are often technology-enabled. The bulk of our current revenue from CDIM comes from large-format and small-format printing services we provide in both black and white and in color.

Software services are a smaller part of overall CDIM. The sale of services addresses a variety of customer needs including the provision of project communication tools, project information management, building information modeling, digital document distribution services, printing services, and others.
Managed Print Services (MPS), consists of placement, management, and optimization of print and imaging equipment in our customers' offices, job sites, and other facilities. MPS relieves our customers of the burden of owning and managing print devices and print networks, and shifts their costs to a “per-use” basis. MPS is supported by our proprietary technology, Abacus™, which allows our customers to capture, control, manage, print, and account for their documents. MPS Services revenue is derived from two sources: 1) an engagement with the customer to place primarily large-format equipment, that we own or lease, at a construction site or in our customers’ offices, and 2) an arrangement by which our customers outsource their printing function to us, including all office printing, copying, and reprographics printing. In both cases this is recurring, contracted revenue with most contracts ranging from 3 to 5 years and we are paid a single cost per unit of material used, often referred to as a “click charge.” MPS sales are driven by the ongoing print needs of our customers at their facilities.

Archiving and Information Management (AIM), combines software and professional services to facilitate the capture, management, access and retrieval of documents and information that have been produced in the past. AIM includes our SKYSITE software to organize, search and retrieve documents, as well as the provision of services that include the capture and conversion of hardcopy and electronic documents, and their cloud-based storage and maintenance. AIM sales are driven by the need to leverage past intellectual property for present or future use, facilitate cost savings and efficiency improvements over current hardcopy and digital storage methods, as well as comply with regulatory and records retention requirements.
Equipment and Supplies, which consists of reselling printing, imaging, and related equipment to customers primarily to architectural, engineering and construction firms.
We have expanded our business beyond the services we traditionally provided to the architectural, engineering, construction, and building owner/operator (AEC/O) industry in the past and are currently focused on growing MPS, AIM and CDIM, as we believe the mix of services demanded by the AEC/O industry continues to shift toward document management at customer locations and in the cloud, and away from its historical emphasis on large-format construction drawings produced “offsite” in our service centers.
We deliver our services via the cloud, through a nationwide network of service centers, regionally-based technical specialists, locally-based sales executives, and a national/regional sales force known as Global Solutions.

Based on our analysis of our operating results, we estimate that sales to the AEC/O industry accounted for approximately 78% of our net sales for 2017, with the remaining 22% consisting of sales to businesses outside of construction.

Costs and Expenses

Our cost of sales consists primarily of materials (paper, toner and other consumables), labor, and “indirect costs” which consist primarily of equipment expenses related to our MPS contracts and our service center facilities. Facilities and equipment expenses include maintenance, repairs, rents, insurance, and depreciation. Paper is the largest component of our material cost; however, paper pricing typically does not significantly affect our operating margins due, in part, to our efforts to pass increased costs on to our customers. We closely monitor material cost as a percentage of net sales to measure volume and waste. We also track labor utilization, or net sales per employee, to measure productivity and determine staffing levels.

We maintain low levels of inventory. Historically, our capital expenditure requirements have varied due to the cost and availability of capital lease lines of credit. Our relationships with credit providers has provided attractive lease rates over the past two years, and as a result, we chose to lease rather than purchase equipment in a significant portion of our engagements.

Research and development costs consist mainly of the salaries, leased building space, and computer equipment that comprises our data storage and development centers in Fremont, California and Kolkata, India. Such costs are primarily recorded to cost of sales.

Results of Operations

(In millions, except percentages)	Year Ended December 31, 2017 (1)	2016 (1)	2015 (1)	2017 Versus 2016 Increase (decrease) $(1)	%	2016 Versus 2015 Increase (decrease) $(1)	%
CDIM	$205.1	$212.5	$221.2	$(7.4)	(3.5)%	$(8.7)	(3.9)%
MPS	129.5	131.8	144.2	(2.3)	(1.7)%	(12.4)	(8.6)%
AIM	12.8	14.0	13.2	(1.3)	(9.0)%	0.8	6.0%
Total services sales	$347.3	$358.3	$378.6	$(11.0)	(3.1)%	$(20.3)	(5.4)%
Equipment and Supplies Sales	47.3	48.0	50.0	(0.7)	(1.5)%	(2.0)	(4.1)%
Total net sales	$394.6	$406.3	$428.7	$(11.7)	(2.9)%	$(22.3)	(5.2)%
Gross profit	$124.0	$133.2	$148.1	$(9.2)	(6.9)%	$(14.9)	(10.0)%
Selling, general and administrative expenses	$101.9	$100.2	$107.3	$1.7	1.7%	$(7.1)	(6.6)%
Amortization of intangibles	$4.3	$4.8	$5.6	$(0.6)	(11.4)%	$(0.8)	(14.3)%
Goodwill impairment	$17.6	$73.9	$—	$(56.3)	(76.2)%	$73.9	100.0%
Restructuring expense	$—	$—	$0.1	$—	—%	$(0.1)	(92.1)%
Loss on extinguishment and modification of debt	$0.2	$0.2	$0.3	$—	—%	$(0.1)	(26.2)%
Interest expense, net	$6.2	$6.0	$7.0	$0.2	3.1%	$(1.0)	(14.0)%
Income tax provision (benefit)	$15.2	$(4.4)	$(69.4)	$19.6	(445.5)%	$65.1	(93.7)%
Net (loss) income attributable to ARC	$(21.5)	$(47.9)	$97.0	$26.4	(55.1)%	$(144.9)	(149.3)%
Adjusted net income attributable to ARC (2)	$6.8	$13.1	$16.8	$(6.3)	(48.1)%	$(3.7)	(21.9)%
Cash flows provided by operating activities	$52.4	$53.1	$60.0	$(0.7)	(1.3)%	$(6.8)	(11.4)%
EBITDA (2)	$33.2	$(14.5)	$68.2	$47.7	(329.5)%	$(82.7)	(121.2)%
Adjusted EBITDA (2)	$54.0	$62.3	$72.2	$(8.3)	(13.3)%	$(9.8)	(13.6)%

(1) Column does not foot due to rounding.

(2) See "Non-GAAP Financial Measures" following "Results of Operations" for more information related to our Non-GAAP disclosures.

The following table provides information on the percentages of certain items of selected financial data as a percentage of net sales for the periods indicated:

	As Percentage of Net Sales Year Ended December 31,		
	2017 (1)	2016 (1)	2015 (1)
Net Sales	100.0 %	100.0 %	100.0 %
Cost of sales	68.6	67.2	65.4
Gross profit	31.4	32.8	34.6
Selling, general and administrative expenses	25.8	24.7	25.0
Amortization of intangibles	1.1	1.2	1.3
Goodwill impairment	4.5	18.2	—
Income (loss) from operations	0.1	(11.3)	8.2
Loss on extinguishment and modification of debt	0.1	0.1	0.1
Interest expense, net	1.6	1.5	1.6
(Loss) income before income tax provision (benefit)	(1.5)	(12.8)	6.5
Income tax provision (benefit)	3.9	(1.1)	(16.2)
Net (loss) income	(5.4)	(11.7)	22.7
Income attributable to the noncontrolling interest	—	(0.1)	(0.1)
Net (loss) income attributable to ARC	(5.5)%	(11.8)%	22.6 %
EBITDA (2)	8.4 %	(3.6)%	15.9 %
Adjusted EBITDA (2)	13.7 %	15.3 %	16.8 %

(1) Column does not foot due to rounding.

(2) See "Non-GAAP Financial Measures" following "Results of Operations" for more information related to our Non-GAAP disclosures.

Fiscal Year Ended December 31, 2017 Compared to Fiscal Year Ended December 31, 2016

Net Sales

Net sales in 2017 decreased 2.9%, compared to 2016. The decrease in net sales was due primarily to declines in our print-based service offerings.

CDIM. CDIM services in 2017 decreased $7.4 million, or 3.5%, compared to 2016. The decrease in sales of CDIM services was primarily due to the continued but moderating reduction in demand for printed construction drawings and related services driven by the ongoing adoption of technology replacing traditional print-based service offerings, and softness in our color imaging sales. Also contributing to the decline in sales of CDIM for the year was the extended closure of our service centers in the Southeastern U.S. which were impacted by hurricanes during the third quarter of 2017. CDIM services represented 52% of total net sales for both 2017 and 2016.

MPS. MPS services in 2017 decreased $2.3 million or 1.7%, due to the decline in print volumes from existing customers. The decline in print volumes was driven in part by the continued optimization of our customers' in-house print environment partially offset by new customer acquisitions. Our MPS offering delivers value to its customers by optimizing their print infrastructure, which in turn, will lower their print volume over time. Sales reductions associated with a decline in print volume are typically offset by new customer acquisitions and expansion of MPS services within existing customers. Revenues from MPS Services sales represented approximately 33% of total net sales for 2017, compared to approximately 32% during 2016.

The number of MPS accounts has grown to approximately 10,100 as of December 31, 2017, an increase of approximately 700 locations compared to December 31, 2016. While MPS is subject to temporary performance fluctuations based on the loss or acquisition of large clients, we believe there is an opportunity for MPS sales growth in the future due to the value that we bring to our customers and the desire to reduce costs in the AEC/O industry.

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AIM. Year-over-year sales of AIM Services decreased by $1.3 million, or 9.0%, in 2017, compared to 2016. The sales decline was primarily driven by a reorganization in our sales staff which we believe caused a temporary decline in AIM sales during 2017. We are driving an expansion of our addressable market for AIM by targeting building owners and facilities managers that require on-demand legacy documents to operate their assets efficiently.

Equipment and Supplies Sales. Equipment and Supplies Sales decreased by $0.7 million, or 1.5% in 2017, compared to 2016, primarily due to a decline in equipment sales in the U.S. Changes in Equipment and Supplies Sales are largely driven by the timing of replacements of aging equipment fleets for customers who prefer to own their equipment. Equipment and Supplies Sales represented approximately 12% of total net sales for both 2017 and 2016. Equipment and Supplies Sales derived from UNIS Document Solutions Co. Ltd (“UDS”), our Chinese business venture, were $23.7 million in 2017, as compared to $20.8 million in 2016. These increases were offset by declines in Equipment and Supplies sales in the U.S. We do not anticipate growth in Equipment and Supplies Sales as we are placing more focus on growing MPS sales and converting sales contracts to MPS agreements.

Gross Profit

Gross profit and gross margin decreased to $124.0 million, and 31.4%, in 2017, compared to $133.2 million, and 32.8%, in 2016, on a sales decrease of $11.7 million.

The decline in our gross margins in 2017 was primarily driven by 1) the impact of lower revenue for the period reducing our ability to leverage the fixed portion of our overhead and labor costs, and 2) the increase in low-margin equipment sales in China.

Selling, General and Administrative Expenses

Selling, general and administrative expenses increased by $1.7 million or 1.7% in 2017 compared to 2016.

General and administrative expenses in 2017 decreased $1.0 million or 1.7% compared to 2016. The reduction in expenses was primarily due to cost reduction initiatives undertaken in response to the drop in revenue.

Year-over-year sales and marketing expenses increased $2.7 million in 2017 compared to 2016. The increase was primarily due to investments in sales and marketing staff, training and marketing initiatives to support our new technology-enabled offerings.

Amortization of Intangibles

Amortization of intangibles of $4.3 million in 2017 decreased compared to 2016, primarily due to the completed amortization of certain customer relationships related to historical acquisitions.

Goodwill impairment

We recorded goodwill impairments of $17.6 million and $73.9 million in 2017 and 2016, respectively.

See Note 3, “Goodwill and other Intangibles” for further information regarding the process of assessing goodwill impairment.

Loss on extinguishment and modification of debt

We made additional principal payments of $14.2 million on our Credit Agreement, which was amended in the third quarter of 2017, above our required principal payments. The additional principal payments and modification resulted in a loss on the extinguishment and modification of debt of $0.2 million for the year ended December 2017.

Interest Expense, Net

Net interest expense totaled $6.2 million in 2017, compared to $6.0 million in 2016. The slight increase for 2017 compared to 2016 was primarily a result of an increase in the reference LIBOR rate under our Credit Agreement. This increase was partially offset by the early extinguishment of our long-term debt and the amendment of our Term Loan Credit Agreement, which reduced the spread by 25 basis points.

Income Taxes

We recorded an income tax provision of $15.2 million in relation to a pretax loss of $6.1 million for 2017, which resulted in an effective income tax rate of negative 249.4%.

Our negative effective income tax rate was primarily related to the Tax Cuts and Jobs Act (the "TCJA") enacted on December 22, 2017. The TCJA represents major tax reform legislation that, among other provisions, reduced the U.S. federal corporate tax rate from 35% to 21%. The income tax effects of the TCJA included $11.9 million of tax expense recorded to write-down our net deferred tax assets in the fourth quarter of 2017, the reporting period in which the TCJA became law. See Note 7 to the consolidated financial statements for further information on the financial statement impact of the TCJA.

Also impacting our effective income tax rate for 2017 was a portion of the goodwill impairment which cannot be deducted for income tax purposes until the related stock is disposed of. Excluding the impact of the TCJA, goodwill impairment, change in valuation allowance, and other discrete items, our 2017 effective income tax rate would have been 40.6%.

Noncontrolling Interest

Net income attributable to noncontrolling interest represents 35% of the income of UDS and its subsidiaries, which together comprise our Chinese joint-venture operations.

Net (Loss) Income Attributable to ARC

Net loss attributable to ARC was $21.5 million in 2017, as compared to $47.9 million in 2016. The changes in net income attributable to ARC in 2017 versus the prior year is primarily due to the goodwill impairment charges taken in the third quarter of 2017 and in the second quarter of 2016, and the additional income tax provision recorded in 2017 due to the new tax legislation.

Fiscal Year Ended December 31, 2016 Compared to Fiscal Year Ended December 31, 2015

Net Sales

Net sales in 2016 decreased 5.2%, compared to 2015. The decrease in net sales was due primarily to declines in our print-based service offerings.

CDIM. CDIM services in 2016 decreased $8.7 million, or 3.9%, compared to 2015. The decrease in sales of CDIM services was primarily due to the continued reduction in demand for printed construction drawings and related services driven by the ongoing adoption of technology replacing traditional print-based service offerings. Also contributing to the decline in CDIM was a decline in color printing services which was primarily driven by a color service location closure in our United Kingdom operations. These declines outpaced sales increases in our cloud and mobile document services such as SKYSITE®. CDIM services represented 52% of total net sales for both 2016 and 2015.

MPS. MPS services in 2016 decreased $12.4 million or 8.6% due primarily to a national MPS account that did not renew its agreement with us following a merger at the end of 2015. Revenues from MPS Services represented approximately 32% of total net sales for 2016, compared to approximately 34% during 2015, respectively. The number of MPS accounts as of December 31, 2016 was approximately 9,400, an increase of approximately 400 locations compared to December 31, 2015, due primarily to growth in new MPS placements in which customers outsource their entire printing function to us.

AIM. Year-over-year sales of AIM Services increased by $0.8 million, or 6.0%, in 2016, compared to 2015. The growth in AIM services was driven by new customer engagements.

Equipment and Supplies Sales. Equipment and Supplies Sales decreased by $2.0 million, or 4.1% in 2016, due to a decline in equipment sales in the U.S. during 2016. Equipment and Supplies Sales represented approximately 12% of total net sales for both 2016 and 2015. Equipment and Supplies Sales derived from UDS were $20.8 million in 2016, as compared to $20.9 million in 2015.

Gross Profit

Gross profit and gross margin decreased to $133.2 million, and 32.8%, in 2016, compared to $148.1 million, and 34.6%, in 2015, on a sales decrease of $22.3 million. The decline in our gross margins in 2016 was primarily driven by the impact of lower revenue reducing our ability to leverage the fixed portion of our overhead and labor costs.

Selling, General and Administrative Expenses

Selling, general and administrative expenses decreased by $7.1 million or 6.6% in 2016 compared to 2015.

General and administrative expenses in 2016 decreased $2.6 million or 4.2% compared to 2015. The reduction in expenses was primarily due to cost reduction initiatives undertaken in 2016 and a decline in stock-based compensation expense, which were partially offset by investments in general and administrative staff to support our new technology-enabled offerings.

Year-over-year sales and marketing expenses decreased $4.5 million in 2016 compared to 2015. Decreases in sales and marketing expenses was primarily due to a reduction in sales compensation as a result of our sales decrease.

Amortization of Intangibles

Amortization of intangibles of $4.8 million in 2016 deceased compared to 2015, primarily due to the completed amortization of certain customer relationships related to historical acquisitions.

Goodwill Impairment

At June 30, 2016, we determined that there were sufficient indicators to trigger an interim goodwill impairment analysis. The Company's analysis indicated that five of our eight reporting units, four in the United States and one in Canada, had a goodwill impairment as of June 30, 2016. Accordingly, the Company recorded a pretax, non-cash charge in 2016 to reduce the carrying value of goodwill by $73.9 million.

See Note 3, “Goodwill and other Intangibles” for further information regarding the process of assessing goodwill impairment.

Loss on extinguishment and modification of debt

As of December 31, 2016, we had paid $54.0 million in aggregate principal of our original $175.0 million term loan made under our Credit Agreement, which was $19.0 million above the required term loan principal payments since the inception of the credit agreement. Principal payments of $22.0 million in 2016 resulted in a loss on extinguishment and modification of debt of $0.2 million in for the year ended December 31, 2016.

Interest Expense, Net

Net interest expense totaled $6.0 million in 2016, compared to $7.0 million in 2015. The decrease was primarily as a result of the early extinguishment of our long-term debt as described above.

