

PROSPECTUS SUPPLEMENT NO. 1
(to Prospectus dated October 24, 2019)

650,736 Shares

COMMON STOCK

This prospectus supplement supplements the prospectus dated October 24, 2019 (as supplemented to date, the “Prospectus”), which forms a part of our Registration Statement on Form S-1 (Registration No. 333-234214). This prospectus supplement is being filed to update and supplement the information in the Prospectus with information contained in our Annual Report on Form 10-K for the fiscal year ended September 30, 2019, filed with the Securities and Exchange Commission on December 19, 2019 (the “Annual Report”). Accordingly, we have attached the Annual Report to this prospectus supplement.

The Prospectus and this prospectus supplement relate solely to 650,736 shares of common stock, par value \$0.01 per share, of Cerecence Inc., which we refer to as our common stock, which may be offered for resale from time to time by certain stockholders named under the heading “Principal and Selling Stockholders” in the Prospectus, whom we refer to as the selling stockholders. The shares of our common stock offered under the Prospectus, as supplemented by this prospectus supplement, may be resold by the selling stockholders at prevailing market prices, at prices different than prevailing market prices or at privately negotiated prices and, accordingly, we cannot determine the price or prices at which shares of our common stock may be resold. The selling stockholders may sell shares through agents they select or through underwriters and dealers they select. The selling stockholders also may sell shares directly to investors. For more information, see the section entitled “Plan of Distribution” in the Prospectus. We do not know if, when or in what amounts a selling stockholder may offer shares of our common stock for resale. The selling stockholders may resell all, some or none of the shares of our common stock offered by the Prospectus, as supplemented by this prospectus supplement, in one or multiple transactions.

This prospectus supplement should be read in conjunction with the Prospectus. This prospectus supplement updates and supplements the information in the Prospectus. If there is any inconsistency between the information in the Prospectus and this prospectus supplement, you should rely on the information in this prospectus supplement.

Our common stock is listed on the NASDAQ Stock Market LLC, or NASDAQ, under the symbol “CRNC.” On December 19, 2019, the closing sales price of our common stock as reported on NASDAQ was \$20.73 per share.

Investing in our common stock involves risks. Before making a decision to invest in our common stock, you should carefully consider the information referred to under the heading “Risk Factors” beginning on page 13 of the Prospectus.

Neither the Securities and Exchange Commission nor any state or other securities commission has approved or disapproved of these securities or determined if the Prospectus or prospectus supplement is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus supplement is December 19, 2019.

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

FORM 10-K

(Mark One)

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

For the fiscal year ended September 30, 2019

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 For the transition period from _____ to _____

Commission File Number: 001-39030

CERENCE INC.

(Exact name of Registrant as specified in its Charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

15 Wayside Road

Burlington, Massachusetts

(Address of principal executive offices)

83-4719946

(I.R.S. Employer
Identification No.)

01803

(Zip Code)

Registrant's telephone number, including area code: (857) 362-7300

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common stock, par value \$0.01 per share	CRNC	The Nasdaq Global Select Market

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

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

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

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

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

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

Large accelerated filer

Accelerated filer

Non-accelerated filer

Smaller reporting company

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use 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 Act). YES NO

As of March 29, 2019, the last business day of the Registrant's most recently completed second quarter, there was no established public market for the registrant's common stock, par value \$0.01 per share.

The number of shares of Registrant's common stock outstanding as of December 12, 2019 was 36,398,349.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Registrant's definitive Proxy Statement to be filed with the Securities and Exchange Commission in connection with the Registrant's 2020 Annual Meeting of Stockholders are incorporated by reference into Part III of this Form 10-K. Such Proxy Statement will be filed within 120 days of the Registrant's fiscal year ended September 30, 2019.

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CAUTIONARY STATEMENT CONCERNING FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K, or Form 10-K, filed by Cerence Inc. together with its consolidated subsidiaries, “Cerence” or the “Company,” or “we,” “us” or “our” unless the context indicates otherwise, contains “forward-looking statements” that involve risks and uncertainties. These statements can be identified by the fact that they do not relate strictly to historical or current facts, but rather are based on current expectations, estimates, assumptions and projections about our industry and our business and financial results. Forward-looking statements often include words such as “anticipates,” “estimates,” “expects,” “projects,” “forecasts,” “intends,” “plans,” “continues,” “believes,” “may,” “will,” “goals” and words and terms of similar substance in connection with discussions of future operating or financial performance. As with any projection or forecast, forward-looking statements are inherently susceptible to uncertainty and changes in circumstances. Our actual results may vary materially from those expressed or implied in our forward-looking statements. Accordingly, undue reliance should not be placed on any forward-looking statement made by us or on our behalf. Although we believe that the forward-looking statements contained in this Form 10-K are based on reasonable assumptions, you should be aware that many factors could affect our actual financial results or results of operations and could cause actual results to differ materially from those in such forward-looking statements, including but not limited to:

- the highly competitive and rapidly changing market in which we operate;
- adverse conditions in the automotive industry or the global economy more generally;
- our strategy to increase cloud services and fluctuations in our operating results;
- escalating pricing pressures from our customers;
- our failure to win, renew or implement service contracts;
- the cancellation or postponement of service contracts after a design win;
- the loss of business from any of our largest customers;
- transition difficulties with our first senior management team;
- inability to recruit and retain qualified personnel;
- cybersecurity and data privacy incidents that damage client relations;
- economic, political, regulatory, foreign exchange and other risks of international operations;
- unforeseen U.S. and foreign tax liabilities;
- the failure to protect our intellectual property or allegations that we have infringed the intellectual property of others;
- defects in our software products that result in lost revenue, expensive correction or claims against us;
- our inability to quickly respond to changes in technology and to develop our intellectual property into commercially viable products;
- a significant interruption in the supply or maintenance of our third-party hardware, software, services or data; and
- certain factors discussed elsewhere in this Form 10-K.

These and other factors are more fully discussed in the “Risk Factors” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations” sections and elsewhere in this Form 10-K. These risks could cause actual results to differ materially from those implied by forward-looking statements in this Form 10-K. Even if our results of operations, financial condition and liquidity and the development of the industry in which we operate are consistent with the forward-looking statements contained in this Form 10-K, those results or developments may not be indicative of results or developments in subsequent periods.

Any forward-looking statements made by us in this Form 10-K speak only as of the date on which they are made. We are under no obligation to, and expressly disclaim any obligation to, update or alter our forward-looking statements, whether as a result of new information, subsequent events or otherwise, except as required by law.

PART I

Item 1. Business.