Income Taxes

We recorded an income tax benefit of $4.4 million in relation to pretax loss of $51.9 million for 2016, which resulted in an effective income tax rate of 8.4%.

Our low effective tax rate was primarily related to $41.3 million of goodwill impairment related to historical stock acquisitions which cannot be deducted for income tax purposes until the related stock is disposed of. Excluding the impact of the goodwill impairment, our 2016 effective income tax rate would have been 39.9%.

Noncontrolling Interest

Net income attributable to noncontrolling interest represents 35% of the income of UDS and its subsidiaries, which together comprise our Chinese joint-venture operations.

Net (Loss) Income Attributable to ARC

Net loss attributable to ARC was $47.9 million in 2016, as compared to net income attributable to ARC of $97.0 million in 2015. The decrease in net income attributable to ARC in 2016 versus the prior year is primarily due to the goodwill impairment charge in 2016 and the reversal of the valuation allowance on certain of our deferred tax assets in 2015.

Quarterly Results of Operations

The following table sets forth certain quarterly financial data for the eight quarters ended December 31, 2017. This quarterly information has been prepared on the same basis as the annual financial statements and, in our opinion, reflects all adjustments necessary for a fair presentation of the information for the periods presented. Operating results for any quarter are not necessarily indicative of results for any future period.

	Quarter Ended (In thousands, except percentages)							
	Mar. 31, 2017	June 30,	Sept. 30,	Dec. 31,	Mar. 31, 2016	June 30,	Sept. 30,	Dec. 31,
CDIM	$51,258	$53,684	$50,089	$50,052	$53,665	$54,860	$53,228	$50,758
MPS	32,494	33,050	32,153	31,782	33,231	34,055	32,796	31,729
AIM	3,212	3,136	3,383	3,033	3,739	3,666	3,154	3,460
Total service revenue	86,964	89,870	85,625	84,867	90,635	92,581	89,178	85,947
Equipment and Supplies Sales	11,767	12,410	10,833	12,243	12,915	11,189	11,265	12,611
Total net sales	$98,731	$102,280	$96,458	$97,110	$103,550	$103,770	$100,443	$98,558
Quarterly sales as a % of annual sales	25.0 %	25.9 %	24.4 %	24.6 %	25.5 %	25.5 %	24.7 %	24.3 %
Gross profit	$30,838	$34,486	$29,227	$29,472	$33,737	$36,392	$32,730	$30,384
Gross margin	31.2 %	33.7 %	30.3 %	30.3 %	32.6 %	35.1 %	32.6 %	30.8 %
Income from operations	$4,576	$7,854	$(15,306)	$3,093	$6,066	$(64,268)	$6,677	$5,794
Net income (loss) attributable to ARC	$1,784	$3,636	$(14,774)	$(12,157)	$2,574	$(55,904)	$2,841	$2,624
Income (loss) per share attributable to ARC shareholders:								
Basic	$0.04	$0.08	$(0.32)	$(0.27)	$0.06	$(1.22)	$0.06	$0.06
Diluted	$0.04	$0.08	$(0.32)	$(0.27)	$0.05	$(1.22)	$0.06	$0.06
EBITDA (1)	$12,819	$16,105	$(6,988)	$11,299	$13,979	$(56,503)	$14,423	$13,619

(1) See "Non-GAAP Financial Measures" following "Results of Operations" for more information related to our Non-GAAP disclosures.

We believe that quarterly revenues and operating results may vary significantly in the future and that quarter-to-quarter comparisons of our results of operations are not necessarily indications of future performance. In addition, our quarterly operating results, particularly those of our CDIM offerings, are typically affected by seasonal factors, primarily the number of working days in a quarter and the holiday season in the fourth quarter. Therefore, historically, in regards to our service offerings, our fourth quarter has generally been the slowest and the least profitable. While our CDIM business is still influenced by the nature of building cycles, our remaining offerings are less so. MPS Services are driven by the production of office documents and our customer's desire to improve business processes and reduce print management costs. We recorded a goodwill impairment charges of $17.6 million during the quarter ended September 30, 2017 and $73.9 million during the quarter ended June 30, 2016. The income tax provision of $13.7 million in the three months ended December 31, 2017 included a $11.9 million impact related to the TCJA enacted on December 22, 2017.

We believe inflation has not had a significant effect on our operations. Price increases for raw materials, such as paper and fuel charges, typically have been, and we expect will continue to be, passed on to customers in the ordinary course of business.

Non-GAAP Financial Measures.

EBITDA and related ratios presented in this report are supplemental measures of our performance that are not required by or presented in accordance with accounting principles generally accepted in the United States of America (“GAAP”). These measures are not measurements of our financial performance under GAAP and should not be considered as alternatives to net income, income from operations, or any other performance measures derived in accordance with GAAP or as an alternative to cash flows from operating, investing or financing activities as a measure of our liquidity.

EBITDA represents net income before interest, taxes, depreciation and amortization. EBITDA margin is a non-GAAP measure calculated by dividing EBITDA by net sales.

We have presented EBITDA and related ratios because we consider them important supplemental measures of our performance and liquidity. We believe investors may also find these measures meaningful, given how our management makes use of them. The following is a discussion of our use of these measures.

We use EBITDA to measure and compare the performance of our operating segments. Our operating segments' financial performance includes all of the operating activities except debt and taxation which are managed at the corporate level for U.S.

operating segments. We use EBITDA to compare the performance of our operating segments and to measure performance for determining consolidated-level compensation. In addition, we use EBITDA to evaluate potential acquisitions and potential capital expenditures.

EBITDA and related ratios have limitations as analytical tools, and should not be considered in isolation, or as a substitute for analysis of our results as reported under GAAP. Some of these limitations are as follows:

- They do not reflect our cash expenditures, or future requirements for capital expenditures and contractual commitments;
- They do not reflect changes in, or cash requirements for, our working capital needs;
- They do not reflect the significant interest expense, or the cash requirements necessary, to service interest or principal payments on our debt;
- Although depreciation and amortization are non-cash charges, the assets being depreciated and amortized will often have to be replaced in the future, and EBITDA does not reflect any cash requirements for such replacements; and
- Other companies, including companies in our industry, may calculate these measures differently than we do, limiting their usefulness as comparative measures.

Because of these limitations, EBITDA and related ratios should not be considered as measures of discretionary cash available to us to invest in business growth or to reduce our indebtedness. We compensate for these limitations by relying primarily on our GAAP results and using EBITDA and related ratios only as supplements.

Our presentation of adjusted net income and adjusted EBITDA is an attempt to provide meaningful comparisons to our historical performance for our existing and future investors. The unprecedented changes in our end markets over the past several years have required us to take measures that are unique in our history and specific to individual circumstances. Comparisons inclusive of these actions make normal financial and other performance patterns difficult to discern under a strict GAAP presentation. Each non-GAAP presentation, however, is explained in detail in the reconciliation tables below.

Specifically, we have presented adjusted net income attributable to ARC and adjusted earnings per share attributable to ARC shareholders for 2017, 2016, and 2015 to reflect the exclusion of loss on extinguishment and modification of debt, goodwill impairment, restructuring expense, trade secret litigation costs, and the impact of new tax legislation, changes in the valuation allowances related to certain deferred tax assets and other discrete tax items. This presentation facilitates a meaningful comparison of our operating results for 2017, 2016, and 2015.

We have presented adjusted EBITDA for 2017, 2016, and 2015 to exclude loss on extinguishment and modification of debt, goodwill impairment, trade secret litigation costs, restructuring expense, and stock-based compensation expense. The adjustment of EBITDA for these items is consistent with the definition of adjusted EBITDA in our credit agreement; therefore, we believe this information is useful to investors in assessing our financial performance.

The following is a reconciliation of cash flows provided by operating activities to EBITDA:

	Year Ended December 31,		
(In thousands)	2017	2016	2015
Cash flows provided by operating activities	$52,370	$53,142	$59,981
Changes in operating assets and liabilities	(3,256)	3,918	4,905
Non-cash expenses, including goodwill impairment	(37,146)	(72,808)	66,163
Income tax provision (benefit)	15,244	(4,364)	(69,432)
Interest expense, net	6,179	5,996	6,974
Income attributable to the noncontrolling interest	(156)	(366)	(348)
EBITDA	$33,235	$(14,482)	$68,243

The following is a reconciliation of net (loss) income attributable to ARC Document Solutions, Inc. shareholders to EBITDA and Adjusted EBITDA:

	Year Ended December 31,		
(In thousands)	2017	2016	2015
Net (loss) income attributable to ARC Document Solutions, Inc. shareholders	$(21,511)	$(47,865)	$97,040
Interest expense, net	6,179	5,996	6,974
Income tax provision (benefit)	15,244	(4,364)	(69,432)
Depreciation and amortization	33,323	31,751	33,661
EBITDA	33,235	(14,482)	68,243
Loss on extinguishment and modification of debt	230	208	282
Goodwill impairment	17,637	73,920	—
Trade secret litigation costs	—	—	34
Restructuring expense	—	7	89
Stock-based compensation	2,947	2,693	3,512
Adjusted EBITDA	$54,049	$62,346	$72,160

The following is a reconciliation of net (loss) income margin attributable to ARC to EBITDA margin and Adjusted EBITDA margin:

	Year Ended December 31,		
	2017	2016 (1)	2015
Net (loss) income margin attributable to ARC	(5.5)%	(11.8)%	22.6 %
Interest expense, net	1.6	1.5	1.6
Income tax provision (benefit)	3.9	(1.1)	(16.2)
Depreciation and amortization	8.4	7.8	7.9
EBITDA margin	8.4	(3.6)	15.9
Loss on extinguishment and modification of debt	0.1	0.1	0.1
Goodwill impairment	4.5	18.2	—
Stock-based compensation	0.7	0.7	0.8
Adjusted EBITDA margin	13.7 %	15.3 %	16.8 %

(1) Column does not foot due to rounding.

The following is a reconciliation of EBITDA to net income (loss) for each respective quarter.

	Quarter Ended (In thousands)							
	Mar. 31,	June 30,	Sept. 30,	Dec. 31,	Mar. 31,	June 30,	Sept. 30,	Dec. 31,
	2017				2016			
Net income (loss) attributable to ARC	$1,784	$3,636	$(14,774)	$(12,157)	$2,574	$(55,904)	$2,841	$2,624
Interest expense, net	1,555	1,594	1,530	1,500	1,446	1,526	1,563	1,461
Income tax provision (benefit)	1,226	2,522	(2,174)	13,670	1,969	(10,015)	2,162	1,520
Depreciation and amortization	8,254	8,353	8,430	8,286	7,990	7,890	7,857	8,014
EBITDA	$12,819	$16,105	$(6,988)	$11,299	$13,979	$(56,503)	$14,423	$13,619

The following is a reconciliation of net (loss) income attributable to ARC Document Solutions, Inc. shareholders to Adjusted net income and Adjusted earnings per share attributable to ARC Document Solutions, Inc. shareholders:

	Year Ended December 31,		
	2017	2016	2015
Net (loss) income attributable to ARC Document Solutions, Inc. shareholders	$(21,511)	$(47,865)	$97,040
Loss on extinguishment and modification of debt	230	208	282
Goodwill impairment	17,637	73,920	—
Restructuring expense	—	7	89
Trade secret litigation costs	—	—	34
Income tax benefit related to above items	(3,194)	(13,419)	(158)
Deferred tax impact due to new tax laws, valuation allowance and other discrete tax items	13,663	247	(80,513)
Adjusted net income attributable to ARC Document Solutions, Inc. shareholders	$6,825	$13,098	$16,774
Actual:			
(Loss) earnings per share attributable to ARC Document Solutions, Inc. shareholders:			
Basic	$(0.47)	$(1.04)	$2.08
Diluted	$(0.47)	$(1.04)	$2.04
Weighted average common shares outstanding:			
Basic	45,669	45,932	46,631
Diluted	45,669	45,932	47,532
Adjusted:			
Earnings per share attributable to ARC Document Solutions, Inc. shareholders:			
Basic	$0.15	$0.29	$0.36
Diluted	$0.15	$0.28	$0.35
Weighted average common shares outstanding:			
Basic	45,669	45,932	46,631
Diluted	46,207	46,561	47,532

Liquidity and Capital Resources

Our principal sources of cash have been operations and borrowings under our debt and lease agreements. Our recent historical uses of cash have been for ongoing operations, payment of principal and interest on outstanding debt obligations, capital expenditures and stock repurchases.

Total cash and cash equivalents as of December 31, 2017 was $28.1 million. Of this amount, $14.6 million was held in foreign countries, with $11.9 million held in China. Repatriation of some of our cash and cash equivalents in foreign countries could be subject to delay for local country approvals and could have potential adverse tax consequences. As a result of holding cash and cash equivalents outside of the U.S., our financial flexibility may be reduced.

Supplemental information pertaining to our historical sources and uses of cash is presented as follows and should be read in conjunction with our Consolidated Statements of Cash Flows and notes thereto included elsewhere in this report.

	Year Ended December 31,		
(In thousands)	2017	2016	2015
Net cash provided by operating activities	$52,370	$53,142	$59,981
Net cash used in investing activities	$(8,362)	$(10,996)	$(13,656)
Net cash used in financing activities	$(42,063)	$(39,796)	$(44,207)

Operating Activities

Cash flows from operations are primarily driven by sales and net profit generated from these sales, excluding non-cash charges.

The decrease in cash flows from operations in 2017 was primarily as a result of the decline in profitability, partially offset by the timing of sales and cash collections as well as the timing of cash outlays related to accounts payable and accrued expenses. Days sales outstanding (“DSO”) decreased to 53 days as of December 31, 2017 from 55 days as of December 31, 2016. We continue our focus on the timely collection of our accounts receivable.

The overall decrease in cash flows from operations in 2016 was primarily as a result of the decline in profitability, as well as the timing of sales and cash collections, partially offset by the timing of cash outlays related to accounts payable and accrued expenses and the reduction in our interest expense resulting from the reduction in principal of our Credit Agreement.

Investing Activities

Net cash used in investing activities was primarily related to capital expenditures. We incurred capital expenditures totaling $9.1 million, $12.1 million, and $14.2 million in 2017, 2016, and 2015, respectively. The change in capital expenditures from 2016 to 2017 is driven by the timing of equipment purchases, and whether such equipment is leased or purchased with available cash.

The decrease in capital expenditures from 2015 to 2016, was primarily due to our decision to purchase more equipment in the second and third quarters of 2015 rather than leasing equipment to take advantage of vendor rebates. As we continue to foster our relationships with credit providers and obtain attractive lease rates, we have increasingly chosen to lease rather than purchase equipment.

Financing Activities

Net cash of $42.1 million used in financing activities in 2017 primarily relates to payments on our debt agreements and capital leases. The Company amended its credit agreement in the third quarter of 2017 resulting in a decrease in required quarterly principal payments on the term loan facility under the credit agreement. In addition, the amendment to the credit agreement increased the maximum aggregate principal amount of revolving loans from $30.0 million to $80.0 million, and reduced the outstanding principal amount of the term loan under the agreement at $60.0 million, although the total principal amount outstanding remained unchanged at $110.0 million on the date of the amendment.

Prior to entering into the amendment to our credit agreement in the third quarter of 2017, we had paid $68.2 million in aggregate principal on our credit agreement. Principal prepayments on the credit agreement of $14.2 million in 2017 resulted in a loss on extinguishment and modification of debt of $0.2 million for 2017. In addition, we purchased approximately 1.2 million shares of our Company's outstanding common stock for $3.4 million pursuant to our stock repurchase program in 2017.

Our cash position, working capital, and debt obligations as of December 31, 2017 and 2016 are shown below and should be read in conjunction with our Consolidated Balance Sheets and notes thereto contained elsewhere in this report.

	December 31,	
(In Thousands)	2017	2016
Cash and cash equivalents	$28,059	$25,239
Working capital	$39,583	$44,892
Borrowings from credit agreement (1) (2)	$99,243	$120,911
Other debt obligations	45,174	36,262
Total debt obligations	$144,417	$157,173

(1) Net of deferred financing fees of $757 and $1,039 at December 31, 2017 and 2016, respectively.
(2) Includes $42.3 million of revolving loans outstanding under our credit agreement at December 31, 2017.

The decrease of $5.3 million in working capital in 2017 was primarily due to an increase in the current portion of long-term debt driven by the amendment to our credit agreement in the third quarter of 2017. To manage our working capital, we chiefly focus on our DSO and monitor the aging of our accounts receivable, as receivables are the most significant element of our working capital.

We believe that our current cash and cash equivalents balance of $28.1 million, availability under our revolving credit facility, availability under our equipment lease lines, and cash flows provided by operations should be adequate to cover the next twelve months of working capital needs, debt service requirements consisting of scheduled principal and interest payments, and planned capital expenditures, to the extent such items are known or are reasonably determinable based on current business and market conditions. See “Debt Obligations” section for further information related to our revolving credit facility.

We generate the majority of our revenue from sales of services and products to the AEC/O industry. As a result, our operating results and financial condition can be significantly affected by economic factors that influence the AEC/O industry, such as non-residential and residential construction spending. Additionally, a general economic downturn may adversely affect the ability of our customers and suppliers to obtain financing for significant operations and purchases, and to perform their obligations under their agreements with us. We believe that credit constraints in the financial markets could result in a decrease in, or cancellation of, existing business, could limit new business, and could negatively affect our ability to collect our accounts receivable on a timely basis.

While we have not been actively seeking growth through acquisition during the last three years, the executive team continues to selectively evaluate potential acquisitions.

Debt Obligations

Credit Agreement

On July 14, 2017, we amended our credit agreement which was originally entered into on November 20, 2014 with Wells Fargo Bank, National Association, as administrative agent and the lenders party thereto (the "Credit Agreement").

Prior to being amended, the Credit Agreement provided for the extension of term loans (“Term Loans”) in an aggregate principal amount of $175.0 million. In addition, prior to being amended, the Credit Agreement provided for the extension of revolving loans (“Revolving Loans”) in an aggregate principal amount not to exceed $30.0 million. The amendment increased the maximum aggregate principal amount of Revolving Loans under the agreement from $30 million to $80 million and reduced the outstanding principal amount of the Term Loan under the agreement to $60 million. Upon the execution of the amendment to the Credit Agreement, the total principal amount outstanding under the agreement remained unchanged at $110.0 million. As a result of the amendment to the Credit Agreement, the principal of the Term Loan amortizes at an annual rate of 7.5% during the first and second years following the date of the amendment and at an annual rate of 10% during the third, fourth and fifth years following the date of the amendment, with any remaining balance payable upon the maturity date. The amendment also extended the maturity date for both the Revolving Loans and the Term Loans until July 14, 2022. As of December 31, 2017, the Company's borrowing availability of Revolving Loans under the $80.0 million Revolving Loan commitment was $35.9 million, after deducting outstanding letters of credit of $1.8 million and an outstanding Revolving Loan balance of $42.3 million.

Loans borrowed under the Credit Agreement bear interest, in the case of LIBOR rate loans, at a per annum rate equal to the applicable LIBOR rate, plus a margin ranging from 1.25% to 2.25%, based on the Company’s Total Leverage Ratio (as defined in the Credit Agreement). Loans borrowed under the Credit Agreement that are not LIBOR rate loans bear interest at a per annum rate equal to (i) the greatest of (A) the Federal Funds Rate plus 0.50%, (B) the one month LIBOR rate plus 1.00% per annum, and (C) the rate of interest announced, from time to time, by Wells Fargo Bank, National Association as its “prime rate,” plus (ii) a margin ranging from 0.25% to 1.25%, based on our Company's Total Leverage Ratio. The amendment reduced the rate of interest payable on the loans borrowed under the Credit Agreement by 0.25%.

The Company pays certain recurring fees with respect to the credit facility, including administration fees to the administrative agent.

Subject to certain exceptions, including in certain circumstances, reinvestment rights, the loans extended under the Credit Agreement are subject to customary mandatory prepayment provisions with respect to: the net proceeds from certain asset sales; the net proceeds from certain issuances or incurrences of debt (other than debt permitted to be incurred under the terms of the Credit Agreement); the net proceeds from certain issuances of equity securities; and net proceeds of certain insurance recoveries and condemnation events of the Company.

The Credit Agreement contains customary representations and warranties, subject to limitations and exceptions, and customary covenants restricting the ability (subject to various exceptions) of the Company and its subsidiaries to: incur additional indebtedness (including guarantee obligations); incur liens; sell certain property or assets; engage in mergers or other fundamental changes; consummate acquisitions; make investments; pay dividends, other distributions or repurchase equity interest of the Company or its subsidiaries; change the nature of their business; prepay or amend certain indebtedness; engage in certain transactions with affiliates; amend their organizational documents; or enter into certain restrictive agreements. In addition, the Credit Agreement contains financial covenants which requires the Company to maintain (i) at all times, a Total Leverage Ratio in an amount not to exceed 3.25 to 1.00; and (ii) a Fixed Charge Coverage Ratio (as defined in the Credit Agreement), as of the last day of each fiscal quarter, an amount not less than 1.15 to 1.00.

The Credit Agreement contains customary events of default, including with respect to: nonpayment of principal, interest, fees or other amounts; failure to perform or observe covenants; material inaccuracy of a representation or warranty when made; cross-default to other material indebtedness; bankruptcy, insolvency and dissolution events; inability to pay debts; monetary judgment defaults; actual or asserted invalidity or impairment of any definitive loan documentation, repudiation of guaranties or subordination terms; certain ERISA related events; or a change of control.

The obligations of the Company's subsidiary that is the borrower under the Credit Agreement are guaranteed by the Company and each other United States domestic subsidiary of the Company. The Credit Agreement and any interest rate protection and other hedging arrangements provided by any lender party to the Credit facility or any affiliate of such a lender are secured on a first priority basis by a perfected security interest in substantially all of the borrower's, the Company's and each guarantor's assets (subject to certain exceptions).

Credit Agreement

The following table sets forth the outstanding balance, borrowing capacity and applicable interest rate under Credit Agreement.

	December 31, 2017		
	Balance	Available Borrowing Capacity	Interest Rate
	(Dollars in thousands)		
Term Loan	$57,750	$ —	3.12 %
Revolving Loans [1]	42,250	35,944	3.64 %
	$100,000	$ 35,944	

[1] Revolving Loan available borrowing capacity, net of $1.8 million of outstanding standby letters of credit as of December 31, 2017

Capital Leases

As of December 31, 2017, we had $45.2 million of capital lease obligations outstanding, with a weighted average interest rate of 5.0% and maturities between 2018 and 2022.

Off-Balance Sheet Arrangements

As of December 31, 2017, we did not have any off-balance-sheet arrangements as defined in Item 303(a)(4)(ii) of Regulation S-K.

Contractual Obligations and Other Commitments

Our future contractual obligations as of December 31, 2017, are as follows:

	Total	Less than 1 year	1 to 3 years	3 to 5 years	More than 5 years
	(In thousands)				
Debt obligations (1)	$100,017	$4,513	$ 11,254	$ 84,250	$ —
Capital lease obligations	45,157	16,278	21,647	7,232	—
Interest on long-term debt and capital leases	17,047	5,082	7,655	4,310	—
Operating leases	63,998	18,270	20,884	12,107	12,737
Total	$226,219	$44,143	$ 61,440	$ 107,899	$ 12,737

(1) Excludes deferred financing fees of $757 as of December 31, 2017.

Operating Leases. We have entered into various non-cancelable operating leases primarily related to facilities, equipment and vehicles used in the ordinary course of business.

Critical Accounting Policies

Our management prepares financial statements in conformity with GAAP. When we prepare these financial statements, we are required to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. On an on-going basis, we evaluate our estimates and judgments, including those related to accounts receivable, inventories, deferred tax assets, goodwill and intangible assets and long-lived assets. We base our estimates and judgments on historical experience and on various other factors that we believe to be reasonable under the circumstances, the results of which form the basis for our judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. To the extent that there are material differences between these estimates and actual results, our future financial statement presentation, financial condition, results of operations and cash flows will be affected. We believe that the accounting policies discussed below are critical to understanding our historical and future performance, as these policies relate to the more significant areas involving management's judgments and estimates.

Goodwill Impairment

In accordance with ASC 350, Intangibles - Goodwill and Other, we assess goodwill for impairment annually as of September 30, and more frequently if events and circumstances indicate that goodwill might be impaired.

At September 30, 2017, our goodwill impairment analysis showed one reporting unit with goodwill attributed to it had a carrying amount which exceeded its fair value. Our underperformance relative to our forecast in the third quarter of 2017, and more specifically, the underperformance against forecast of one of our reporting units which previously had goodwill impairment in 2016 drove the decline in the fair value of the reporting unit. As a result, we recorded a pretax, non-cash charge for the three months ended September 30, 2017 to reduce the carrying value of goodwill by $17.6 million.

During 2016, we performed an interim goodwill impairment analysis as of June 30, 2016 in addition to our annual goodwill impairment analysis as of September 30, 2016.

At June 30, 2016, we determined that there were sufficient indicators to trigger an interim goodwill impairment analysis. The indicators included, among other factors: (1) the underperformance against plan of our reporting units, (2) a revision of our forecasted future earnings, and (3) a decline in the Company's market capitalization in 2016. The underperformance against plan of our reporting units and the resulting revision of our forecasted future earnings was driven by: (a) a larger than expected decline in our print-related sales which began during the second quarter of 2016 due to an acceleration in the adoption of new technology replacing printed documents in our industry, (b) the lack of new national customer acquisitions, which had been expected based on historical customer acquisition rates, and (c) lower than expected growth derived from our cloud-based digital document management solutions. Based on currently available information, we do not believe that the trend we have identified to replace traditional print-based document reproduction and management with digital document solutions is temporary, and we anticipate that such declines will continue to impact the Company's net sales in the foreseeable future.

Our interim goodwill impairment analysis indicated that five of our eight reporting units, four in the United States and one in Canada, failed step one of the impairment analysis. Accordingly, we recorded a pretax, non-cash charge for the three months ended June 30, 2016 to reduce the carrying value of goodwill by $73.9 million.
Goodwill impairment testing is performed at the reporting unit level. Goodwill is assigned to reporting units at the date the goodwill is initially recorded. Once goodwill has been assigned to reporting units, it no longer retains its association with a particular acquisition, and all of the activities within a reporting unit, whether acquired or internally generated, are available to support the value of the goodwill.

Traditionally, goodwill impairment testing is a two-step process. Step one involves comparing the fair value of the reporting units to its carrying amount. If the carrying amount of a reporting unit is greater than zero and its fair value is greater than its carrying amount, there is no impairment. If the reporting unit's carrying amount is greater than the fair value, the second step must be completed to measure the amount of impairment, if any. Step two involves calculating the implied fair value of goodwill. For our annual goodwill impairment test as of September 30, 2017, we elected to early-adopt ASU 2017-04 which simplifies subsequent goodwill measurement by eliminating Step 2 from the goodwill impairment test. As a result, we compared the fair value of a reporting unit with its respective carrying value, and recognized an impairment charge for the amount by which the carrying amount exceeded the reporting unit's fair value.

We determine the fair value of our reporting units using an income approach. Under the income approach, we determined fair value based on estimated discounted future cash flows of each reporting unit. Determining the fair value of a reporting unit is judgmental in nature and requires the use of significant estimates and assumptions, including revenue growth rates and EBITDA margins, discount rates and future market conditions, among others.
Our projections are driven, in part, by industry data gathered from third parties, including projected growth rates of the AEC/O industry by segment (i.e. residential and non-residential) and anticipated GDP growth rates, as well as company-specific data such as estimated composition of our customer base (i.e. non-AEC/O vs. AEC/O, residential vs. non- residential), historical revenue trends, and EBITDA margin performance of our reporting units. Our revenue projections for each of ARC's reporting units include the estimated respective customer composition for each reporting unit, year-to-date revenue at the time of the goodwill impairment analysis, and projected growth rates for the related customer types. Once the forecasted revenue was established for each of the reporting units based on the process noted above, using the current year EBITDA margin as a base line, we forecasted future EBITDA margins. In general, our EBITDA margins are significantly affected by (1) revenue trends and (2) cost management initiatives. Revenue trends impact our EBITDA margins because a significant portion of our cost of sales are considered relatively fixed therefore an increase in forecasted revenue (particularly when combined with any cost management or productivity enhancement initiatives) would result in meaningful gross margin expansion. Similarly, a significant portion of our selling, general, and administrative expenses are considered fixed. Hence, in forecasting EBITDA margins, significant reliance was placed on the historical impact of revenue trends on EBITDA margin.
As of December 31, 2017, the estimated fair values of our reporting units were based upon their respective projected EBITDA margins, which were anticipated to vary from annual declines to increases up to 100 basis points for the periods analyzed. These cash flows were discounted using a weighted average cost of capital ranging from 10% to 12%, depending upon the size and risk profile of the reporting unit. We considered market information in assessing the reasonableness of the fair value under the income approach described above.
Goodwill, by reporting unit, as of December 31, 2017 was as follows:

(Dollars in thousands)	Number of Reporting Units	Representing Goodwill of	
No goodwill balance	6	$	—
	2	$	121,051

Fair value of reporting unit exceeds its carrying value by more than 100%	8	$	121,051

The goodwill balances reflected above are net of the $17.6 million goodwill impairment recognized in the third quarter of 2017.

Based upon a sensitivity analysis, a reduction of approximately 50 basis points of projected EBITDA in 2018 and beyond, assuming all other assumptions remain constant, would result in no further impairment of goodwill.

Given the changing document and printing needs of our customers and the uncertainties regarding the effect on our business, there can be no assurance that the estimates and assumptions made for purposes of our goodwill impairment testing in 2017 will prove to be accurate predictions of the future. If our assumptions, including forecasted EBITDA of certain reporting units, are not achieved, we may be required to record additional goodwill impairment charges in future periods, whether in connection with our next annual impairment testing in the third quarter of 2018, or on an interim basis, if any such change constitutes a triggering event (as defined under ASC 350, Intangibles - Goodwill and Other) outside of the quarter when we regularly perform our annual goodwill impairment test. It is not possible at this time to determine if any such future impairment charge would result or, if it does, whether such charge would be material.

Revenue Recognition

We apply the provisions of ASC 605, Revenue Recognition. In general, we recognize revenue when (i) persuasive evidence of an arrangement exists, (ii) shipment of products has occurred or services have been rendered, (iii) the sales price charged is fixed or determinable and (iv) collection is reasonably assured. Net sales include an allowance for estimated sales returns and discounts.

We recognize revenues from CDIM services and MPS services when services have been rendered, while revenues from the sale of equipment and supplies are recognized upon delivery to the customer or upon customer pickup.

We recognize revenues from AIM services when such services have been rendered as they relate to scanning services, "digital shipping" and managed file transfer. Revenues derived from our AIM Services include hosted software licensing activities, which are recognized ratably over the term of the license.

We have established contractual pricing for certain large national customer accounts. These contracts generally establish uniform pricing at all service centers for Global Solutions. Revenues earned from our Global Solutions are recognized in the same manner as non-Global Solutions revenues.

Management provides for returns, discounts and allowances based on historic experience and adjusts such allowances as considered necessary. To date, such provisions have been within the range of management’s expectations.

Effective January 1, 2018, we are required to adopt Accounting Standards Codification ("ASC") 606, Revenue from Contracts with Customers. We do not expect the adoption to have a material impact to our Consolidated Financial Statements. See Note 2, “Summary of Significant Accounting Policies” for further information about the adoption of the ASC 606.

Income Taxes

Deferred tax assets and liabilities reflect temporary differences between the amount of assets and liabilities for financial and tax reporting purposes. Such amounts are adjusted, as appropriate, to reflect changes in tax rates expected to be in effect when the temporary differences reverse. A valuation allowance is recorded to reduce our deferred tax assets to the amount that is more likely than not to be realized. Changes in tax laws or accounting standards and methods may affect recorded deferred taxes in future periods. See Note 7, “Income Taxes” for further information about the impact of the TCJA enacted on December 22, 2017 to our Consolidated Financial Statements.

In accordance with ASC 740-10, Income Taxes, we evaluate the need for deferred tax asset valuation allowances based on a more likely than not standard. The ability to realize deferred tax assets depends on the ability to generate sufficient taxable income within the carryback or carryforward periods provided for in the tax law for each applicable tax jurisdiction. We consider the following possible sources of taxable income when assessing the realization of deferred tax assets:

- Future reversals of existing taxable temporary differences;
- Future taxable income exclusive of reversing temporary differences and carryforwards
- Taxable income in prior carryback years; and
- Tax-planning strategies.

The assessment regarding whether a valuation allowance is required or should be adjusted also considers all available positive and negative evidence factors, including but not limited to:

•Nature, frequency, and severity of recent losses;
•Duration of statutory carryforward periods;
•Historical experience with tax attributes expiring unused; and
•Near- and medium-term financial outlook.

It is difficult to conclude a valuation allowance is not required when there is significant objective and verifiable negative evidence, such as cumulative losses in recent years. We utilize a rolling three years of actual and current year anticipated results as the primary measure of cumulative losses in recent years. The evaluation of deferred tax assets requires judgment in assessing the likely future tax consequences of events that have been recognized in our financial statements or tax returns and future profitability.

Our accounting for deferred tax consequences represents our best estimate of those future events. Changes in our current estimates, due to unanticipated events or otherwise, could have a material effect on our financial condition and results of operations. At September 30, 2015 as a result of sustained profitability in the U.S. evidenced by three years of earnings and forecasted continuing profitability, we determined it was more likely than not future earnings will be sufficient to realize deferred tax assets in the U.S. Accordingly we reversed most of our U.S. valuation allowance resulting in non-cash income tax benefit of $80.7 million for 2015. We have a $2.4 million valuation allowance against certain deferred tax assets as of December 31, 2017, which increased by $1.1 million in 2017 primarily due to certain provisions in the TCJA.

Our gross deferred tax assets remain available to us for use in future years until they fully expire, which based on forecasted continuing profitability, we estimate that it is more likely than not that future earnings will be sufficient to realize certain of our deferred tax assets. In future quarters we will continue to evaluate our historical results for the preceding twelve quarters and our future projections to determine whether we will generate sufficient taxable income to utilize our deferred tax assets, and whether a partial or full valuation allowance is required.

We calculate our current and deferred tax provision based on estimates and assumptions that could differ from the actual results reflected in income tax returns filed in subsequent years. Adjustments based on filed returns are recorded when identified.

Income taxes have not been provided on certain undistributed earnings of foreign subsidiaries because such earnings are considered to be permanently reinvested.