Overview

Cerence builds automotive cognitive assistance solutions to power natural and intuitive interactions between automobiles, drivers and passengers, and the broader digital world. We are a premier provider of AI-powered assistants and innovations for connected and autonomous vehicles, including one of the world's most popular software platforms for building automotive virtual assistants, such as "*Hey BMW*" and "*Ni hao Banma*". Our customers include all major automobile original equipment manufacturers, or OEMs, or their tier 1 suppliers worldwide, including BMW, Daimler, FCA Group, Ford, Geely, GM, Renault-Nissan, SAIC, Toyota, Volkswagen Group, Aptiv, Bosch, Continental, DENSO TEN and Harman. We deliver our solutions on a white-label basis, enabling our customers to deliver customized virtual assistants with unique, branded personalities and ultimately strengthening the bond between automobile brands and end users. Our vision is to enable a more enjoyable, safer journey for everyone.

Our platform utilizes industry-leading speech recognition, natural language understanding, speech signal enhancement and acoustic modeling technology. Automotive virtual assistants built with our platform can enable a wide variety of modes of human-vehicle interaction, including speech, touch, handwriting, gaze tracking and gesture recognition, and can support the integration of third-party virtual assistants into the in-vehicle experience.

The market for automotive cognitive assistance is rapidly expanding. The proliferation of smartphones and smart speakers has encouraged consumers to rely on a growing number of virtual assistants and special-purpose bots for various tasks such as controlling entertainment systems and checking the news. Automobile drivers and passengers increasingly expect hands-free access to virtual assistants as part of the mobility experience, with common use cases in a variety of categories including mobility domains such as navigation, voice-activated texts, and telephone communication, automobile domains, such as automobile user guides, and ignition on-off, and generic domains, such as entertainment. To meet the increasing demand for automotive cognitive assistance and to offer differentiated mobility experiences, OEMs and suppliers are building proprietary virtual assistants into an increasing proportion of their vehicles. We believe that this trend will continue and that consumer appetite for automotive cognitive assistance will grow further as vehicles become more autonomous and drivers pursue new forms of human-vehicle engagement previously not feasible during vehicle operation.

Our software platform is a market leader for building integrated, branded and differentiated virtual assistants for automobiles. As a unified platform and common interface for automotive cognitive assistance, our software platform provides OEMs and suppliers with an important control point with respect to the mobility experience and their brand value. Our platform is fully customizable and designed to support our customers in creating their own ecosystem in the automobile and transforming the vehicle into a hub for numerous connected devices and services. Virtual assistants built with our software platform can address user requests across a wide variety of categories, such as navigation, control, media, communication and tools. Our software platform is comprised of edge computing and cloud-connected software components and a software framework linking these components together under a common programming interface. We implement our software platform for our customers through our professional services organization, which works with OEMs and suppliers to optimize our software for the requirements, configurations and acoustic characteristics of specific vehicle models.

We generate revenue primarily by selling software licenses and cloud-connected services. In addition, we generate professional services revenue from our work with OEMs and suppliers during the design, development and deployment phases of the vehicle model lifecycle and through maintenance and enhancement projects. Through our over 20 years in the automotive industry, we have developed longstanding industry relationships and benefit from incumbency. We have existing relationships with all major OEMs or their tier 1 suppliers, and while our customer contracts vary, they generally represent multi-year engagements, giving us visibility into future revenue. We have master agreements or similar commercial arrangements in place with many of our customers, supporting customer retention over the long term.

Our fixed backlog includes \$353.3 million of future revenue related to remaining performance obligations and \$55.6 million of contractual commitments which have not yet been invoiced, was \$408.9 million as of September 30, 2019. Our variable backlog includes estimated future revenue from variable forecasted royalties related to our embedded and connected businesses, was \$955.7 million as of September 30, 2019. Our estimation of forecasted royalties is based on our royalty rates for embedded and connected technologies from expected car shipments under our existing contracts over the term of the programs. Anticipated shipments are based on historical shipping experience and current customer projections that management believes are reasonable as of the date of this Form 10-K. Both our embedded and connected technologies are priced and sold on a per-vehicle or device basis, where we receive a single fee for either or both the embedded license and the connected service term. However, our fixed and variable backlog may not be indicative of our actual future revenue. The revenue we actually recognize is subject to several factors, including the number and timing of vehicles our customers ship, potential terminations or changes in scope of customer contracts and currency fluctuations. As of September 30, 2019, we estimate that our adjusted backlog includes \$408.9 million of fixed backlog and \$955.7 million of variable backlog, was approximately \$1.36 billion, with approximately 50% of revenue expected to be recognized over the next three years.

Our solutions have been installed in more than 325 million automobiles to date, including over 48 million new vehicles in fiscal 2019 alone. Based on royalty reports provided by our customers and third-party reports of total vehicles shipped worldwide, we estimate that approximately 52% of all shipped cars during the fiscal year ended September 30, 2019 included Cerence technologies, compared to approximately 48% for the fiscal year ended September 30, 2018. Cerence hybrid solutions shipped on approximately 7.8 million vehicles during the fiscal year ended September 30, 2019, an increase of approximately 37% compared to approximately 5.7 million vehicles for the fiscal year ended September 30, 2018. In aggregate, over 60 automobile brands worldwide use our solutions, covering over 70 languages and dialects, including English, German, Spanish, French, Mandarin, Cantonese and Shanghainese.

In fiscal 2019, we generated revenue of \$303.3 million, an increase of 9.5% compared to \$277.0 million for the fiscal year ended September 30, 2018. We recorded net income of \$100.3 million for the fiscal year ended September 30, 2019, an increase of 1604.9% compared to \$5.9 million for the fiscal year ended September 30, 2018. For each of the periods presented, our business was wholly-owned by Nuance Communications, Inc. ("Nuance"). The financial information included herein may not necessarily reflect our results of operations in the future or what our results of operations would have been had we been an independent, publicly traded company during the periods presented.

History and Corporate Information

On October 1, 2019, or the Distribution Date, Nuance, a leading provider of speech and language solutions for businesses and consumers around the world, completed the legal and structural separation and distribution to its stockholders of all of the outstanding shares of our common stock, and its consolidated subsidiaries, in a tax free spin-off (which we refer to as the Spin-Off). The distribution was made in the amount of one share of our common stock for every eight shares of Nuance common stock (which we refer to as the Distribution) owned by Nuance's stockholders as of 5:00 p.m. Eastern Time on September 17, 2019, the record date of the Distribution.

In connection with the Distribution, on September 30, 2019, we filed an Amended and Restated Certificate of Incorporation, or the Charter, with the Secretary of State of the State of Delaware, which became effective on October 1, 2019. Our Amended and Restated By-laws also became effective on October 1, 2019. On October 2, 2019, our common stock began regular-way trading on the Nasdaq Global Select Market under the ticker symbol CRNC.