The amount of taxable income or loss we report to the various tax jurisdictions is subject to ongoing audits by federal, state and foreign tax authorities. Our estimate of the potential outcome of any uncertain tax issue is subject to management’s assessment of relevant risks, facts, and circumstances existing at that time. We use a more-likely-than-not threshold for financial statement recognition and measurement of tax positions taken or expected to be taken in a tax return. We record a liability for the difference between the benefit recognized and measured and tax position taken or expected to be taken on our tax return. To the extent that our assessment of such tax positions changes, the change in estimate is recorded in the period in which the determination is made. We had no unrecognized tax benefits as of December 31, 2017.

Recent Accounting Pronouncements

See Note 2, “Summary of Significant Accounting Policies” to our Consolidated Financial Statements for disclosure on recently adopted accounting pronouncements and those not yet adopted.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

Our primary exposure to market risk is interest rate risk associated with our debt instruments. We use both fixed and variable rate debt as sources of financing. In 2014, we entered into a $205.0 million Credit Agreement, consisting of a $175.0 million term loan and a $30.0 million revolving loan facility, which was subsequently amended in 2017. Borrowings under the Credit Agreement bear interest at a rate equal to an applicable margin plus a variable rate. As such, the Credit Agreement exposes us to market risk for changes in interest rates. To manage our exposure to interest rate volatility associated with borrowings under our Credit Agreement, we entered into interest rate cap agreements in the first quarter of 2015, which expired in 2017. We have not, and do not plan to, enter into any derivative financial instruments for trading or speculative purposes.

As of December 31, 2017, we had $145.2 million of total debt and capital lease obligations, of which approximately 31% was at a fixed rate, with the remainder at variable rates. Given our outstanding indebtedness at December 31, 2017, the effect of a 100 basis point increase in LIBOR on our interest expense would be approximately $1.0 million annually.

Although we have international operating entities, our exposure to foreign currency rate fluctuations is not significant to our financial condition or results of operations.

Item 8. Financial Statements and Supplementary Data

Our financial statements and the accompanying notes that are filed as part of this report are listed under “Part IV, Item 15. Financial Statements Schedules and Reports” and are set forth beginning on page F-1 immediately following the signature pages of this Annual Report on Form 10-K, except for our quarterly results of operations, which are included in Item 7 of this Annual Report on Form 10-K.

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

None.

Item 9A. Controls and Procedures

Disclosure Controls and Procedures

We maintain disclosure controls and procedures that are designed to ensure that information required to be disclosed in our reports under the Exchange Act are recorded, processed, summarized, and reported within the time periods specified in the Securities and Exchange Commission’s rules and forms, and that such information is accumulated and communicated to our management, including our Chief Executive Officer and our Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosures.

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 disclosure controls and procedures (as defined in Rule 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934) as of December 31, 2017. Based on that evaluation, our Chief Executive Officer and our Chief Financial Officer concluded that as of December 31, 2017, our disclosure controls and procedures were effective.

Management’s Report on Internal Control Over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting (as defined in Rule 13a-15(f) or 15(d)-15(f) of the Exchange Act). Under the supervision and with the participation of the Company’s management, including our Chief Executive Officer and President and our Chief Financial Officer, the Company conducted an evaluation of the effectiveness of its internal control over financial reporting based upon the framework in Internal Control — Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on that evaluation, the Company’s management concluded that its internal control over financial reporting was effective as of December 31, 2017.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. 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.

Changes in Internal Control Over Financial Reporting

There were no changes to internal control over financial reporting during the quarter ended December 31, 2017, that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting. Our independent registered public accounting firm has issued an audit report on internal control over financial reporting, which appears below.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Stockholders and Board of Directors of ARC Document Solutions, Inc.

Opinion on Internal Control over Financial Reporting

We have audited the internal control over financial reporting of ARC Document Solutions, Inc. and subsidiaries (the "Company") as of December 31, 2017, 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 December 31, 2017, 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 December 31, 2017, of the Company and our report dated March 5, 2018, expressed an unqualified opinion on those financial statements.

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 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

San Francisco, California
March 5, 2018

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Item 9B. Other Information

None.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

Certain information regarding our executive officers is included in Part I, Item 1, of this Annual Report on Form 10-K under “Executive Officers of the Registrant.” All other information regarding directors, executive officers and corporate governance required by this item is incorporated herein by reference to the applicable information in the proxy statement for our 2018 annual meeting of stockholders, which will be filed with the SEC within 120 days after our fiscal year end of December 31, 2017, and is set forth under “Nominees for Director,” “Corporate Governance Profile,” “Section 16(a) Beneficial Ownership Reporting Compliance,” and in other applicable sections in the proxy statement.

Item 11. Executive Compensation

The information required by this item is incorporated herein by reference to the applicable information in the proxy statement for our 2018 annual meeting of stockholders and is set forth under “Executive Compensation.”

The information in the section of the proxy statement for our 2018 annual meeting captioned “Compensation Committee Report” is incorporated by reference herein but shall be deemed furnished, not filed and shall not be deemed to be incorporated by reference into any filing we make under the Securities Act of 1933 or the Exchange Act.

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

The information required by this item is incorporated herein by reference to the applicable information in the proxy statement for our 2018 annual meeting of stockholders and is set forth under “Beneficial Ownership of Voting Securities” and “Equity Compensation Plan Information.”

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

The information required by this item is incorporated herein by reference to the applicable information in the proxy statement for our 2018 annual meeting of stockholders and is set forth under “Certain Relationships and Related Transactions” and “Corporate Governance Profile.”

Item 14. Principal Accountant Fees and Services

The information required by this item is incorporated herein by reference to the proxy statement for our 2018 annual meeting of stockholders and is set forth under “Auditor Fees.”

PART IV
Item 15. Exhibits and Financial Statement Schedules.
(a) The following documents are filed as part of this Annual Report on Form 10-K:
(1) Financial Statements

Report of Independent Registered Public Accounting Firm
Consolidated Balance Sheets as of December 31, 2017 and 2016
Consolidated Statements of Operations for the years ended December 31, 2017, 2016 and 2015
Consolidated Statements of Comprehensive (Loss) Income for the years ended December 31, 2017, 2016 and 2015
Consolidated Statements of Equity for the years ended December 31, 2017, 2016 and 2015
Consolidated Statements of Cash Flows for the years ended December 31, 2017, 2016 and 2015
Notes to Consolidated Financial Statements
All other schedules have been omitted as the required information is not present or is not present in amounts sufficient to require submission of the schedule, or because the information required is included in the Consolidated Financial Statements and notes thereto.
(3) Exhibits
See Item 15(b) below.
(b) Exhibits
The following exhibits are filed herewith as part of this Annual Report on Form 10-K or are incorporated by reference to exhibits previously filed with the SEC:
Item 16 Form 10-K Summary.
Not applicable.

Index to Exhibits

Number	Description
3.1	Certificate of Ownership and Merger as filed with Secretary of State of the State of Delaware (incorporated by reference to Exhibit 3.1 to the Registrant's Form 8-K filed December 27, 2012).
3.2	Restated Certificate of Incorporation, filed March 13, 2013.
3.3	Second Amended and Restated Bylaws, (incorporated by reference to Exhibit 3.1 to the Registrant's Form 8-K filed on October 6, 2009).
4.1	Specimen Stock Certificate (incorporated by reference to Exhibit 4.1 to the Registrant's Form 10-K filed on March 9, 2011).
4.2	Registration Rights Agreement, dated December 1, 2010, among ARC Document Solutions, certain subsidiaries of ARC Document Solutions as guarantors thereto, and Merrill Lynch, Pierce, Fenner & Smith Incorporated, as representative of the several initial purchasers (incorporated by reference to Exhibit 4.3 to the Registrant's Form 8-K filed on December 2, 2010)
10.1	ARC Document Solutions 2005 Stock Plan (incorporated by reference to Exhibit 10.7 to the Registrant's Registration Statement on Form S-1 A (Reg. No. 333-119788), as amended on January 13, 2005).^
10.2	Amendment No. 1 to ARC Document Solutions 2005 Stock Plan dated May 22, 2007 (incorporated by reference to Exhibit 10.63 to the Registrant's Form 10-Q filed on August 9, 2007).^
10.3	Amendment No. 2 to ARC Document Solutions 2005 Stock Plan dated May 2, 2008 (incorporated by reference to Exhibit 10.3 to the Registrant's Form 10-Q filed August 8, 2008). ^
10.4	Amendment No. 3 to ARC Document Solutions 2005 Stock Plan (incorporated by reference to Exhibit 10.1 to the Registrant's Form 10-Q filed August 7, 2009). ^
10.5	Forms of Stock Option Agreements under the 2005 Stock Plan (incorporated by reference to Exhibit 10.8 to the Registrant's Registration Statement on Form S-1 (Reg. No. 333-119788), as filed on October 15, 2004).^
10.6	Forms of Restricted Stock Award Agreements under 2005 Stock Plan (incorporated by reference to Exhibit 10.27 to the Registrant's Registration Statement on Form S-1 A (Reg. No. 333-119788), as amended on December 6, 2004).^
10.7	Form of Restricted Stock Unit Award Agreement under 2005 Stock Plan (incorporated by reference to Exhibit 10.28 to the Registrant's Registration Statement on Form S-1 A (Reg. No. 333-119788), as amended on

	December 6, 2004).^
10.8	Form of Stock Appreciation Right Agreement under 2005 Stock Plan (incorporated by reference to Exhibit 10.29 to the Registrant's Registration Statement on Form S-1 A (Reg. No. 333-119788), as amended on January 13, 2005).^
10.9	Form of ARC Document Solutions Stock Option Grant Notice - Non-employee Directors (Discretionary Non-statutory Stock Options) (incorporated by reference to Exhibit 10.1 to the Registrant's Form 8-K filed on December 16, 2005).^

10.10	Form of ARC Document Solutions Non-employee Directors Nonstatutory Stock Option Agreement (Discretionary Grants) (incorporated by reference to Exhibit 10.2 to the Registrant’s Form 8-K filed on December 16, 2005).^
10.11	Amended and Restated ARC Document Solutions 2005 Employee Stock Purchase Plan amended and restated as of July 30, 2009 (incorporated by reference to Exhibit 10.1 to the Registrant’s Form 10-Q filed on November 9, 2009).^
10.12	Lease Agreement, for the premises commonly known as 934 and 940 Venice Boulevard, Los Angeles, CA, dated November 19, 1997, by and between American Reprographics Company, L.L.C. (formerly Ford Graphics Group, L.L.C.) and Sumo Holdings LA, LLC (incorporated by reference to Exhibit 10.10 to the Registrant’s Registration Statement on Form S-1 (Reg. No. 333-119788), as filed on October 15, 2004).
10.13	Amendment to Lease for the premises commonly known as 934 and 940 Venice Boulevard, Los Angeles, CA, effective as of August 2, 2005, by and between Sumo Holdings LA, LLC, Landlord and American Reprographics Company, L.L.C. (formerly known as Ford Graphics Group, L.L.C.) Tenant (incorporated by reference to Exhibit 10.2 to the Registrant’s Form 10-Q filed on November 14, 2005
10.14	Lease Agreement for the premises commonly known as 345 Clinton Street, Costa Mesa, CA, dated September 23, 2003, by and between American Reprographics Company (dba Consolidated Reprographics) and Sumo Holdings Costa Mesa, LLC (incorporated by reference to Exhibit 10.16 to the Registrant’s Registration Statement on Form S-1 (Reg. No. 333-119788), as filed on October 15, 2004).
10.15	Lease Agreement for the premises commonly known as 616 Monterey Pass Road, Monterey Park, CA, by and dated November 19, 1997, between Dieterich-Post Company and American Reprographics Company, L.L.C. (as successor lessee) (incorporated by reference to Exhibit 10.26 to the Registrant’s Form 10-K filed on March 1, 2007).
10.16	Indemnification Agreement, dated April 10, 2000, among American Reprographics Company, L.L.C., American Reprographics Holdings, L.L.C., ARC Acquisition Co., L.L.C., Mr. Chandramohan, Mr. Suriyakumar, Micro Device, Inc., Dieterich-Post Company, ZS Ford L.P., and ZS Ford L.L.C. (incorporated by reference to Exhibit 10.19 to the Registrant’s Registration Statement on Form S-1 (Reg. No. 333-119788), as filed on October 15, 2004).
10.17	Form of Indemnification Agreement between ARC Document Solutions, Inc. and each of its Directors and Executive Officers (incorporated by reference to Exhibit 10.42 to the Registrant's Form 10-K filed on March 13, 2013).
10.18	Letter Amendment, dated March 13, 2014, by and between ARC Document Solutions, Inc. and Mr. Suriyakumar (incorporated by reference to Exhibit 10.47 to the Registrant's Form 10-K filed on March 14, 2014).^
10.19	Amended and Restated Employment Agreement, dated March 13, 2014, between ARC Document Solutions, Inc. and Mr. Kumarakulasingam (incorporated by reference to Exhibit 10.48 to the Registrant's Form 10-K filed on March 14, 2014).^
10.2	Executive Employment Agreement, dated May 1, 2014, by and between ARC Document Solutions, Inc. and John Toth (incorporated by reference to Exhibit 10.1 to the Registrant’s Form 8-K filed on May 7, 2014).
10.21	

Executive Employment Agreement, dated May 1, 2014, by and between ARC Document Solutions, Inc. and Rahul K. Roy (incorporated by reference to Exhibit 10.2 to the Registrant's Form 8-K filed on May 7, 2014).^

10.22	Executive Employment Agreement, dated May 1, 2014, by and between ARC Document Solutions, Inc. and Dilantha Wijesuriya (incorporated by reference to Exhibit 10.3 to the Registrant's Form 8-K filed on May 7, 2014).^
10.23	Executive Employment Agreement, dated May 1, 2014, by and between ARC Document Solutions, Inc. and Jorge Avalos (incorporated by reference to Exhibit 10.4 to the Registrant's Form 8-K filed on May 7, 2014).^
10.24	ARC Document Solutions, Inc. 2014 Stock Incentive Plan (incorporated by reference to Exhibit 10.1 to the Registrant's Form 8-K filed on May 7, 2014).
10.25	Amendment No. 1 to ARC Document Solutions, Inc. 2014 Stock Incentive Plan (incorporated by reference to Exhibit 10.2 to the Registrant's Form 8-K filed on May 7, 2014).
10.26	Amended and Restated Executive Employment Agreement dated May 17, 2014 by and between ARC Document Solutions, Inc. and Mr. Suriyakumar (incorporated by reference to Exhibit 10.1 to the Registrant's Form 8-K filed on May 19, 2014).^
10.27	Credit Agreement dated November 20, 2014, among ARC Document Solutions, LLC, Wells Fargo Bank, National Association, as administrative agent, and the lenders party thereto (incorporated by reference to Exhibit 10.1 to the Registrant’s Form 8-K filed on November 24, 2014).
10.28	Independent Consulting Agreement effective February 2, 2015, by and between ARC Document Solutions, Inc. and John Toth (incorporated by reference to Exhibit 10.1 to the Registrant's Form 8-K filed on January 30, 2015).
10.29	Amended and Restated Executive Employment Agreement, dated February 1, 2015, by and between ARC Document Solutions, Inc. and Jorge Avalos (incorporated by reference to Exhibit 10.2 to the Registrant's Form 8-K filed on January 30, 2015). ^
10.30	Amendment to Credit Agreement, dated June 4, 2015, among ARC Document Solutions, LLC, Wells Fargo Bank, National Association, as administrative agent and the financial institutions party thereto as lenders (incorporated by reference to Exhibit 99.1 to the Registrant's Form 8-K filed on June 5, 2015).
10.31	Amended and Restated Executive Employment Agreement, dated June 9, 2015, between ARC Document Solutions, Inc. and Jorge Avalos (incorporated by reference to Exhibit 10.1 to the Registrant's Form 8-K filed on June 16, 2015). ^
10.32	Amended and Restated Executive Employment Agreement, dated June 9, 2015, between ARC Document Solutions, Inc. and Rahul K. Roy (incorporated by reference to Exhibit 10.2 to the Registrant's Form 8-K filed on June 16, 2015). ^
10.33	Amended and Restated Executive Employment Agreement, dated June 9, 2015, between ARC Document Solutions, Inc. and Dilantha Wijesuriya (incorporated by reference to Exhibit 10.3 to the Registrant's Form 8-K filed on June 16, 2015). ^
10.34	Amendment Letter, dated as of February 5, 2016, by and among ARC Document Solutions, LLC, the lenders party thereto and Wells Fargo Bank, National Association, as administrative agent (incorporated by reference to Exhibit 99.1 to the Registrant's Form 8-K filed on February 9, 2016).

10.35	Amendment dated May 9, 2016 to Amended and Restated Executive Employment Agreement, dated June 9, 2015, between ARC Document Solutions, Inc. and Rahul K. Roy (incorporated by reference to Exhibit 10.1 to the Registrant's Form 8-K filed on May 3, 2016).^

10.36	Amendment to Credit Agreement, dated June 24, 2016, among ARC Documents Solutions, LLC, Wells Fargo Bank, National Association, as administrative agent, and the lenders party thereto (incorporated by reference to Exhibit 10.1 to the Registrant's Form 8-K filed on June 24, 2016).
10.37	Amendment to Credit Agreement, dated July 14, 2017, among ARC Document Solutions, LLC, Wells Fargo Bank, National Association, as administrative agent, and the financial institutions party thereto as lenders (incorporated by reference to Exhibit 10.1 to the Registrant's Form 8-K filed on July 18, 2017).
21.1	List of Subsidiaries.*
23.1	Consent of Deloitte & Touche LLP, Independent Registered Public Accounting Firm.*
31.1	Certification of Principal Executive Officer pursuant to Rules 13a-14(a)/15d-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.*
31.2	Certification of Principal Financial Officer pursuant to Rules 13a-14(a)/15d-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.*
32.1	Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.*
32.2	Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.*
101.INS	XBRL Instance Document *
101.SCH	XBRL Taxonomy Extension Schema *
101.CAL	XBRL Taxonomy Extension Calculation Linkbase *
101.DEF	XBRL Taxonomy Extension Definition Linkbase *
101.LAB	XBRL Taxonomy Extension Label Linkbase *
101.PRE	XBRL Taxonomy Extension Presentation Linkbase *

*Filed herewith
^Indicates management contract or compensatory plan or agreement

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.

ARC DOCUMENT SOLUTIONS, INC.

By: /s/ KUMARAKULASINGAM SURIYAKUMAR
Chairman, President and Chief Executive Officer

Date: March 5, 2018

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 in the capacities and on the dates indicated.

Signature	Title	Date
/s/ KUMARAKULASINGAM SURIYAKUMAR Kumarakulasingam Suriyakumar	Chairman, President and Chief Executive Officer and Director (Principal Executive Officer)	March 5, 2018
/s/ JORGE AVALOS Jorge Avalos	Chief Financial Officer (Principal Financial Officer)	March 5, 2018
/s/ THOMAS J. FORMOLO Thomas J. Formolo	Director	March 5, 2018
/s/ DEWITT KERRY MCCLUGGAGE Dewitt Kerry McCluggage	Director	March 5, 2018
/s/ JAMES F. MCNULTY James F. McNulty	Director	March 5, 2018
/s/ MARK W. MEALY Mark W. Mealy	Director	March 5, 2018
/s/ MANUEL PEREZ DE LA MESA Manuel Perez de la Mesa	Director	March 5, 2018
/s/ JOHN G. FREELAND John G. Freeland	Director	March 5, 2018

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Stockholders and Board of Directors of ARC Document Solutions, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of ARC Document Solutions, Inc. and subsidiaries (the "Company") as of December 31, 2017 and 2016, the related consolidated statements of operations, comprehensive income (loss), equity, and cash flows, for each of the three years in the period ended December 31, 2017, and the related notes (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 December 31, 2017 and 2016, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2017, 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 December 31, 2017, 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 March 5, 2018 expressed an unqualified opinion on the Company's internal control over financial reporting.

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.

/s/ DELOITTE & TOUCHE LLP
San Francisco, California
March 5, 2018

We have served as the Company's auditor since 2009.

ARC DOCUMENT SOLUTIONS, INC.
CONSOLIDATED BALANCE SHEETS
(In thousands, except per share data)

	December 31, 2017	December 31, 2016
Assets		
Current assets:		
Cash and cash equivalents	$ 28,059	$ 25,239
Accounts receivable, net of allowances for accounts receivable of $2,341 and $2,060	57,011	59,735
Inventories, net	19,937	18,184
Prepaid expenses	4,208	3,861
Other current assets	5,266	4,785
Total current assets	114,481	111,804
Property and equipment, net of accumulated depreciation of $198,693 and $201,192	64,245	60,735
Goodwill	121,051	138,688
Other intangible assets, net	9,068	13,202
Deferred income taxes	28,029	42,667
Other assets	2,551	2,185
Total assets	$ 339,425	$ 369,281
Liabilities and Equity		
Current liabilities:		
Accounts payable	$ 24,289	$ 24,782
Accrued payroll and payroll-related expenses	12,617	12,219
Accrued expenses	17,201	16,138
Current portion of long-term debt and capital leases	20,791	13,773
Total current liabilities	74,898	66,912
Long-term debt and capital leases	123,626	143,400
Other long-term liabilities	3,290	2,148
Total liabilities	201,814	212,460
Commitments and contingencies (Note 6)		
Stockholders’ equity:		
ARC Document Solutions, Inc. stockholders’ equity:		
Preferred stock, $0.001 par value, 25,000 shares authorized; 0 shares issued and outstanding	—	—
Common stock, $0.001 par value, 150,000 shares authorized; 47,913 and 47,428 shares issued and 45,266 and 45,988 shares outstanding	48	47
Additional paid-in capital	120,953	117,749
Retained earnings	20,524	41,822
Accumulated other comprehensive loss	(1,998)	(3,793)
	139,527	155,825
Less cost of common stock in treasury, 2,647 and 1,440 shares	9,290	5,909
Total ARC Document Solutions, Inc. stockholders’ equity	130,237	149,916
Noncontrolling interest	7,374	6,905
Total equity	137,611	156,821
Total liabilities and equity	$ 339,425	$ 369,281

The accompanying notes are an integral part of these consolidated financial statements.

ARC DOCUMENT SOLUTIONS, INC.
CONSOLIDATED STATEMENTS OF OPERATIONS
(In thousands, except per share data)

	Year Ended December 31,		
	2017	2016	2015
Service sales	$347,326	$358,341	$378,638
Equipment and supplies sales	47,253	47,980	50,027
Total net sales	394,579	406,321	428,665
Cost of sales	270,556	273,078	280,541
Gross profit	124,023	133,243	148,124
Selling, general and administrative expenses	101,889	100,214	107,280
Amortization of intangible assets	4,280	4,833	5,642
Goodwill impairment	17,637	73,920	—
Restructuring expense	—	7	89
Income (loss) from operations	217	(45,731)	35,113
Other income, net	(81)	(72)	(99)
Loss on extinguishment and modification of debt	230	208	282
Interest expense, net	6,179	5,996	6,974
(Loss) income before income tax provision (benefit)	(6,111)	(51,863)	27,956
Income tax provision (benefit)	15,244	(4,364)	(69,432)
Net (loss) income	(21,355)	(47,499)	97,388
Income attributable to noncontrolling interest	(156)	(366)	(348)
Net (loss) income attributable to ARC Document Solutions, Inc. shareholders	$(21,511)	$(47,865)	$97,040
(Loss) earnings per share attributable to ARC Document Solutions, Inc. shareholders:			
Basic	$(0.47)	$(1.04)	$2.08
Diluted	$(0.47)	$(1.04)	$2.04
Weighted average common shares outstanding:			
Basic	45,669	45,932	46,631
Diluted	45,669	45,932	47,532

The accompanying notes are an integral part of these consolidated financial statements.

ARC DOCUMENT SOLUTIONS, INC.
CONSOLIDATED STATEMENTS OF COMPREHENSIVE (LOSS) INCOME
(In thousands)

	Year Ended December 31,		
	2017	2016	2015
Net (loss) income	$(21,355)	$(47,499)	$97,388
Other comprehensive income (loss), net of tax			
Foreign currency translation adjustments, net of tax	1,906	(2,191)	(2,116)
Fair value adjustment of derivatives, net of tax	202	14	(211)
Other comprehensive income (loss), net of tax	2,108	(2,177)	(2,327)
Comprehensive (loss) income	(19,247)	(49,676)	95,061
Comprehensive income (loss) attributable to noncontrolling interest	469	(115)	(43)
Comprehensive (loss) income attributable to ARC Document Solutions, Inc. shareholders	$(19,716)	$(49,561)	$95,104

The accompanying notes are an integral part of these consolidated financial statements.

ARC DOCUMENT SOLUTIONS, INC.
CONSOLIDATED STATEMENTS OF EQUITY
(In thousands, except per share data)

	ARC Document Solutions, Inc. Shareholders							
	Common Stock				Accumulated			
	Shares	Par Value	Additional Paid-in Capital	Retained Earnings (Deficit)	Other Comprehensive Loss	Common Stock in Treasury	Noncontrolling Interest	Total
Balance at December 31, 2014	46,800	$ 47	$110,650	$(7,353)	$ (161)	$(408)	$ 7,063	$109,838
Stock-based compensation	131		3,783					3,783
Issuance of common stock under Employee Stock Purchase Plan	21		111					111
Stock options exercised	154	—	673					673
Tax deficiency from stock-based compensation			(128)					(128)
Treasury shares	24					(204)		(204)
Comprehensive income (loss)				97,040	(1,936)		(43)	95,061
Balance at December 31, 2015	47,130	$ 47	$115,089	$89,687	$ (2,097)	$(612)	$ 7,020	$209,134
Stock-based compensation	229		2,693					2,693
Issuance of common stock under Employee Stock Purchase Plan	33		120					120
Stock options exercised	36	—	98					98
Tax deficiency from stock-based compensation			(251)					(251)
Treasury shares						(5,297)		(5,297)
Comprehensive loss				(47,865)	(1,696)		(115)	(49,676)
Balance at December 31, 2016	47,428	$ 47	$117,749	$41,822	$ (3,793)	$(5,909)	$ 6,905	$156,821
Stock-based compensation	404	1	2,946					2,947
Modified retrospective adjustment resulting from the adoption of ASC 2016-09			29	213				242
Issuance of common stock under Employee Stock Purchase Plan	47		133					133
Stock options exercised	34		96					96
Treasury shares						(3,381)		(3,381)
Comprehensive (loss) income				(21,511)	1,795		469	(19,247)
Balance at December 31, 2017	47,913	$ 48	$120,953	$20,524	$ (1,998)	$(9,290)	$ 7,374	$137,611

The accompanying notes are an integral part of these consolidated financial statements.

ARC DOCUMENT SOLUTIONS, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(In thousands)

	Year Ended December 31,		
	2017	2016	2015
Cash flows from operating activities			
Net (loss) income	$(21,355)	$(47,499)	$97,388
Adjustments to reconcile net (loss) income to net cash provided by operating activities:			
Allowance for accounts receivable	1,249	918	340
Depreciation	29,043	26,918	28,019
Amortization of intangible assets	4,280	4,833	5,642
Amortization of deferred financing costs	306	445	589
Goodwill impairment	17,637	73,920	—
Stock-based compensation	2,947	2,693	3,512
Deferred income taxes	13,802	(4,711)	10,173
Deferred tax valuation allowance	1,031	51	(80,669)
Loss on extinguishment and modification of debt	230	208	282
Other non-cash items, net	(56)	(716)	(390)
Changes in operating assets and liabilities:			
Accounts receivable	2,158	(1,294)	729
Inventory	(1,339)	(1,590)	(967)
Prepaid expenses and other assets	(556)	109	2,296
Accounts payable and accrued expenses	2,993	(1,143)	(6,963)
Net cash provided by operating activities	52,370	53,142	59,981
Cash flows from investing activities			
Capital expenditures	(9,106)	(12,097)	(14,245)
Other	744	1,101	589
Net cash used in investing activities	(8,362)	(10,996)	(13,656)
Cash flows from financing activities			
Proceeds from stock option exercises	96	98	673
Proceeds from issuance of common stock under Employee Stock Purchase Plan	133	120	111
Share repurchases	(3,381)	(5,297)	(204)
Contingent consideration on prior acquisitions	(275)	(571)	(413)
Early extinguishment of long-term debt	(14,150)	(22,000)	(14,500)
Payments on long-term debt agreements and capital leases	(65,516)	(12,990)	(27,329)
Borrowings under revolving credit facilities	63,100	1,000	4,560
Payments under revolving credit facilities	(21,800)	(50)	(6,448)
Payment of deferred financing costs	(270)	(106)	(25)
Payment of hedge premium	—	—	(632)
Net cash used in financing activities	(42,063)	(39,796)	(44,207)
Effect of foreign currency translation on cash balances	875	(1,074)	(791)
Net change in cash and cash equivalents	2,820	1,276	1,327
Cash and cash equivalents at beginning of period	25,239	23,963	22,636
Cash and cash equivalents at end of period	$28,059	$25,239	$23,963
Supplemental disclosure of cash flow information:			
Cash paid for interest	$5,574	$5,936	$7,247
Income taxes paid, net	$56	$971	$721
Noncash financing activities:			

Capital lease obligations incurred	$25,192	$18,948	$13,157
Contingent liabilities in connection with the acquisition of businesses	$27	$75	$—

The accompanying notes are an integral part of these consolidated financial statements.

ARC DOCUMENT SOLUTIONS, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(In thousands, except per share data or where otherwise noted)

1. DESCRIPTION OF BUSINESS AND BASIS OF PRESENTATION

ARC Document Solutions, Inc. (“ARC Document Solutions,” “ARC” or the “Company”) is a leading document solutions provider to architectural, engineering, construction, and facilities management professionals, while also providing document solutions to businesses of all types. ARC offers a variety of services including: Construction Document Information Management ("CDIM"), Managed Print Services ("MPS"), and Archive and Information Management ("AIM"). In addition, ARC also sells Equipment and Supplies. The Company conducts its operations through its wholly-owned operating subsidiary, ARC Document Solutions, LLC, a Texas limited liability company, and its affiliates.

Basis of Presentation

The accompanying Consolidated Financial Statements include the accounts of the Company and its subsidiaries. All material intercompany accounts and transactions have been eliminated in consolidation.

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America (“GAAP”) requires management to make estimates and assumptions that affect the amounts reported in the Consolidated Financial Statements and accompanying notes. The Company evaluates its estimates and assumptions on an ongoing basis and relies on historical experience and various other factors that it believes to be reasonable under the circumstances to determine such estimates. Actual results could differ from those estimates and such differences may be material to the Consolidated Financial Statements.

Correction to 2016 Financial Statements

Subsequent to the issuance of the Company's 2016 Consolidated Financial Statements, management identified an immaterial error in the balance sheet presentation of the Company's deferred tax assets and liabilities as of December 31, 2016. In its 2016 Consolidated Financial Statements, the Company presented its deferred taxes on a gross basis; however, such deferred taxes should have been presented on a net basis by taxing jurisdiction in accordance with Accounting Standards Codification (ASC) 740, Income Taxes. As a result of the error, the Company has corrected the deferred tax assets and deferred tax liabilities balances as of December 31, 2016 in the accompanying Consolidated Balance Sheets. The correction resulted in a decrease to the Company's deferred tax liabilities balance of $30.3 million with a corresponding decrease of the same amount to the Company's deferred tax assets balance as of December 31, 2016. This correction had no impact to the Company's previously reported Consolidated Statements of Operations, Consolidated Statements of Comprehensive Income (Loss), Consolidated Statements of Equity, Consolidated Statements of Cash Flows, or Notes to the Consolidated Financial Statements. The Company has concluded that the error correction was not material to the Consolidated Financial Statements.

Risk and Uncertainties

The Company generates the majority of its revenue from sales of services and products to customers in the architectural, engineering, construction and building owner/operator (AEC/O) industry. As a result, the Company’s operating results and financial condition can be significantly affected by economic factors that influence the AEC/O industry, such as non-residential construction spending, GDP growth, interest rates, unemployment rates, and office vacancy rates. Reduced activity (relative to historic levels) in the AEC/O industry would diminish demand for some of ARC’s services and products, and would therefore negatively affect revenues and have a material adverse effect on its business, operating results and financial condition.

As part of the Company’s growth strategy, ARC intends to continue to offer and grow a variety of service offerings, some of which are relatively new to the Company. The success of the Company’s efforts will be affected by its ability to acquire new customers for the Company’s new service offerings, as well as to sell the new service offerings to existing customers. The Company’s inability to successfully market and execute these relatively new service offerings could significantly affect its business and reduce its long term revenue, resulting in an adverse effect on its results of operations and financial condition.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Cash Equivalents

Cash equivalents include demand deposits and short-term investments with a maturity of three months or less when purchased.

The Company maintains its cash deposits at numerous banks located throughout the United States, Canada, India, Australia, United Arab Emirates, the United Kingdom and China, which at times, may exceed federally insured limits. UDS, the Company's joint venture in China, held $11.9 million and $11.7 million of the Company's cash and cash equivalents as of December 31, 2017 and 2016, respectively. The Company has not experienced any losses in such accounts and believes it is not exposed to any significant risk on cash and cash equivalents.

Concentrations of Credit Risk and Significant Vendors

Concentrations of credit risk with respect to trade receivables are limited due to a large, diverse customer base. No individual customer represented more than 2%, 2%, or 4% of net sales during 2017, 2016, and 2015, respectively. The Company has geographic concentration risk as sales in California, as a percent of total sales, were approximately 34%, 33%, and 31% for 2017, 2016, and 2015, respectively.

The Company contracts with various suppliers. Although there are a limited number of suppliers that could supply the Company's inventory, management believes any shortfalls from existing suppliers would be absorbed from other suppliers on comparable terms. However, a change in suppliers could cause a delay in sales and adversely affect results.

Purchases from the Company's three largest vendors during 2017, 2016, and 2015 comprised approximately 46%, 40%, and 37% respectively, of the Company's total purchases of inventory and supplies.

Allowance for Doubtful Accounts

The Company performs periodic credit evaluations of the financial condition of its customers, monitors collections and payments from customers, and generally does not require collateral. The Company provides for the possible inability to collect accounts receivable by recording an allowance for doubtful accounts. The Company writes off an account when it is considered uncollectible. The Company estimates the allowance for doubtful accounts based on historical experience, aging of accounts receivable, and information regarding the credit worthiness of its customers. Additionally, the Company provides an allowance for returns and discounts based on historical experience. The allowance for doubtful accounts activity was as follows:

	Balance at Beginning of Period	Charges to Cost and Expenses	Deductions (1)	Balance at End of Period
Year ended December 31, 2017				
Allowance for accounts receivable	$ 2,060	$ 1,249	$ (968)	$ 2,341
Year ended December 31, 2016				
Allowance for accounts receivable	$ 2,094	$ 918	$ (952)	$ 2,060
Year ended December 31, 2015				
Allowance for accounts receivable	$ 2,413	$ 340	$ (659)	$ 2,094

(1) Deductions represent uncollectible accounts written-off net of recoveries.