Our principal executive offices are located at 15 Wayside Road, Burlington, Massachusetts 01803 and our telephone number at that address is (857) 362-7300. Our website is www.cerence.com. We are not including the information contained in our website as part of, or incorporating it by reference into, this Form 10-K. We make available free of charge through our website our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to these reports, as soon as reasonably practicable after we electronically file these materials with, or otherwise furnish them to, the Securities and Exchange Commission, or the SEC. The SEC maintains an Internet website (<https://www.sec.gov>) that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC.

Our Capabilities

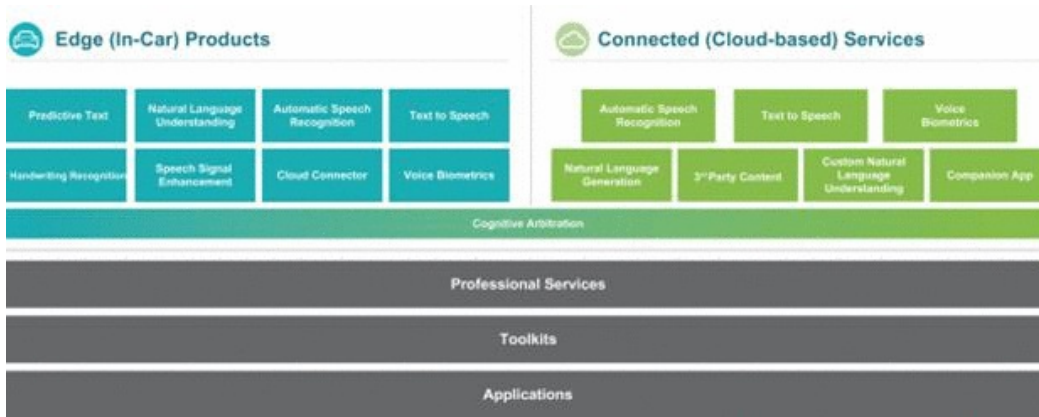
Our mission is to empower the automotive ecosystem with digital platform solutions for connected and autonomous vehicles. We deliver automotive cognitive assistance solutions that are natural and intuitive and that enable OEMs to strengthen the emotional connection with their end users through a distinct, consistent, branded experience. Our principal offering is our software platform, which our customers use to build virtual assistants that can communicate, find information and take action across an expanding variety of categories, including navigation, control, media, communication, information and tools. Our software, developed in deep partnership with the automotive industry, improves the mobility experience for drivers and passengers all over the world.

Navigation	Control	Media	Communication		Information		Tools	
Universal POI Search	HVAC	Radio	Calling	Calendar	POI Knowledge	Weather	Calc	Chat Bot
Address Entry	Command & Control	Local Music	Messaging	Tasks	General Knowledge	News	Unit Converter	Currency Converter
Multi-Country	Audio Control	W3W	Email	Reminders	Car Manual	Flight Status	School Vacations	Lunar Calendar
Restaurants	Car Status	Podcast	Location Sharing	Notes	Stocks	Sports	Date & Time	Public Holidays
Local Business	Help	Online Music				City Events	GEO Quiz	Horoscope

User engagement with virtual assistants built with our software platform typically begins with a voice request. Upon receiving such an input, our software platform determines what the user has said, infers user intent, and maps the request to the most applicable category and domain. Depending on the applicable domain, our software platform determines whether to respond directly or access an external data source or third-party virtual assistant, in all cases resulting in a response including spoken words or taking action. Depending on the complexity of the request and other factors, engagement may consist of multiple rapid voice interactions with the user and may combine assistance in multiple domains.

Our software platform has a hybrid architecture combining edge software components, which are embedded in a vehicle's head unit and integrated with onboard systems, with cloud-connected components, which access data and content on external networks and support over-the-air updates. This hybrid architecture enables our software platform to combine the performance, reliability, efficiency, security and tight vehicular integration of embedded software with the flexibility that cloud connectivity provides. Response frameworks can generally be customized such that requests are processed first at the edge, controlling cloud transmission costs, or in parallel at the edge and in the cloud, to achieve higher confidence responses with low latency. Through edge computing capabilities, the platform is able to provide certain features, such as wake up words, while avoiding privacy and latency issues associated with always-listening cloud-connected technologies. Our software platform includes a common programming framework including toolkits and applications for its edge and cloud-connected components, and our customers can choose the software components that are necessary to power the experiences that they want to build and offer.

Cerence Platform Framework - Hybrid Architecture



We deliver our software platform through our professional services organization, which works with OEMs and suppliers to tailor it to the desired requirements, configurations and acoustic characteristics of specific vehicle models. For an initial implementation, our professional services engagements typically begin with the porting of our key technologies to the customer's specific hardware platform and the development of specific dialogues and grammar libraries. Our professional services teams also work with OEMs on acoustic optimization of a system and application of our audio signal processing technologies. Following an initial implementation, our professional services organization may continue to provide services over the course of a head unit program and vehicle model lifecycle through maintenance and enhancement engagements.

Edge Software Components

Our software platform's edge software components are installed on a vehicle's head unit and can operate without access to external networks and information. We tailor our edge software components to a customer's desired use cases and a vehicle model's unique systems, sensors and data interfaces.

Capabilities of our edge software components include automatic speech recognition, natural language understanding, noise cancellation, driver and passenger voice isolation, voice biometrics, wake-up word and text-to-speech synthesis, as well as certain non-speech technologies such as touch and text input. Edge deployment suits these technologies as it provides the following functionality and benefits:

- *Performance.* Processing at the edge is often necessary to meet the low latency requirements of natural conversation.
- *Vehicle Systems Integration.* Vehicle applications, sensors, and data interfaces can be integrated deeply with embedded systems.
- *Availability.* Edge-located systems are available regardless of cellular coverage and network connectivity.
- *Reduced cost.* Processing at the edge reduces or eliminates cellular data transmission costs.
- *Privacy.* Users' utterances and system outputs processed at the edge remain onboard and can immediately be purged.

Certain forms of assistant speech invocation can only be implemented using edge software. The use of wake-up words like "Hey BMW" and "Ni hao Banma" require constant listening and signal processing to identify instances when a virtual assistant should activate and respond. Sending a constant stream of audio from the car interior to the cloud for processing would require enormous amounts of bandwidth and potentially create privacy concerns. The same requirements apply to our new JustTalk technology, which constantly listens to spoken conversation, determines speaker intent, and invokes assistance appropriately without requiring a specific invocation phrase.

We typically sell our edge software components under a traditional per unit perpetual software license model, in which a per unit fee is charged for each software instance installed on an automotive head unit. Our customers generally provide estimates of the units to be shipped for a particular program, and we review third-party market studies and work with our customers to refine and understand these projections. While these projections provide us with some reasonable visibility into future revenue, the number of units to be shipped for a particular program is not committed upfront.