Inventories

Inventories are valued at the lower of cost (determined on a first-in, first-out basis; or average cost) or net realizable value. Inventories primarily consist of reprographics materials for use and resale, and equipment for resale. On an ongoing basis, inventories are reviewed and adjusted for estimated obsolescence or unmarketable inventories to reflect the lower of cost or net realizable value. Charges to increase inventory reserves are recorded as an increase in cost of sales. As of December 31, 2017 and 2016, the reserves for inventory obsolescence was $0.9 million and 0.7 million, respectively.

Income Taxes

Deferred tax assets and liabilities reflect temporary differences between the amount of assets and liabilities for financial and tax reporting purposes. Such amounts are adjusted, as appropriate, to reflect changes in tax rates expected to be in effect when the temporary differences reverse. A valuation allowance is recorded to reduce the Company's deferred tax assets to the amount that is more likely than not to be realized. Changes in tax laws or accounting standards and methods may affect recorded deferred taxes in future periods.

When establishing a valuation allowance, the Company considers future sources of taxable income such as future reversals of existing taxable temporary differences, future taxable income exclusive of reversing temporary differences and carryforwards and tax planning strategies. A tax planning strategy is an action that: is prudent and feasible; an enterprise ordinarily might not take, but would take to prevent an operating loss or tax credit carryforward from expiring unused; and would result in realization of deferred tax assets. In the event the Company determines that its deferred tax assets, more likely than not, will not be realized in the future, the valuation adjustment to the deferred tax assets will be charged to earnings in the period in which the Company makes such a determination.

At September 30, 2015 as a result of sustained profitability in the U.S. evidenced by three years of earnings and forecasted continuing profitability (as defined by Financial Accounting Standards Board (“FASB”) Accounting Standards Codification (“ASC”) 740-10, Income Taxes), the Company determined it was more likely than not future earnings would be sufficient to realize deferred tax assets in the U.S. Accordingly the Company reversed most of its income tax valuation allowance resulting in non-cash income tax benefit of $80.7 million for the year ended December 31, 2015. The Company has a $2.4 million valuation allowance against certain deferred tax assets as of December 31, 2017.

In future quarters the Company will continue to evaluate its historical results for the preceding twelve quarters and its future projections to determine whether the Company will generate sufficient taxable income to utilize its deferred tax assets, and whether a valuation allowance is required.

The Company calculates its current and deferred tax provision based on estimates and assumptions that could differ from the actual results reflected in income tax returns filed in subsequent years. Adjustments based on filed returns are recorded when identified.

Income taxes have not been provided on certain undistributed earnings of foreign subsidiaries because such earnings are considered to be permanently reinvested.

The amount of taxable income or loss the Company reports to the various tax jurisdictions is subject to ongoing audits by federal, state and foreign tax authorities. The Company's estimate of the potential outcome of any uncertain tax issue is subject to management’s assessment of relevant risks, facts, and circumstances existing at that time. The Company uses a more-likely-than-not threshold for financial statement recognition and measurement of tax positions taken or expected to be taken in a tax return. The Company records a liability for the difference between the benefit recognized and measured and tax position taken or expected to be taken on its tax return. To the extent that the Company's assessment of such tax positions changes, the change in estimate is recorded in the period in which the determination is made. The Company reports tax-related interest and penalties as a component of income tax expense.

The Company’s effective income tax rate differs from the statutory tax rate primarily due to the effect of the Tax Cuts and Jobs Act (the "TCJA") enacted on December 22, 2017, the valuation allowance on certain of the Company’s deferred tax assets, state income taxes, stock-based compensation, goodwill and other identifiable intangibles, and other discrete items. See Note 7 “Income Taxes” for further information.

Property and Equipment

Property and equipment are stated at cost and are depreciated using the straight-line method over their estimated useful lives, as follows:

Buildings	10-20 years
Leasehold improvements	10-20 years or lease term, if shorter
Machinery and equipment	3-7 years
Furniture and fixtures	3-7 years

Assets acquired under capital lease arrangements are included in machinery and equipment, are recorded at the present value of the minimum lease payments, and are depreciated using the straight-line method over the life of the asset or term of the lease, whichever is shorter. Expenses for repairs and maintenance are charged to expense as incurred, while renewals and betterments are capitalized. Gains or losses on the sale or disposal of property and equipment are reflected in operating income.

The Company accounts for software costs developed for internal use in accordance with ASC 350-40, Intangibles – Goodwill and Other, which requires companies to capitalize certain qualifying costs incurred during the application development stage of the related software development project. The primary use of this software is for internal use and, accordingly, such capitalized software development costs are depreciated on a straight-line basis over the economic lives of the related products not to exceed three years. The Company’s machinery and equipment (see Note 4 “Property and Equipment”) includes $1.7 million and $0.8 million of capitalized software development costs as of December 31, 2017 and 2016, net of accumulated amortization of $18.9 million and $18.1 million as of December 31, 2017 and 2016, respectively. Depreciation expense includes the amortization of capitalized software development costs which amounted to $0.8 million, $0.4 million, and $0.2 million during the years ended December 31, 2017, 2016, and 2015, respectively.

Impairment of Long-Lived Assets

The Company periodically assesses potential impairments of its long-lived assets in accordance with the provisions of ASC 360, Accounting for the Impairment or Disposal of Long-lived Assets. An impairment review is performed whenever events or changes in circumstances indicate that the carrying value of the assets may not be recoverable. The Company groups its assets at the lowest level for which identifiable cash flows are largely independent of the cash flows of the other assets and liabilities. The Company has determined that the lowest level for which identifiable cash flows are available is the regional level, which is the operating segment level.

Factors considered by the Company include, but are not limited to, significant underperformance relative to historical or projected operating results; significant changes in the manner of use of the acquired assets or the strategy for the overall business; and significant negative industry or economic trends. When the carrying value of a long-lived asset may not be recoverable based upon the existence of one or more of the above indicators of impairment, the Company estimates the future undiscounted cash flows expected to result from the use of the asset and its eventual disposition. If the sum of the expected future undiscounted cash flows and eventual disposition is less than the carrying amount of the asset, the Company recognizes an impairment loss. An impairment loss is reflected as the amount by which the carrying amount of the asset exceeds the fair value of the asset, based on the fair value if available, or discounted cash flows, if fair value is not available. The Company had no long-lived asset impairments in 2017, 2016 or 2015.

Goodwill and Other Intangible Assets

In accordance with ASC 350, Intangibles - Goodwill and Other, the Company assesses goodwill for impairment annually as of September 30, and more frequently if events and circumstances indicate that goodwill might be impaired.

Goodwill impairment testing is performed at the reporting unit level. Goodwill is assigned to reporting units at the date the goodwill is initially recorded. Once goodwill has been assigned to reporting units, it no longer retains its association with a particular acquisition, and all of the activities within a reporting unit, whether acquired or internally generated, are available to support the value of the goodwill.

Traditionally, goodwill impairment testing is a two-step process. Step one involves comparing the fair value of the reporting units to its carrying amount. If the carrying amount of a reporting unit is greater than zero and its fair value is greater than its carrying amount, there is no impairment. If the reporting unit’s carrying amount is greater than the fair value, the second step must be completed to measure the amount of impairment, if any. Step two involves calculating an implied fair value of goodwill.

For its annual goodwill impairment test as of September 30, 2017, the Company elected to early-adopt ASU 2017-04 which simplifies subsequent goodwill measurement by eliminating step two from the goodwill impairment test.

The Company determines the fair value of its reporting units using an income approach. Under the income approach, the Company determined fair value based on estimated discounted future cash flows of each reporting unit. Determining the fair value of a reporting unit is judgmental in nature and requires the use of significant estimates and assumptions, including revenue growth rates and EBITDA margins, discount rates and future market conditions, among others.

Other intangible assets that have finite lives are amortized over their useful lives. Customer relationships are amortized using the accelerated method, based on customer attrition rates, over their estimated useful lives of 13 (weighted average) years.

Deferred Financing Costs

Direct costs incurred in connection with debt agreements are recorded as incurred and amortized based on the effective interest method for the Company's borrowings under its credit agreement ("Credit Agreement"). At December 31, 2017 and 2016, the Company had deferred financing costs of $0.8 million and $1.0 million, respectively, net of accumulated amortization of $0.1 million and $1.6 million, respectively.

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Fair Values of Financial Instruments

The following methods and assumptions were used by the Company in estimating the fair value of its financial instruments for disclosure purposes:

Cash equivalents: Cash equivalents are time deposits with maturity of three months or less when purchased, which are highly liquid and readily convertible to cash. Cash equivalents reported in the Company's Consolidated Balance Sheet were $8.5 million and $3.9 million as of December 31, 2017 and 2016, respectively, and are carried at cost and approximate fair value due to the relatively short period to maturity of these instruments.

Short- and long-term debt and capital leases: The carrying amount of the Company's capital leases reported in the Consolidated Balance Sheets approximates fair value based on the Company's current incremental borrowing rate for similar types of borrowing arrangements. The carrying amount reported in the Company's Consolidated Balance Sheet as of December 31, 2017 for borrowings under its Credit Agreement is $100.0 million, excluding unamortized deferred financing fees. The Company has determined, utilizing observable market quotes, that the fair value of borrowings under its Credit Agreement is $100.0 million as of December 31, 2017.

Insurance Liability

The Company maintains a high deductible insurance policy for a significant portion of its risks and associated liabilities with respect to workers' compensation. The Company's deductible is $250 thousand per individual. The accrued liabilities associated with this program are based on the Company's estimate of the ultimate costs to settle known claims, as well as claims incurred but not yet reported to the Company, as of the balance sheet date. The Company's estimated liability is not discounted and is based upon an actuarial report obtained from a third party. The actuarial report uses information provided by the Company's insurance brokers and insurers, combined with the Company's judgments regarding a number of assumptions and factors, including the frequency and severity of claims, claims development history, case jurisdiction, applicable legislation, and the Company's claims settlement practices.

The Company is self-insured for healthcare benefits provided to certain employees in the United States, with a stop-loss at $250 thousand per individual. Liabilities associated with the risks that are retained by the Company are estimated, in part, by considering historical claims experience, demographic factors, severity factors and other actuarial assumptions. The Company's results could be materially affected by claims and other expenses related to such plans if future occurrences and claims differ from these assumptions and historical trends. Other employees are covered by other offered healthcare benefits.

Commitments and Contingencies

In the normal course of business, the Company estimates potential future loss accruals related to legal, workers' compensation, healthcare, tax and other contingencies. These accruals require management's judgment on the outcome of various events based on the best available information. However, due to changes in facts and circumstances, the ultimate outcomes could differ from management's estimates.

Revenue Recognition

The Company applies the provisions of ASC 605, Revenue Recognition. In general, the Company recognizes revenue when (i) persuasive evidence of an arrangement exists, (ii) delivery of products has occurred or services have been rendered, (iii) the sales price charged is fixed or determinable and (iv) collection is reasonably assured. Net sales include an allowance for estimated sales returns and discounts.

The Company recognizes service revenue when services have been rendered, while revenues from the resale of equipment and supplies are recognized upon delivery to the customer or upon customer pickup. Revenue from equipment service agreements are recognized over the term of the service agreement.

The Company has established contractual pricing for certain large national customer accounts ("Global Solutions"). These contracts generally establish uniform pricing at all operating segments for Global Solutions. Revenues earned from the Company's Global Solutions are recognized in the same manner as non-Global Solutions revenues.

Included in revenues are fees charged to customers for shipping, handling, and delivery services. Such revenues amounted to $10.7 million, $11.1 million, and $11.2 million for 2017, 2016, and 2015, respectively.

Revenues from hosted software licensing activities are recognized ratably over the term of the license. Revenues from software licensing activities comprise less than 1% of the Company's consolidated revenues during the years ended December 31, 2017, 2016, and 2015.

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Management provides for returns, discounts and allowances based on historic experience and adjusts such allowances as considered necessary.

Comprehensive (Loss) Income

The Company's comprehensive (loss) income includes foreign currency translation adjustments and the fair value adjustment of derivatives, net of taxes.

Asset and liability accounts of international operations are translated into the Company's functional currency, U.S. dollars, at current rates. Revenues and expenses are translated at the average currency rate for the fiscal year.

Segment and Geographic Reporting

The provisions of ASC 280, Segment Reporting, require public companies to report financial and descriptive information about their reportable operating segments. The Company identifies operating segments based on the various business activities that earn revenue and incur expense and whose operating results are reviewed by the Company's Chief Executive Officer, who is the Company's chief operating decision maker. Because its operating segments have similar products and services, classes of customers, production processes, distribution methods and economic characteristics, the Company operates as a single reportable segment.

Net sales of the Company's principal services and products were as follows:

	Year Ended December 31,		
	2017	2016	2015
Service Sales			
CDIM	$205,083	$212,511	$221,174
MPS	129,479	131,811	144,244
AIM	12,764	14,019	13,220
Total services sales	347,326	358,341	378,638
Equipment and Supplies Sales	47,253	47,980	50,027
Total net sales	$394,579	$406,321	$428,665

The Company recognizes revenues in geographic areas based on the location to which the product was shipped or services have been rendered. See table below for revenues and property and equipment, net, attributable to the Company's U.S. operations and foreign operations.

	Year Ended December 31,								
	2017			2016			2015		
	U.S.	Foreign Countries	Total	U.S.	Foreign Countries	Total	U.S.	Foreign Countries	Total
Revenues from external customers	$339,250	$55,329	$394,579	$353,077	$53,244	$406,321	$366,082	$62,583	$428,665
Property and equipment, net	$58,287	$5,958	$64,245	$54,847	$5,888	$60,735	$50,777	$6,813	$57,590

Advertising and Shipping and Handling Costs

Advertising costs are expensed as incurred and approximated $1.7 million, $1.9 million, and $2.0 million during 2017, 2016, and 2015, respectively. Shipping and handling costs incurred by the Company are included in cost of sales.

Stock-Based Compensation

The Company applies the Black-Scholes valuation model in determining the fair value of share-based payments to employees, which is then amortized on a straight-line basis over the requisite service period.

Total stock-based compensation for 2017, 2016, and 2015, was $2.9 million, $2.7 million, and $3.5 million, respectively, and was recorded in selling, general, and administrative expenses, consistent with the classification of the underlying salaries. In

accordance with ASC 718, Income Taxes, any excess tax benefit resulting from stock-based compensation, in the Consolidated Statements of Cash Flows, are classified as financing cash inflows.
The weighted average fair value at the grant date for options issued in 2017, 2016, and 2015, was $2.57, $2.07, and $4.88 respectively. The fair value of each option grant was estimated on the date of grant using the Black-Scholes option-pricing model using the following weighted average assumptions for 2017, 2016, and 2015:

	Year Ended December 31,		
	2017	2016	2015
Weighted average assumptions used:			
Risk free interest rate	2.11%	1.43%	1.62%
Expected volatility	54.9%	56.8%	56.2%
Expected dividend yield	— %	— %	— %

Using historical exercise data as a basis, the Company determined that the expected term for stock options issued in 2017, 2016, and 2015 was 6.5 years, 6.5 years, and 6.4 years, respectively.
For fiscal years 2017, 2016, and 2015, expected stock price volatility is based on the Company's historical volatility for a period equal to the expected term. The risk-free interest rate is based on the U.S. Treasury yield curve in effect at the time of grant with an equivalent remaining term. The Company has not paid dividends in the past and does not currently plan to pay dividends in the near future. The Company accounts for forfeitures of share-based awards when they occur.
As of December 31, 2017, total unrecognized stock-based compensation expense related to nonvested stock-based compensation was approximately $3.1 million, which is expected to be recognized over a weighted average period of approximately 1.8 years.
For additional information, see Note 8 "Employee Stock Purchase Plan and Stock Plan."

Research and Development Expenses

Research and development activities relate to costs associated with the design and testing of new technology or enhancements and maintenance to existing technology. Such costs are expensed as incurred are primarily recorded to cost of sales. In total, research and development amounted to $6.9 million, $6.2 million, and $5.8 million during 2017, 2016, and 2015, respectively.

Noncontrolling Interest

The Company accounted for its investment in UNIS Document Solutions Co. Ltd., ("UDS") under the purchase method of accounting, in accordance with ASC 805, Business Combinations. UDS has been consolidated in the Company's financial statements from the date of acquisition. Noncontrolling interest, which represents the 35 percent non-controlling interest in UDS, is reflected on the Company's Consolidated Financial Statements.

Sales Taxes

The Company bills sales taxes, as applicable, to its customers. The Company acts as an agent and bills, collects, and remits the sales tax to the proper government jurisdiction. The sales taxes are accounted for on a net basis, and therefore are not included as part of the Company's revenue.

Earnings Per Share

The Company accounts for earnings per share in accordance with ASC 260, Earnings Per Share. Basic earnings per share is computed by dividing net income attributable to ARC by the weighted-average number of common shares outstanding for the period. Diluted earnings per common share is computed similarly to basic earnings per share except that the denominator is increased to include the number of additional common shares that would have been outstanding if common shares subject to outstanding options and acquisition rights had been issued and if the additional common shares were dilutive. Common share equivalents are excluded from the computation if their effect is anti-dilutive. There were 5.3 million, 4.7 million, and 2.0 million common shares excluded from the calculation of diluted net (loss) income attributable to ARC per common share as their effect would have been anti-dilutive for 2017, 2016, and 2015, respectively. The Company's common share equivalents consist of stock options issued under the Company's Stock Plan.
Basic and diluted weighted average common shares outstanding were calculated as follows for 2017, 2016, and 2015:

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	Year Ended December 31,		
	2017	2016	2015
Weighted average common shares outstanding during the period — basic	45,669	45,932	46,631
Effect of dilutive stock options	—	—	901
Weighted average common shares outstanding during the period — diluted	45,669	45,932	47,532

Recently Adopted Accounting Pronouncements

In January 2017, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") 2017-04, Intangibles-Goodwill and Other (Topic 350) - Simplifying the Test for Goodwill Impairment. The new guidance simplifies subsequent goodwill measurement by eliminating step two from the goodwill impairment test. Accordingly, the Company is required to perform its annual, or interim, goodwill impairment tests by comparing the fair value of a reporting unit with its respective carrying value, and recognize an impairment charge for the amount by which the carrying amount exceeds the reporting unit's fair value; however, the loss recognized should not exceed the total amount of goodwill allocated to that reporting unit. The Company elected to early-adopt ASU 2017-04 for its annual goodwill impairment test as of September 30, 2017. See Note 3, "Goodwill and Other Intangibles" for further information regarding the process of assessing goodwill impairment and the results of the Company's 2017 annual goodwill impairment test.