Cloud-Connected Components

Our software platform's cloud-connected components are comprised of certain speech and natural language understanding related technologies, AI-enabled personalization and context-based response frameworks, and content integration platforms. Our cloud-connected speech-related technologies perform many of the same tasks as our speech-related edge components while offering enhanced functionality through increased computational power and access to external content. Our principal content platform offering is Content Services, a data aggregation system which supports access to a wide range of live information such as news, traffic and weather. Cloud-connected components also support the replication of personalized settings such as voice profiles and preferences across multiple vehicles.

We offer cloud-connected components in the form of a connected service to the vehicle end user. Initial subscriptions typically have multi-year terms from the time of a vehicle's sale and are paid in advance by the OEM or supplier. Renewal options vary and are managed by our customers on behalf of vehicle end users.

Virtual Assistant Coexistence

The wide variety of use cases encompassed by automotive cognitive assistance, in the context of evolving consumer preferences, necessitates the coexistence of multiple virtual assistants within the in-vehicle environment. For example, many vehicle-related categories such as navigation and control can best be addressed by a tightly integrated, vehicle-model-specific virtual assistant. At the same time, drivers and passengers often prefer to use familiar Internet-based virtual assistants for more general domains such as entertainment.

To enable our customers to provide a consistent automotive cognitive assistance experience across multiple coexisting virtual assistants, our software platform can support the integration of third-party virtual assistants, providing a uniform interface for virtual assistant engagement. We have invested in our platform to develop the technology and capabilities necessary to integrate third party virtual assistants with vehicles' systems.

To make integration as seamless as possible, we have built cognitive arbitration technology that is capable of inferring user intent, determining which within a set of virtual assistants would be best suited to address a request, and sending the request to the selected assistant. Depending on a system's configuration and the virtual assistants to which it is connected, output can be presented back to the user through a vehicle-specific personality or through the virtual assistant's own interface. Cognitive arbitration represents an important control point with respect to the mobility experience and an important brand differentiation opportunity for OEMs and suppliers. Like the rest of our software platform, cognitive arbitration is a white label product that can be customized and branded.

Along with providing OEMs control over their brand identity, our cognitive arbitration technology is an important element in letting an OEM design the overall driver and passenger experience. This technology allows an OEM to dictate interactions with third-party virtual assistants within the vehicle, strengthening its ability to differentiate and control the overall in-vehicle experience.

Professional Services

We have a large professional services team that works with our customers in the design, development and deployment phases of a vehicle head unit program and vehicle model lifecycle, as well as in maintenance and enhancement engagements. Our range of capabilities include personalization of grammar and natural language understanding development, localization, language selection and system coverage, navigation speech data generation, system prompt recordings, porting our platform's framework and our ability to deploy cognitive arbitration technologies, and user experience reviews and studies. Our professional services team is globally distributed to serve our customers in their primary design and production jurisdictions. We typically charge manufacturers for our design and consulting work, although we have recently observed an industry shift towards connected services solutions and have changed our pricing strategy, both of which have moved fees from the professional services portion of our business to the license and connected services portion of our business. Our professional services contracts are primarily project-based, in line with customary non-recurring engineering industry practices.

Our Competitive Strengths

Our key competitive strengths include:

- **Industry-leading speech-related technology.** Our research shows that consumers see speech as an increasingly attractive medium for human-vehicle interaction. Nevertheless, they are often frustrated with speech recognition solutions that misunderstand spoken language or require users to speak rigid, pre-defined commands associated with a limited set of functions. Developing speech-based automotive virtual assistants that users will perceive as natural is challenging as a matter of artificial intelligence technology, acoustic engineering and user interface design. We believe our software platform, as tailored for a specific vehicle model by our professional services organization, represents one of the most technologically advanced and highest-performing human-vehicle speech interaction systems available today. In tests performed by our customers to assess correct recognition of words, sentences, and domains, our solutions have achieved some of the highest marks relative to competitors and our offerings are backed by our portfolio of patents and associated rights.
- **Hybrid edge-cloud system architecture.** Our software platform's hybrid architecture combines the performance, reliability and tight integration that only edge software can provide with the flexibility of cloud connectivity. Cloud-reliant solutions with which our software platform competes cannot match edge software's low latency, its bandwidth efficiency or its availability in the absence of network connectivity. Moreover, emerging speech invocation paradigms such as wake up words and situationally aware invocation are most effectively implemented using edge technology.
- **Bespoke vehicle integration and acoustic tuning.** Cognitive assistance for categories such as navigation, entertainment and control requires tight integration with onboard vehicle components, which vary widely among vehicle models. Separately, speech interaction systems can be significantly hampered by the noisy environment of a vehicle cabin and must be tuned for particular acoustics and audio system components. To achieve the tight vehicle integration necessary to address these concerns, our professional services team works closely with OEMs and suppliers to customize our offerings for the particular characteristics of specific vehicle models. Our expertise in acoustics enables us to implement systems that can isolate the voices of individual speakers and support simultaneous virtual assistance for speakers in multiple zones, representing a key point of differentiation.
- **Interoperability with third-party Internet-based virtual assistants.** Virtual assistants from large technology companies have become popular with consumers. We believe that consumers want to use these assistants while traveling in their vehicles and that a comprehensive automotive cognitive assistance system requires the coexistence of multiple virtual assistants. To accommodate their end user preferences while still providing a unique and brand-specific experience, OEMs seek to offer a common in-vehicle interface with seamless integration across various virtual assistants. To this end, our software platform can support the integration of multiple third-party virtual assistants and provide a uniform interface for virtual assistant engagement. Our market-leading position, our focus on the automotive market and the large size of our installed base create incentives for third party virtual assistant providers to work with us and support this integration.
- **Independence from large technology companies and automobile industry players.** As vehicles become more autonomous, mobility experiences are being increasingly defined by in-cabin features and alternative forms of human-vehicle engagement. Branded, differentiated automotive cognitive assistance is thus increasingly important to OEMs' brand value. As a neutral, independent, white-label software platform vendor, we empower our customers to build branded and differentiated experiences and retain ownership of, or rights to, their system design and data. The virtual assistant coexistence enabled by our cognitive arbitration functionality is designed to allow our customers to provide access to third-party virtual assistants without ceding overall control of the cognitive assistance experience.
- **OEM alignment.** The design and development of the head unit within the vehicle ecosystem is a complex process requiring tight integration of the software and hardware components used in and with the vehicle. We believe our demonstrated long-standing capabilities in working closely with OEMs, understanding their needs, product roadmaps and global go-to-market strategies enables us to innovate our technologies to meet an OEM's specifications. Furthermore, our working relationships with OEMs uniquely allow us to market and sell our solutions on both a local and global basis in accordance with an OEM's particular requirements.
- **Broad language coverage.** Our software platform supports over 70 languages and dialects, far more than any of our competitors. As a result of our broad language support, our customers are already delivering cognitive assistance based on our software platform in over 60 countries across the Americas, Europe and Asia, including China, the U.S. and all other large automotive markets. Our language support also enables multi-lingual capabilities for domains such as music selection, point-of-interest selection, and cross-border navigation among others, representing a critical feature for markets such as Continental Europe in which automobiles may routinely traverse multiple lingual zones. We believe that our portfolio of languages and multi-lingual capabilities represent an important competitive advantage, as the development of capabilities to support a new language is expensive and time-consuming.