In March 2016, the FASB issued ASU 2016-09, Improvements to Employee Share-Based Payment Accounting. The new guidance requires excess tax benefits and tax deficiencies to be recorded in the statement of operations when share-based awards vest or are settled. In addition, cash flows related to excess tax benefits will no longer be separately classified as a financing activity apart from other income tax cash flows. The standard also allows the Company to repurchase more of an employee's shares for tax withholding purposes without triggering liability accounting, clarifies that all cash payments made on an employee's behalf for withheld shares should be presented as a financing activity on the Company's statement of cash flows, and provides an accounting policy election to account for forfeitures as they occur. The Company adopted ASU 2016-09 on January 1, 2017, which resulted in a cumulative adjustment to equity of $0.2 million, and an election to account for forfeitures of share-based awards when they occur.

Recent Accounting Pronouncements Not Yet Adopted

In May 2014, the FASB issued ASU 2014-09, Revenue from Contracts with Customers (Topic 606). The new guidance requires entities to recognize revenues when promised goods or services are transferred to customers in an amount that reflects the consideration that is expected to be received in exchange for those goods or services. In addition, ASU 2014-09 provides guidance on the recognition of costs related to obtaining and fulfilling customer contracts. The new guidance is effective for 2018, including interim periods.

The Company has performed an analysis of each of its service revenue categories (CDIM, MPS and AIM) to identify any differences in the recognition, measurement, or presentation of revenue recognition and related costs. In addition, the Company analyzed its product revenue category (equipment and supplies sales). Based on its analyses, the Company expects the pattern of revenue recognition and the costs to acquire customer contracts to remain consistent with the Company's current revenue recognition policy. The Company also analyzed detailed disclosure requirements as well as any changes to the Company's systems and internal controls to support adoption of the new standard.

The Company will adopt the new standard effective January 1, 2018 under the modified retrospective method and expects the impact to its consolidated financial statements to be immaterial.

In August 2016, the FASB issued ASU 2016-15, Statement of Cash Flows (Topic 230) - Classification of Certain Cash Receipts and Cash Payments. The new guidance addresses diversity in practice for classification of certain transactions in the statement of cash flows including, but not limited to: debt prepayment or debt extinguishment costs, contingent consideration payments made after a business combination, proceeds from the settlement of insurance claims, and distributions received from equity method investees. ASU 2016-15 is effective for the Company in 2018. The adoption is not expected to have a material impact to the Company's consolidated financial statements.

In February 2016, the FASB issued Accounting Standards Codification (“ASC”) 842 (“ASC 842”), Leases. The new guidance replaces the existing guidance in ASC 840, Leases. ASC 842 requires a dual approach for lessee accounting under which a lessee would account for leases as finance leases or operating leases. Both finance leases and operating leases will result in the lessee recognizing a right-of-use (ROU) asset and a corresponding lease liability. For finance leases the lessee would recognize interest expense and amortization of the ROU asset and for operating leases the lessee would recognize a straight-line total lease expense. ASC 842 is effective for the Company January 1, 2019. While the Company is continuing to assess the potential impacts that ASC 842 will have on its consolidated financial statements, the Company believes that the most significant impact relates to its accounting for facility leases related to its service centers and office space, which are currently classified as operating leases. The Company expects the accounting for capital leases related to its machinery and equipment will remain substantially unchanged under the new standard. Due to the substantial number of operating leases that it has, the Company believes this ASU will increase assets and liabilities by the same material amount on its consolidated balance sheet. The Company's current undiscounted minimum commitments under noncancelable operating leases is approximately $64.0 million. The Company does not believe adoption of this ASU will have a significant impact to its consolidated statements of operations, equity, or cash flows.

3. GOODWILL AND OTHER INTANGIBLES

Goodwill

In accordance with ASC 350, Intangibles - Goodwill and Other, the Company assesses goodwill for impairment annually as of September 30, and more frequently if events and circumstances indicate that goodwill might be impaired.

Goodwill impairment testing is performed at the reporting unit level. Goodwill is assigned to reporting units at the date the goodwill is initially recorded. Once goodwill has been assigned to reporting units, it no longer retains its association with a particular acquisition, and all of the activities within a reporting unit, whether acquired or internally generated, are available to support the value of the goodwill.

Traditionally, goodwill impairment testing is a two-step process. Step one involves comparing the fair value of the reporting units to its carrying amount. If the carrying amount of a reporting unit is greater than zero and its fair value is greater than its carrying amount, there is no impairment. If the reporting unit's carrying amount is greater than the fair value, the second step must be completed to measure the amount of impairment, if any. Step two involves calculating an implied fair value of goodwill.

For its annual goodwill impairment test as of September 30, 2017, the Company elected to early-adopt ASU 2017-04 which simplifies subsequent goodwill measurement by eliminating step two from the goodwill impairment test. As a result, the Company compared the fair value of a reporting unit with its respective carrying value, and recognized an impairment charge for the amount by which the carrying amount exceeded the reporting unit's fair value.

At September 30, 2017, the Company's goodwill impairment analysis showed one reporting unit with goodwill attributed to it had a carrying amount which exceeded its fair value. The underperformance of the Company relative to its forecast in the third quarter of 2017, and more specifically, the underperformance against forecast of one of the Company's reporting units which previously had goodwill impairment in 2016 drove the decline in the fair value of the reporting unit. As a result, the Company recorded a pretax, non-cash charge for the three months ended September 30, 2017 to reduce the carrying value of goodwill by $17.6 million.

At June 30, 2016, the Company determined that there were sufficient indicators to trigger an interim goodwill impairment analysis. The indicators included, among other factors: (1) the underperformance against plan of the Company's reporting units, (2) a revision of the Company's forecasted future earnings, and (3) a decline in the Company's market capitalization in 2016. The Company's interim goodwill impairment analysis as of June 30, 2016 indicated that five of its eight reporting units, four in the United States and one in Canada, failed step one of the impairment analysis. Accordingly, the Company recorded a pretax, non-cash charge for the three months ended June 30, 2016 to reduce the carrying value of goodwill by $73.9 million.

Given the changing document and printing needs of the Company's customers, and the uncertainties regarding the effect on the Company's business, there can be no assurance that the estimates and assumptions made for purposes of

the Company’s goodwill impairment test in 2017 will prove to be accurate predictions of the future. If the Company’s assumptions, including forecasted EBITDA of certain reporting units, are not achieved, the Company may be required to record additional goodwill impairment charges in future periods, whether in connection with the Company’s next annual impairment testing in the third quarter of 2018, or on an interim basis, if any such change constitutes a triggering event (as defined under ASC 350, Intangibles-Goodwill and Other) outside of the quarter when the Company regularly performs its annual goodwill impairment test. It is not possible at this time to determine if any such future impairment charge would result or, if it does, whether such charge would be material.
The changes in the carrying amount of goodwill from January 1, 2016 through December 31, 2017 are summarized as follows:

	Gross Goodwill	Accumulated Impairment Loss	Net Carrying Amount
January 1, 2016	$405,558	$ 192,950	$212,608
Goodwill impairment	—	73,920	(73,920)
December 31, 2016	405,558	266,870	138,688
Goodwill impairment	—	17,637	(17,637)
December 31, 2017	$405,558	$ 284,507	$121,051

Long-lived and Other Intangible Assets

The Company periodically assesses potential impairments of its long-lived assets in accordance with the provisions of ASC 360, Accounting for the Impairment or Disposal of Long-lived Assets. An impairment review is performed whenever events or changes in circumstances indicate that the carrying value of the assets may not be recoverable. The Company groups its assets at the lowest level for which identifiable cash flows are largely independent of the cash flows of the other assets and liabilities. The Company has determined that the lowest level for which identifiable cash flows are available is the regional level, which is the operating segment level.

Factors considered by the Company include, but are not limited to, significant underperformance relative to historical or projected operating results; significant changes in the manner of use of the acquired assets or the strategy for the overall business; and significant negative industry or economic trends. When the carrying value of a long-lived asset may not be recoverable based upon the existence of one or more of the above indicators of impairment, the Company estimates the future undiscounted cash flows expected to result from the use of the asset and its eventual disposition. If the sum of the expected future undiscounted cash flows and eventual disposition is less than the carrying amount of the asset, the Company recognizes an impairment loss. An impairment loss is reflected as the amount by which the carrying amount of the asset exceeds the fair value of the asset, based on the fair value if available, or discounted cash flows, if fair value is not available. The Company assessed potential impairments of its long lived assets as of September 30, 2017 and concluded that there was no impairment.
The following table sets forth the Company’s other intangible assets resulting from business acquisitions as of December 31, 2017 and 2016 which continue to be amortized:

	December 31, 2017			December 31, 2016		
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Amortizable other intangible assets						
Customer relationships	$99,486	$ 90,805	$ 8,681	$99,104	$ 86,305	$12,799
Trade names and trademarks	20,297	19,910	387	20,281	19,878	403
	$119,783	$ 110,715	$ 9,068	$119,385	$ 106,183	$13,202

Estimated future amortization expense of other intangible assets for each of the next five fiscal years and thereafter are as follows:

2018	$3,877
2019	3,152
2020	1,540
2021	180
2022	103
Thereafter	216

$9,068

4. PROPERTY AND EQUIPMENT

Property and equipment consist of the following:

	December 31,	
	2017	2016
Machinery and equipment	$245,172	$242,805
Buildings and leasehold improvements	15,512	16,688
Furniture and fixtures	2,254	2,434
	262,938	261,927
Less accumulated depreciation	(198,693)	(201,192)
	$64,245	$60,735

Depreciation expense was $29.0 million, $26.9 million, and $28.0 million for 2017, 2016 and 2015, respectively.

5. LONG-TERM DEBT

Long-term debt consists of the following:

	December 31,	
	2017	2016
Term Loan maturing 2022 net of deferred financing fees of $757 and $1,039; 3.12% and 2.86% interest rate at December 31, 2017 and 2016	$56,993	$119,961
Revolving Loans; 3.64% and 2.64% interest rate at December 31, 2017 and 2016	42,250	950
Various capital leases; weighted average interest rate of 5.0% and 5.6% at December 31, 2017 and 2016; principal and interest payable monthly through December 2022	45,157	36,231
Various other notes payable with a weighted average interest rate of 10.7% at December 31, 2017 and 2016; principal and interest payable monthly through November 2019	17	31
	144,417	157,173
Less current portion	(20,791)	(13,773)
	$123,626	$143,400

Credit Agreement

On July 14, 2017, the Company amended its Credit Agreement which was originally entered into on November 20, 2014 with Wells Fargo Bank, National Association, as administrative agent and the lenders party thereto.

Prior to being amended, the Credit Agreement provided for the extension of term loans (“Term Loans”) in an aggregate principal amount of $175.0 million. In addition, prior to being amended, the Credit Agreement provided for the extension of revolving loans (“Revolving Loans”) in an aggregate principal amount not to exceed $30.0 million. The amendment increased the maximum aggregate principal amount of Revolving Loans under the agreement from $30 million to $80 million and reduced the outstanding principal amount of the Term Loan under the agreement to $60 million. Upon the execution of the amendment to the Credit Agreement, the total principal amount outstanding under the agreement remained unchanged at $110.0 million. As a result of the amendment to the Credit Agreement, the principal of the Term Loan amortizes at an annual rate of 7.5% during the first and second years following the date of the amendment and at an annual rate of 10% during the third, fourth and fifth years following the date of the amendment, with any remaining balance payable upon the maturity date. The amendment also extended the maturity date for both the Revolving Loans and the Term Loans until July 14, 2022.

As of December 31, 2017, the Company's borrowing availability of Revolving Loans under the $80.0 million Revolving Loan commitment was $35.9 million, after deducting outstanding letters of credit of $1.8 million and outstanding Revolving Loans of $42.3 million.

Loans borrowed under the Credit Agreement bear interest, in the case of LIBOR rate loans, at a per annum rate equal to the applicable LIBOR rate, plus a margin ranging from 1.25% to 2.25%, based on the Company’s Total Leverage Ratio (as defined in the Credit Agreement). Loans borrowed under the Credit Agreement that are not LIBOR rate loans bear interest at a per annum rate equal to (i) the greatest of (A) the Federal Funds Rate plus 0.50%, (B) the one month LIBOR rate plus 1.00% per annum, and (C) the rate of interest announced, from time to time, by Wells Fargo

Bank, National Association as its “prime rate,” plus (ii) a margin ranging from 0.25% to 1.25%, based on the Company's Total Leverage Ratio. The amendment reduced the rate of interest payable on the loans borrowed under the Credit Agreement by 0.25%.

The Company pays certain recurring fees with respect to the credit facility, including administration fees to the administrative agent.

Subject to certain exceptions, including in certain circumstances, reinvestment rights, the loans extended under the Credit Agreement are subject to customary mandatory prepayment provisions with respect to: the net proceeds from certain asset sales; the net proceeds from certain issuances or incurrences of debt (other than debt permitted to be incurred under the terms of the Credit Agreement); the net proceeds from certain issuances of equity securities; and net proceeds of certain insurance recoveries and condemnation events of the Company.

The Credit Agreement contains customary representations and warranties, subject to limitations and exceptions, and customary covenants restricting the ability (subject to various exceptions) of the Company and its subsidiaries to: incur additional indebtedness (including guarantee obligations); incur liens; sell certain property or assets; engage in mergers or other fundamental changes; consummate acquisitions; make investments; pay dividends, other distributions or repurchase equity interest of the Company or its subsidiaries; change the nature of their business; prepay or amend certain indebtedness; engage in certain transactions with affiliates; amend their organizational documents; or enter into certain restrictive agreements. In addition, the Credit Agreement contains financial covenants which requires the Company to maintain (i) at all times, a Total Leverage Ratio in an amount not to exceed 3.25 to 1.00; and (ii) a Fixed Charge Coverage Ratio (as defined in the Credit Agreement), as of the last day of each fiscal quarter, an amount not less than 1.15 to 1.00.

The Credit Agreement contains customary events of default, including with respect to: nonpayment of principal, interest, fees or other amounts; failure to perform or observe covenants; material inaccuracy of a representation or warranty when made; cross-default to other material indebtedness; bankruptcy, insolvency and dissolution events; inability to pay debts; monetary judgment defaults; actual or asserted invalidity or impairment of any definitive loan documentation, repudiation of guaranties or subordination terms; certain ERISA related events; or a change of control.

The obligations of the Company's subsidiary that is the borrower under the Credit Agreement are guaranteed by the Company and each other United States domestic subsidiary of the Company. The Credit Agreement and any interest rate protection and other hedging arrangements provided by any lender party to the Credit facility or any affiliate of such a lender are secured on a first priority basis by a perfected security interest in substantially all of the borrower's, the Company's and each guarantor's assets (subject to certain exceptions).

Prior to entering into the amendment to our Credit Agreement in the third quarter of 2017, the Company had paid $68.2 million in aggregate principal on its Credit Agreement. Principal prepayments on the Credit Agreement of $14.2 million in 2017 resulted in a loss on extinguishment and modification of debt of $0.2 million for 2017.

Minimum future maturities of long-term debt, excludes deferred financing fees, and capital lease obligations as of December 31, 2017 are as follows:

	Long-Term Debt	Capital Lease Obligations
Year ending December 31:		
2018	$ 4,513	$ 16,278
2019	5,254	12,544
2020	6,000	9,103
2021	6,000	5,708
2022	78,250	1,524
Thereafter	—	—
	$ 100,017	$ 45,157

6. COMMITMENTS AND CONTINGENCIES

The Company leases machinery, equipment, and office and operational facilities under non-cancelable operating lease agreements. Certain lease agreements for the Company's facilities generally contain renewal options and provide for annual increases in rent based on the local Consumer Price Index. The following is a schedule of the Company’s future minimum lease payments as of December 31, 2017:

	Third Party	Related Party	Total
Year ending December 31:			
2018	$17,766	$504	$18,270
2019	11,130	514	11,644
2020	8,726	514	9,240
2021	5,857	514	6,371
2022	5,222	514	5,736
Thereafter	12,223	514	12,737
	$60,924	$3,074	$63,998

Total rent expense under operating leases, including month-to-month rentals, amounted to $22.1 million, $23.7 million, and $24.0 million during 2017, 2016 and 2015, respectively. Under certain lease agreements, the Company is responsible for other costs such as property taxes, insurance, maintenance, and utilities.

The Company leased several of its facilities under lease agreements with entities owned by certain of its current and former executive officers which expire through December 2023. The rental payments on these facilities amounted to $0.5 million, $0.5 million and $0.5 million during 2017, 2016 and 2015, respectively.

The Company has entered into indemnification agreements with each director and named executive officer which provide indemnification under certain circumstances for acts and omissions which may not be covered by any directors' and officers' liability insurance. The indemnification agreements may require the Company, among other things, to indemnify its officers and directors against certain liabilities that may arise by reason of their status or service as officers and directors (other than liabilities arising from willful misconduct of a culpable nature), to advance their expenses incurred as a result of any proceeding against them as to which they could be indemnified, and to obtain officers' and directors' insurance if available on reasonable terms. There have been no events to date which would require the Company to indemnify its officers or directors.

The Company is involved in various additional legal proceedings and other legal matters from time to time in the normal course of business. The Company does not believe that the outcome of any of these matters will have a material effect on its consolidated financial position, results of operations or cash flows.

7. INCOME TAXES

In December 2017, the Tax Cuts and Jobs Act (the "TCJA") was enacted. The TCJA includes a number of changes to existing U.S. tax laws that impact the Company. This includes a reduction to the federal corporate tax rate from 35 percent to 21 percent for the tax years beginning after December 31, 2017. The TCJA also provides for a one-time transition tax on certain foreign earnings as well as changes beginning in 2018 regarding the deductibility of interest expense, additional limitations on executive compensation, meals and entertainment expenses and the inclusion of certain foreign earnings in U.S. taxable income.

The Company recognized $11.9 million of tax expense in the fourth quarter of 2017 primarily due to the reduction in its net U.S. deferred tax assets for the 14% decrease in the U.S. federal statutory rate. In accordance with Staff Accounting Bulletin No. 118, which provides guidance on accounting for the impact of the TCJA, in effect allowing an entity to use a methodology similar to the measurement period in a business combination, as of March 5, 2018, the Company has not completed its accounting for the tax effects of the TCJA. As such, the Company has recorded a reasonable estimate of the impact from the TCJA, but is still analyzing the TCJA and refining its calculations. Additionally, further guidance from the IRS, SEC, or the FASB could result in changes to the Company's accounting for the tax effects of the TCJA. The accounting is expected to be completed by the time the calendar year 2017 federal corporate tax income tax return is filed in late 2018.

The following table includes the consolidated income tax provision for federal, state, and foreign income taxes related to the Company's total earnings before taxes for 2017, 2016 and 2015:

	Year Ended December 31,		
	2017	2016	2015
Current:			
Federal	$(170)	$42	$219
State	139	89	364
Foreign	438	165	481
	407	296	1,064
Deferred:			
Federal	15,669	(3,236)	(56,750)
State	(751)	(1,519)	(13,705)
Foreign	(81)	95	(41)
	14,837	(4,660)	(70,496)
Income tax provision (benefit)	$15,244	$(4,364)	$(69,432)

The Company's foreign earnings before taxes were $1.0 million, $0.7 million and $1.1 million for 2017, 2016 and 2015, respectively.
The consolidated deferred tax assets and liabilities consist of the following:

	December 31,	
	2017	2016
Deferred tax assets:		
Financial statement accruals not currently deductible	$2,339	$2,692
Accrued vacation	848	1,185
Deferred revenue	185	280
State taxes	29	48
Fixed assets	4,113	6,555
Goodwill and other identifiable intangibles	12,848	22,291
Stock-based compensation	4,545	6,072
Federal tax net operating loss carryforward	17,258	27,759
State tax net operating loss carryforward, net	5,951	4,996
State tax credits, net	1,164	958
Foreign tax credit carryforward	517	517
Foreign tax net operating loss carryforward	616	499
Federal alternative minimum tax	104	284
Interest rate hedge	—	131
Gross deferred tax assets	50,517	74,267
Less: valuation allowance	(2,366)	(1,304)
Net deferred tax assets	$48,151	$72,963
Deferred tax liabilities:		
Goodwill and other identifiable intangibles	$(19,972)	$(30,296)
Outside basis in foreign entities	(150)	—
Net deferred tax assets	$28,029	$42,667

A reconciliation of the statutory federal income tax rate to the Company's effective tax rate is as follows:

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	Year Ended December 31,		
	2017	2016	2015
Statutory federal income tax rate	35 %	35 %	35 %
State taxes, net of federal benefit	—	2	5
Foreign taxes	(4)	—	—
Valuation allowance	(17)	—	(289)
Non-deductible expenses and other	(5)	1	1
Section 162(m) limitation	(1)	(1)	1
Tax Cuts and Jobs Act enacted on December 22, 2017	(195)	—	—
Discrete items for state taxes	(4)	(1)	(1)
Non-deductible portion of goodwill impairment	(58)	(28)	—
Effective income tax rate	(249)%	8 %	(248)%

In accordance with ASC 740-10, Income Taxes, the Company evaluates the need for deferred tax asset valuation allowances based on a more likely than not standard. The ability to realize deferred tax assets depends on the ability to generate sufficient taxable income within the carryback or carryforward periods provided for in the tax law for each applicable tax jurisdiction. The Company considers the following possible sources of taxable income when assessing the realization of deferred tax assets:

•Future reversals of existing taxable temporary differences;
•Future taxable income exclusive of reversing temporary differences and carryforwards;
•Taxable income in prior carryback years; and
•Tax-planning strategies.

The assessment regarding whether a valuation allowance is required or should be adjusted also considers all available positive and negative evidence factors, including but not limited to:

•Nature, frequency, and severity of recent losses;
•Duration of statutory carryforward periods;
•Historical experience with tax attributes expiring unused; and
•Near- and medium-term financial outlook.

The Company utilizes a rolling three years of actual and current year anticipated results as the primary measure of cumulative income/losses in recent years, as adjusted for permanent differences. The evaluation of deferred tax assets requires judgment in assessing the likely future tax consequences of events that have been recognized in the Company's financial statements or tax returns and future profitability. The Company's accounting for deferred tax consequences represents its best estimate of those future events. Changes in the Company's current estimates, due to unanticipated events or otherwise, could have a material effect on its financial condition and results of operations. At September 30, 2015, as a result of sustained profitability in the U.S. evidenced by three years of earnings and forecasted continuing profitability, the Company determined it was more likely than not that future earnings would be sufficient to realize certain of its deferred tax assets in the U.S. Accordingly the Company reversed most of its U.S. valuation allowance, resulting in non-cash income tax benefit of $80.7 million for the year ended December 31, 2015. The Company has a $2.4 million valuation allowance against certain deferred tax assets as of December 31, 2017, which increased by $1.1 million in 2017 primarily due to the provisions in the TCJA.

Based on the Company’s current assessment, the remaining net deferred tax assets as of December 31, 2017 are considered more likely than not to be realized. The valuation allowance of $2.4 million may be increased or reduced as conditions change or if the Company is unable to implement certain available tax planning strategies. The realization of the Company’s net deferred tax assets ultimately depends on future taxable income, reversals of existing taxable temporary differences or through a loss carry back. The Company has income tax receivables of $25 thousand as of December 31, 2017 included in other current assets in its consolidated balance sheet primarily related to income tax refunds for prior years.

As of December 31, 2017, the Company had approximately $82.2 million of consolidated federal, $96.6 million of state and $3.3 million of foreign net operating loss and charitable contribution carryforwards available to offset future taxable income, respectively. The federal net operating loss carryforward began in 2011 and will begin to expire in varying amounts between 2031 and 2037. The charitable contribution carryforward began in 2015 and will begin to expire in varying amounts between 2020 and 2022. The state net operating loss carryforwards expire in varying amounts between 2018 and 2037. The foreign net operating loss carryforwards begin to expire in varying amounts beginning in 2022.

The Company or one of its subsidiaries files income tax returns in the U.S. federal jurisdiction, and various states and foreign jurisdictions. With few exceptions, the Company is no longer subject to U.S. federal, state and local, or non-U.S. income tax examinations by tax authorities for years before 2011.

There were no unrecognized tax benefits as of and for the years ended December 31, 2017 or 2016, or 2015.

8. EMPLOYEE STOCK PURCHASE PLAN AND STOCK PLAN

Employee Stock Purchase Plan

Under the Company’s Employee Stock Purchase Plan (the “ESPP”) eligible employees may purchase up to a calendar year maximum per eligible employee of the lesser of (i) 2,500 shares of common stock, or (ii) a number of shares of common stock having an aggregate fair market value of $25 thousand as determined on the date of purchase at 85% of the fair market value of such shares of common stock on the applicable purchase date. The compensation expense in connection with the ESPP in 2017, 2016, and 2015 was $30 thousand, $21 thousand and $19 thousand, respectively.

Employees purchased the following shares in the periods presented:

	Year Ended December 31,		
	2017	2016	2015
Shares purchased	47	33	21
Average price per share	$ 2.83	$ 3.59	$ 5.40

Stock Plan

The Company's Stock Plan provides for the grant of incentive and non-statutory stock options, stock appreciation rights, restricted stock, restricted stock units, stock bonuses and other forms of awards granted or denominated in the Company's common stock or units of the Company's common stock, as well as cash bonus awards to employees, directors and consultants of the Company. The Company's Stock Plan authorizes the Company to issue up to 3.5 million shares of common stock. At December 31, 2017, 0.7 million shares remain available for issuance under the Stock Plan.

Stock options granted under the Company's Stock Plan generally expire no later than ten years from the date of grant. Options generally vest and become fully exercisable over a period of three to four years from date of award, except that options granted to non-employee directors may vest over a shorter time period. The exercise price of options must be equal to at least 100% of the fair market value of the Company’s common stock on the date of grant. The Company allows for cashless exercises of vested outstanding options.

During 2017 and 2016, the Company granted options to acquire a total of 526 thousand shares and 570 thousand shares, respectively, of the Company's common stock to certain key employees with an exercise price equal to the fair market value of the Company’s common stock on the date of grant. The granted stock options vest annually over three to four years from the grant date and expire 10 years after the date of grant.

The following is a further breakdown of the stock option activity under the Stock Plan:

	Year Ended December 31, 2016			
	Shares	Weighted Average Exercise Price	Weighted Average Contractual Life (In years)	Aggregate Intrinsic Value (In thousands)
Outstanding at December 31, 2015	3,953	$ 5.84		
Granted	570	$ 3.74		
Exercised	(36)	$ 2.70		
Forfeited/Cancelled	(186)	$ 5.77		
Outstanding at December 31, 2016	4,301	$ 5.44		
Granted	526	$ 4.67		
Exercised	(34)	$ 2.82		
Forfeited/Cancelled	(58)	$ 6.21		
Outstanding at December 31, 2017	4,735	$ 5.36	5.44	$ 28
Vested or expected to vest at December 31, 2017	4,735	$ 5.36	5.44	$ 28
Exercisable at December 31, 2017	3,691	$ 5.46	4.57	$ 26

The aggregate intrinsic value in the table above represents the total pretax intrinsic value (the difference between the closing stock price on December 31, 2017 and the exercise price, multiplied by the number of in-the-money options) that would have been received by the option holders had all the option holders exercised their options on December 31, 2017. This amount changes based on the fair market value of the common stock. Total intrinsic value of options exercised during the years ended December 31, 2017, 2016 and 2015 was $63 thousand, $42 thousand and $0.6 million, respectively.

A summary of the Company's non-vested stock options as of December 31, 2017, and changes during the year then ended is as follows:

Non-vested Options	Shares	Weighted Average Grant Date Fair Market Value
Non-vested at December 31, 2016	1,046	$ 3.15
Granted	526	$ 2.57
Vested	(510)	$ 3.35
Forfeited/Cancelled	(18)	$ 2.83
Non-vested at December 31, 2017	1,044	$ 2.77

The following table summarizes certain information concerning outstanding options at December 31, 2017:

Range of Exercise Price	Options Outstanding at December 31, 2017
$2.37 – $2.70	1,330
$3.65 – $4.82	1,020
$5.37 – $7.19	1,001
$8.20 – $9.09	1,384
$2.37 – $9.09	4,735

Restricted Stock

The Stock Plan provides for automatic grants of restricted stock awards to non-employee directors of the Company, as of each annual meeting of the Company's stockholders having a then fair market value equal to $60 thousand.

In 2017, the Company granted 306 thousand shares of restricted stock to certain key employees at a price per share equal to the closing price of the Company's common stock on the date the restricted stock was granted. The granted stock options and restricted stock vest annually over three years from the grant date. In addition, the Company granted approximately 16 thousand

shares of restricted stock to each of the Company's six non-employee members of its board of directors at a price per share equal to the closing price of the Company's common stock on the date the restricted stock was granted. The restricted stock vests on the one-year anniversary of the grant date.
In 2016, the Company granted 130 thousand shares of restricted stock to certain key employees at a price per share equal to the closing price of the Company's common stock on the date the restricted stock was granted. The granted stock options and restricted stock vest annually over three years from the grant date. In addition, the Company granted approximately 14 thousand shares of restricted stock to each of the Company's seven non-employee members of its board of directors at a price per share equal to the closing price of the Company's common stock on the date the restricted stock was granted. The restricted stock vests on the one -year anniversary of the grant date.
In 2015, the Company granted 116 thousand shares of restricted stock to certain key employees at a price per share equal to the closing price of the Company's common stock on the date the restricted stock was granted. The restricted stock vests annually over three to four years from the grant date. In addition, the Company granted 7 thousand shares of restricted stock to each of the Company's six non-employee members of its board of directors at a price per share equal to the closing price of the Company's common stock on the date the restricted stock was granted. The restricted stock vests on the one-year anniversary of the grant date.

A summary of the Company’s non-vested restricted stock as of December 31, 2017, and changes during the year then ended is as follows:

Non-vested Restricted Stock	Shares	Weighted Average Grant Date Fair Market Value
Non-vested at December 31, 2016	388	$ 5.71
Granted	403	$ 4.49
Vested	(208)	$ 5.35
Forfeited/Cancelled	—	$ —
Non-vested at December 31, 2017	583	$ 4.99

The total fair value of restricted stock awards vested during the years ended December 31, 2017, 2016 and 2015 was $1.0 million, $0.4 million and $1.6 million, respectively.

9. RETIREMENT PLANS

The Company sponsors a 401(k) Plan, which covers substantially all employees of the Company who have attained age 21. Under the Company’s 401(k) Plan, eligible employees may contribute up to 75% of their annual eligible compensation (or in the case of highly compensated employees, up to 6% of their annual eligible compensation), subject to contribution limitations imposed by the Internal Revenue Service. The Company matches 20% of an employee’s contributions, up to a total of 4% of that employee’s compensation. An independent third party administers the Company’s 401(k) Plan. The Company's total expense under these plans amounted to $0.4 million annually during 2017, 2016 and 2015.

10. FAIR VALUE MEASUREMENTS

In accordance with ASC 820, Fair Value Measurement, the Company has categorized its assets and liabilities that are measured at fair value into a three-level fair value hierarchy as set forth below. If the inputs used to measure fair value fall within different levels of the hierarchy, the categorization is based on the lowest level input that is significant to the fair value measurement. The three levels of the hierarchy are defined as follows:
Level 1-inputs to the valuation methodology are quoted prices (unadjusted) for identical assets or liabilities in active markets.
Level 2-inputs to the valuation methodology include quoted prices for similar assets and liabilities in active markets, and inputs that are observable for the asset or liability, either directly or indirectly, for substantially the full term of the financial instrument.
Level 3-inputs to the valuation methodology are unobservable and significant to the fair value measurement.

The following table summarizes the bases used to measure certain assets and liabilities at fair value on a nonrecurring basis in the consolidated financial statements as of and for the year ended December 31, 2017 and 2016:

	Significant Other Unobservable Inputs			
	December 31, 2017		December 31, 2016	
	Level 3	Total Losses	Level 3	Total Losses
Nonrecurring Fair Value Measure				
Goodwill	$121,051	$ 17,637	$138,688	$ 73,920

In accordance with ASC 350, goodwill was written down to its implied fair value of $121.1 million as of September 30, 2017, resulting in an impairment charge of $17.6 million during 2017. As of June 30, 2016, goodwill was written down to its implied fair value of $138.7 million resulting in an impairment charge of $73.9 million during 2016. See Note 3, "Goodwill and Other Intangibles " for further information regarding the process of determining the implied fair value of goodwill and change in goodwill.

The following table summarizes the bases used to measure certain assets and liabilities at fair value on a recurring basis in the consolidated financial statements as of and for the year ended December 31, 2017 and 2016:

	Significant Other Unobservable Inputs					
	December 31, 2017			December 31, 2016		
	Level 2	Level 3	Total Losses	Level 2	Level 3	Total Losses
Recurring Fair Value Measure						
Interest rate cap contracts	$—	$—	$ —	$39	$—	$ —
Contingent purchase price consideration for acquired businesses	$—	$205	$ —	$—	$402	$ —

The Company determines the fair value of its interest rate cap contracts based on observable interest rate yield curves and represent the expected discounted cash flows underlying the financial instruments.

The Company recognizes liabilities for future earnout obligations on business acquisitions, or contingent purchase price consideration for acquired businesses, at their fair value based on discounted projected payments on such obligations. The inputs to the valuation, which are level 3 inputs within the fair value hierarchy, are projected sales to be provided by the acquired businesses based on historical sales trends for which earnout amounts are contractually based. Based on the Company's assessment as of December 31, 2017, the estimated contractually required earnout amounts would be achieved.

The following table presents the change in the Level 3 contingent purchase price consideration liability for 2017 and 2016:

	Year Ended December 31,	
	2017	2016
Beginning balance	$402	$1,059
Additions related to acquisitions	27	104
Payments	(274)	(571)
Adjustments included in earnings	34	(171)
Foreign currency translation adjustments	16	(19)
Ending balance	$205	$402