- **Broad, global network of deep relationships with OEMs and tier 1 suppliers.** We have supplied speech recognition systems to OEMs and suppliers for over 20 years, working closely with our customers through our global professional services organization to design and integrate our solutions into their brands. Today, we work with all major OEMs or their tier 1 suppliers worldwide, leveraging the geographic breadth and industry experience of our professional services teams. Our long history in the automotive industry and the global reach and experience of our over 450 professional services employees across 10 countries gives us credibility with OEMs as we seek new business with OEMs, either directly or through their tier 1 suppliers. We believe that OEMs who sell globally will value our experience in servicing and deploying solutions on a global basis. We often have master agreements or similar commercial arrangements with our customers. These master agreements help us retain customer relationships over the long term.

Our Growth Strategies

We believe our growth opportunity has three key facets: the penetration of our offerings and key enabling technologies throughout the vehicle market; the revenue we are able to capture per vehicle; and our market share relative to competitors. Our primary strategies for pursuing our growth include the following:

- **Maintain and extend product leadership.** We intend to continue investing in developing our product functionality and expanding the breadth of categories and domains our software platform is able to address, particularly with a view toward maintaining our market share in edge software components and growing our share in cloud-connected software functionalities. Our existing relationship with, and our proximity in the design process to, OEMs provides us with insight into the needs of the end-users and roadmaps for innovation. For instance, this insight has helped us identify and advance our technologies for autonomous driving systems, which technologies have been incorporated in solutions currently under development. Additionally, we intend to continue to invest in customizing and supporting our solutions for specific individual automobile vehicle models, resulting in tight integration of our solutions. We believe that increasing complexity of our edge software components, including with respect to multi-modal interaction, and growth in our cloud-connected product areas, including the enabling of third-party services, will enable us to increase the revenue per vehicle that we are able to generate. Additionally, these investments will help maintain our position with existing customers through new vehicle models and enable us to grow with the overall market for automotive cognitive assistance.
- **Continue to invest in interoperability with third-party virtual assistants** We believe that the growing popularity of third-party virtual assistants is creating increasing demand for access to these assistants as part of the mobility experience. We also believe that complete automotive cognitive assistance requires the coexistence of multiple virtual assistants. We intend to continue to invest to develop our software platform's interoperability with third-party virtual assistants and its cognitive arbitration capabilities to maintain its position as a neutral automotive cognitive assistance platform. We believe a neutral automotive cognitive assistance platform will increasingly be valued by OEMs that prioritize maintaining their unique and branded in-car experience and the ability to control the mobility experience overall.
- **Increase penetration in key geographic markets, including China** We operate worldwide today, including in emerging markets. However, our presence in certain large geographic automobile markets, such as India and Southeast Asia, is relatively small today primarily as a result of lower penetration of automobile cognitive assistance in those markets. We specifically developed localized language support in emerging markets such as Indonesia and Thailand in fiscal year 2018 and made investments in India in fiscal 2019. As these markets grow, we intend to continue to invest in manufacturer relationships and the development of localized technology to maintain and expand our local market share.

We currently serve the Chinese market through a combination of domestic OEMs and suppliers, such as Geely, Proton, Roewe, SAIC, and Banma Network Technology, and global non-Chinese manufacturers and suppliers who sell into the Chinese market, such as Audi, BMW, Daimler, Aptiv and Harman. We offer cognitive assistance in all the primary Chinese languages and dialects, including Mandarin, Cantonese and Shanghainese. Our current presence in China includes approximately 240 R&D, professional services, and sales and marketing professionals across three R&D centers and professional services hubs. We intend to continue to expand our presence in the Chinese market through the ongoing development of language capabilities and investment in relationships with manufacturers and suppliers that sell into that market.

- **Deliver new functionality to existing installed base.** Our solutions have been installed in over 325 million vehicles to date. Our large installed base represents an opportunity to deliver new features and software. Depending on system capabilities, we are able to deliver updated functionality to our users in the form of embedded software upgrades performed by dealers and over-the-air updates delivered from the cloud.

Competition

The automobile cognitive assistance market is competitive. Today, we face two primary sets of competitors:

- **Large technology companies.** Many large technology companies, including Amazon, Apple, Google, Microsoft, Alibaba, Baidu and Tencent, offer Internet-based virtual assistants. Given the popularity in general of these virtual assistants, we believe that automobile drivers and riders increasingly desire the ability to use them as part of the mobility experience. To meet this demand, some of these companies have invested in technologies, such as Apple CarPlay, to make their virtual assistants more accessible within vehicle cabins.

While these third-party virtual assistants directly compete with some of the functionality we provide as part of our software platform, they also increase the need for our software platform in two ways. First, given the fragmented and competitive nature of the virtual assistant market, it is important for OEMs and suppliers to enable their passengers to utilize a variety of virtual assistants. Our software platform's cognitive arbitration functionality can, dependent on appropriate third-party agreements, enable OEMs and suppliers to provide access to multiple third-party virtual assistants through a consistent, branded interface. Second, the noisy environment of a vehicle cabin presents significant speech processing challenges for smartphone-based third-party virtual assistants that are not designed for a specific vehicle model. Our software platform integrates with third-party virtual assistants and improves their functionality by improving the quality of speech input.

- **Small, focused competitors.** We compete for business directly with certain companies focused on cognitive assistance, including SoundHound in the U.S., iFlyTek in China, and other regional and technology-focused competitors. These companies have had some success selling into our customer base. However, we believe that we have multiple meaningful competitive advantages, including our scale, our globally distributed team, our best-in-class portfolio of compatible languages, and our deep focus on the automotive market. We also believe that our technology, particularly our speech signal enhancement and acoustic tuning, is superior based on benchmarking results against our competitors. We believe we will continue to be able to compete successfully against these competitors as we continue to invest in our offerings.

Our industry has attracted, and may continue to attract, new entrants. Although we find that OEMs often prefer to maintain relationships with suppliers that have a proven record of performance, they also rigorously reevaluate suppliers on the basis of product quality, price, reliability and timeliness of delivery, product design capability, technical expertise and development capability, new product innovation, financial viability, operational flexibility, customer service and overall management.

Technology

Our software platform's edge and cloud-connected software components are based on a number of proprietary technologies. We customize these technologies for specific vehicle models and continuously update and improve our features and functionality. Our key technologies include but are not limited to the following:

- **Speech Signal Enhancement.** A high-quality voice input signal is a precondition to reliable speech recognition and cognitive assistance. However, in a typical vehicle cabin, ambient interior sounds and noise from around the vehicle mix with infotainment system output and conversations between passengers, create a complex soundscape that can obscure virtual assistant requests. Audio signal processing technologies are therefore critical to the cognitive assistance experience. We have been developing and combining highly advanced audio signal enhancement technologies for over 20 years, and we tune our software in relation to the placement of microphones in a vehicle to create defined acoustic zones and support the isolation of individual speakers. Our technologies deliver best-in-class speech recognition results, as evidenced by tests performed by our customers to assess correct recognition of words, sentences, and domains, in which our solutions have achieved some of the highest marks relative to competitors.
- **Automatic Speech Recognition.** Our speech recognition technology, built using neural networks and specifically designed for automotive applications, is recognized as the automotive industry leader in automatic speech recognition. We support over 70 languages and dialects, representing one of the largest language portfolios in the speech industry. Key features of our speech recognition technology include free-form conversational interpretation, as opposed to a rigid system of predefined commands, and barge-in capabilities, enabling users to correct and modify their requests in the middle of stating them.
- **Natural Language Understanding.** Once speech has been captured and accurately converted into words, natural language understanding technology, or NLU, is necessary to match the request to the appropriate category and domain to interpret the user's intent. Our NLU system applies artificial intelligence reasoning, including predefined and learned preferences and real-time contextual information, to deliver informative responses consistent with what a user desires. NLU processing is performed by a hybrid of edge and cloud-connected software components to optimize performance, efficiency, reliability and security.

- **Vocalizer: Text-to-Speech and Natural Language Generation.** In many cases, the most useful result of a spoken query or command is a spoken response back to the user. To enable cognitive assistants to speak, we offer text-to-speech technology in more than 70 languages and dialects and over 130 distinct voices. We also develop custom voices for customers who wish to differentiate themselves through an exclusive personality representing their brand.
- **Voice Biometrics.** Our software platform includes biometric functionality that can detect minute differences in humans' voices and securely store and match users' voiceprints. The voice biometrics enables personalization of the automotive experience by recognizing users based on their voice and automatically loading individual preferences and other automotive settings.
- **Push-to-Talk, Wake-Up Words and Just Talk.** Through our software platform, we are capable of offering three methods for invoking the virtual assistant, which can be implemented alone or in combination:
 - *Push-to-Talk*, functionality, most commonly implemented as a button on the steering wheel or center console.
 - *Wake-Up Word*, functionality, involving a spoken keyword or phrase, such as "Hey BMW."
 - *Just Talk*. Our active listening technology, introduced in 2017, filters out background noise and irrelevant conversation until it hears a keyword, phrase, or command that it understands as related to an applicable domain and which is intended as a virtual assistant request. False triggers are minimized through sophisticated syntax, cadence and intonation analysis performed in real-time and can be further reduced using automobile sensors such as head or body movement trackers.
- **Cognitive Arbitration.** Our cognitive arbitration technology can route arbitrary requests to the most appropriate virtual assistant or bot, including third-party virtual assistants.
- **Non-Speech, Multimodal Input.** Our technology seeks to mimic conversational human interaction by incorporating input methods beyond speech. Our multimodal capabilities allow vehicle systems to accept multiple forms of input such as voice, gestures, gaze, predictive text and handwriting.
- **Multi-Seat Intelligence.** Due to its flexible design, our speech signal enhancement technology can be easily configured for complex multi-zone scenarios with various users and nearly arbitrary microphone configurations. Dedicated processing modes enable efficient and robust multi-user speech recognition in challenging acoustical environments. This allows for passenger interaction in individual zones like sharing music or interacting simultaneously with the car or infotainment systems, where some passengers can enjoy browsing their music by speech, while others can send emails or other work-related activities.

Research and Development

We were spun off from Nuance, a leader in the development of speech recognition, natural language understanding and conversational artificial intelligence for a variety of industrial applications. As part of Nuance, our research and development efforts have taken two forms. First, we have maintained technical engineering centers in major regions of the world that help develop our software platform and its underlying components and provide our customers with local engineering capabilities and design development. Second, we have collaborated with Nuance's research and development efforts and participated in the development of various technologies beneficial to our company and the broader Nuance organization.

Following the Spin-Off, our company remains responsible for its own research and development efforts. Nuance employees who have been engaged in research and development attributable to Cerence have become employees of our company. We employ approximately 700 research and development personnel around the world, including scientists, engineers and technicians. Our total research and development expenses were approximately \$93.1 million, \$81.0 million and \$56.8 million for fiscal 2019, 2018 and 2017, respectively.

We believe that continued investment in research and development will be critical for us to continue to deliver market-leading solutions for automotive cognitive assistance. Accordingly, we intend to continue to invest in our product portfolio and allocate capital and resources to our growth opportunities.

Customers

Our customers include all major OEMs or their tier 1 suppliers worldwide. Our automobile manufacturer customers, commonly referred to as OEMs, include BMW, FCA Group, Ford, Daimler, Geely, Renault-Nissan, SAIC, Toyota, Volkswagen Group and many others and represented 39% of our sales in fiscal 2019. Our largest customer, Toyota, represented 21% of our revenue in fiscal 2019. Our tier 1 supplier customers, who typically sell automobile components to the OEMs, include Aptiv, Bosch, Continental, DENSO TEN, Harman and many others and represented 60% of our business in fiscal year 2019.

Our revenue base is geographically diverse. In fiscal 2019, approximately 44%, 33% and 23% of our revenue came from the Americas, Europe and Asia, respectively.

Sales and Marketing and Professional Services

We market our offerings using a high-touch OEM solutions model. We sell directly to our customers, which include OEMs and suppliers and are described in “—Customers,” and for each of our customers we assign a team comprising sales and marketing as well as professional services personnel. Our customer contracts are bespoke and vary widely, but generally represent multi-year agreements providing visibility into future revenue and helping to support retention of customer relationships over the long term.

Our sales and marketing team includes approximately 100 employees. This team includes sales representatives, account managers, sales engineers, product managers and marketing experts. As we sell our offerings to all major OEMs or their tier 1 suppliers today, our sales strategy is primarily focused on leveraging our existing customer relationships. Account managers typically have longstanding relationships with specific customers and are distributed worldwide to provide local customer coverage. We oftentimes utilize customer-specific demo days in which we showcase our technology and capabilities to OEMs and tier 1 suppliers on an individual basis. These events help maintain our market presence and awareness of our platform’s offerings while also providing opportunities to solicit feedback and input from our customers on our roadmap and future technologies.

Our professional services organization includes approximately 450 employees. These employees work with our customers in the design phase of the vehicle lifecycle to tailor our platform for specific requirements such as branding and also tune the software for the characteristics of a vehicle model. Our professional services team also provides post-design phase services through maintenance engagements, particular with respect to our cloud-connected solutions. The tight integration of our platform into our customers’ design process and their vehicles supports our ability to win future business with those customers. Like our sales representatives, our professional services employees often have longstanding relationships with specific customers and are distributed worldwide to provide local customer coverage.

Employees

As of September 30, 2019, we had approximately 1,400 full-time employees, including approximately 100 in sales and marketing, approximately 100 in administrative functions, approximately 450 in professional services, and approximately 700 in research and development. Approximately 85% of our employees are based outside of the United States. None of our employees in the United States are represented by a labor union, however certain of our employees in Europe are represented by workers councils or labor unions. We believe that our relationships with our employees are satisfactory.

Intellectual Property

Following the Spin-Off, we took ownership of approximately 1,250 patents and patent applications and other intellectual property previously owned by Nuance. We entered into the Intellectual Property Agreement, which provides us with certain non-exclusive rights with respect to patents that will continue to be held by Nuance. While no individual patent or group of patents, taken alone, is considered material to our business, in the aggregate, these patents and rights provide meaningful protection for our products, technologies, and technical innovations.

Item 1A. Risk Factors.

You should carefully consider all of the information in this Form 10-K and each of the risks described below, which we believe are the principal risks that we face. Some of the risks relate to our business, others to our intellectual property and technology and the consequences of the Spin-Off. Some risks relate principally to the securities markets and ownership of our common stock. Any of the following risks could materially and adversely affect our business, financial condition and results of operations and the actual outcome of matters as to which forward-looking statements are made in this Form 10-K.

Risks Relating to Our Business

The market in which we operate is highly competitive and rapidly changing and we may be unable to compete successfully.

There are a number of companies that develop or may develop products that compete in the automotive cognitive assistance market. The market for our products and services is characterized by intense competition, evolving industry and regulatory standards, emerging business and distribution models, disruptive software technology developments, short product and service life cycles, price sensitivity on the part of customers, and frequent new product introductions, including alternatives for certain of our products that offer limited functionality at significantly lower costs or free of charge. Current and potential competitors have established, or may establish, cooperative relationships among themselves or with third parties to increase the ability of their technologies to address the needs of our prospective customers. Furthermore, existing or prospective customers may decide to develop competing products or have established, or may in the future establish, strategic relationships with our competitors. We also face significant competition with respect to cloud-based solutions in the automotive cognitive assistance market where existing and new competitors may have or have already established significant market share and product offerings.

The competition in the automotive cognitive assistance market could adversely affect our operating results by reducing the volume of the products and solutions we license or sell or the prices we can charge. Some of our current or potential competitors are large technology companies that have significantly greater financial, technical and marketing resources than we do, and others are smaller specialized companies that possess automotive expertise or regional focus and may have greater price flexibility than we do. These competitors may be able to respond more rapidly than we can to new or emerging technologies or changes in customer requirements, or may decide to offer products at low or unsustainable cost to win new business. They may also devote greater resources to the development, promotion and sale of their products than we do, and in certain cases may be able to include or combine their competitive products or technologies with other of their products or technologies in a manner whereby the competitive functionality is available at lower cost or free of charge within the larger offering. To the extent they do so, penetration of our products, and therefore our revenue, may be adversely affected. Our large competitors may also have greater access to customer data, which provides them with a competitive advantage in developing new products and technologies. Our success depends substantially upon our ability to enhance our products and technologies, to develop and introduce, on a timely and cost-effective basis, new products and features that meet changing customer requirements and incorporate technological enhancements, and to maintain our alignment with the OEMs, their technology and market strategies. If we are unable to develop new products and enhance functionalities or technologies to adapt to these changes and maintain our alignment with OEMs, our business will suffer.

Adverse conditions in the automotive industry or the global economy more generally could have adverse effects on our results of operations.

Our business depends on, and is directly affected by, the global automobile industry. Automotive production and sales are highly cyclical and depend on general economic conditions and other factors, including consumer spending and preferences, changes in interest rate levels and credit availability, consumer confidence, fuel costs, fuel availability, environmental impact, governmental incentives and regulatory requirements, and political volatility, especially in energy-producing countries and growth markets. Such factors may also negatively impact consumer demand for automobiles that include features such as our products. In addition, automotive production and sales can be affected by our customers' ability to continue operating in response to challenging economic conditions, and in response to labor relations issues, regulatory requirements, trade agreements and other factors. The volume of global automotive production has fluctuated, sometimes significantly, from year to year, and such fluctuations give rise to fluctuations in the demand for our products. Any significant adverse change in any of these factors, including, but not limited to, general economic conditions and the resulting bankruptcy of a customer or the closure of a customer manufacturing facility, may result in a reduction in automotive sales and production by our customers, and could have a material adverse effect on our business, results of operations and financial condition.

Our strategy to increase cloud connected services may adversely affect our near-term revenue growth and results of operations.

Our leadership position has historically been derived from our products and services based on edge software technology. We have been and are continuing to develop new products and services that incorporate cloud-connected components. The design and development of new cloud-connected components will involve significant expense. Our research and development costs have greatly increased in recent years and, together with certain expenses associated with delivering our connected services, are projected to continue to escalate in the near future. We may encounter difficulties with designing, developing and releasing new cloud-connected components, as well as integrating these components with our existing hybrid technologies. These development issues may further increase costs and may affect our ability to innovate in a manner demanded by the market. As a result, our strategy to incorporate more cloud-connected components may adversely affect our revenue growth and results of operations.

Pricing pressures from our customers may adversely affect our business.

We may experience pricing pressure from our customers in the future, which could result from the major OEMs' strong purchasing power. As a developer of automotive cognitive assistance components, we may be expected to quote fixed prices or be forced to accept prices with annual price reduction commitments for long-term sales arrangements or discounted reimbursements for our work. Any price reductions could impact our sales and profit margins. Our future profitability will depend upon, among other things, our ability to continuously reduce the costs for our components and maintain our cost structure. Our profitability is also influenced by our success in designing and marketing technological improvements in automotive cognitive assistance systems. If we are unable to offset any price reductions in the future, our business, results of operations and financial condition would be adversely affected.

We invest effort and money seeking OEMs' validation of our technology, and there can be no assurance that we will win or be able to renew service contracts, which could adversely affect our future business, results of operations and financial condition.

We invest effort and money from the time an OEM or a tier 1 supplier begins designing for an upcoming program to the date on which the customer chooses our technology to be incorporated directly or indirectly into one or more specific vehicle models to be produced by the customer. This selection process is known as a "design win." We could expend our resources without success. After a design win, it is typically quite difficult for a product or technology that did not receive the design win to displace the winner until the customer begins a new selection process because it is very unlikely that a customer will change complex technology until a vehicle model is revamped. In addition, the company with the winning design may have an advantage with the customer going forward because of the established relationship between the winning company and such customer, which could make it more difficult for such company's competitors to win the designs for other service contracts. Even if we have an established relationship with a customer, any failure to perform under a service contract or innovate in response to their feedback may neutralize our advantage with that customer. If we fail to win a significant number of customer design competitions in the future or to renew a significant number of existing service contracts, our business, results of operations and financial condition would be adversely affected. Moreover, due to the evolution of our connected offerings and architecture, trending away from providing legacy infotainment and connected services and a change in our professional services pricing strategies, we expect our deferred revenue balances to decrease in the future, including due to a wind-down of a legacy connected service relationship with a major OEM, since the majority of the cash from the contract has been collected. To the extent we are unable to renew existing service contracts, such decrease could intensify. The period of time from winning a contract to implementation is long and we are subject to the risks of cancellation or postponement of the contract or unsuccessful implementation.

Our products are technologically complex and incorporate many technological innovations. Prospective customers generally must make significant commitments of resources to test and validate our products before including them in any particular vehicle model. The development cycles of our products with new customers are approximately six months to two years after a design win, depending on the customer and the complexity of the product. These development cycles result in us investing our resources prior to realizing any revenues from the customer contracts. Further, we are subject to the risk that a customer cancels or postpones implementation of our technology, as well as that we will not be able to implement our technology successfully. Further, our sales could be less than forecast if the vehicle model is unsuccessful, including reasons unrelated to our technology. Long development cycles and product cancellations or postponements may adversely affect our business, results of operations and financial condition.

Our business could be materially and adversely affected if we lost any of our largest customers.

The loss of business from any of our major customers, whether by lower overall demand for vehicles, cancellation of existing contracts or the failure to award us new business, could have a material adverse effect on our business, results of operations and financial condition. Alternatively, there is a risk that one or more of our major customers could be unable to pay our invoices as they become due or that a customer will simply refuse to make such payments given its financial difficulties. If a major customer becomes subject to bankruptcy or similar proceedings whereby contractual commitments are subject to stay of execution and the possibility of legal or other modification, or if a major customer otherwise successfully procures protection against us legally enforcing its obligations, it is likely that we will be forced to record a substantial loss. In addition, certain of our customers that are tier 1 suppliers exclusively sell to certain OEMs, including some of our other customers. A bankruptcy of, or other significant disruption to, any of these OEMs could intensify any adverse impact on our business and results of operations.

Our operating results may fluctuate significantly from period to period, and this may cause our stock price to decline.

Our revenue and operating results may fluctuate materially in the future. These fluctuations may cause our results of operations to not meet the expectations of securities analysts or investors which would likely cause the price of our stock to decline. Factors that may contribute to fluctuations in operating results include:

- given our limited customer base, the volume, timing and fulfillment of large customer contracts;
- renewals of existing customer contracts and wins of new customer programs;
- increased expenditures incurred pursuing new product or market opportunities;
- receipt of royalty reports;
- fluctuating sales by our customers to their end-users;
- contractual counterparties failing to meet their contractual commitments to us;
- introduction of new products by us or our competitors;
- cybersecurity or data breaches;
- reduction in the prices of our products in response to competition, market conditions or contractual obligations;
- impairment of goodwill or intangible assets;
- accounts receivable that are not collectible;
- higher than anticipated costs related to fixed-price contracts with our customers;
- change in costs due to regulatory or trade restrictions;
- expenses incurred in litigation matters, whether initiated by us or brought by third-parties against us, and settlements or judgments we are required to pay in connection with disputes;
- changes in our stock compensation practices, as relates to employee short term incentive payments; and
- general economic trends as they affect the customer bases into which we sell.

Due to the foregoing factors, among others, our revenue and operating results may fluctuate significantly from period to period. Our expense levels are based in significant part on our expectations of future revenue, and we may not be able to reduce our expenses quickly to respond to near-term shortfalls in projected revenue. Therefore, our failure to meet revenue expectations would seriously harm our operating results, financial condition and cash flows.

We have our first senior management team since being spun off from Nuance. If we encounter difficulties in the transition, our business could be negatively impacted.

We have appointed our first senior management team, including our first Chief Executive Officer and Chief Financial Officer. Our future success will partly depend upon our first senior management team's and other key employees' effective implementation of our business strategies. Our first management team may require transition time to fully understand all aspects of our business and the transition may be disruptive to, or cause uncertainty in, our business and strategic direction. If we have failures in any aspects of this transition, or the strategies implemented by our management team are not successful, our business could be harmed.

If we are unable to attract and retain key personnel, our business could be harmed.

If any of our key employees were to leave, we could face substantial difficulty in hiring qualified successors and could experience a loss in productivity while any successor obtains the necessary training and experience. Although we have arrangements with some of our executive officers designed to promote retention, our employment relationships are generally at-will and we have had key employees leave in the past. We cannot assure you that one or more key employees will not leave in the future. We intend to continue to hire additional highly qualified personnel, including research and development and operational personnel, but may not be able to attract, assimilate or retain qualified personnel in the future. Any failure to attract, integrate, motivate and retain these employees could harm our business.

We depend on skilled employees and could be impacted by a shortage of critical skills.

Much of our future success depends on the continued service and availability of skilled employees, particularly with respect to technical areas. Skilled and experienced personnel in the areas where we compete are in high demand, and competition for their talents is intense. We expect that many of our key employees will receive a total compensation package that includes equity awards. New regulations or volatility in the stock market could diminish our use, and the value, of our equity awards. This would place us at a competitive disadvantage in attracting qualified personnel or force us to offer more cash compensation.

Cybersecurity and data privacy incidents or breaches may damage client relations and inhibit our growth.

The confidentiality and security of our information, and that of third parties, is critical to our business. Our services involve the transmission, use, and storage of customers' and their customers' information, which may be confidential or contain personally identifiable information. Any cybersecurity or data privacy incidents could have a material adverse effect on our results of operations and financial condition. While we maintain a broad array of information security and privacy measures, policies and practices, our networks may be breached through a variety of means, resulting in someone obtaining unauthorized access to our information, to information of our customers or their customers, or to our intellectual property; disabling or degrading service; or sabotaging systems or information. In addition, hardware, software, systems, or applications we develop or procure from third parties may contain defects in design or manufacture or other problems that could unexpectedly compromise information security. Unauthorized parties may also attempt to gain access to our systems or facilities, or those of third parties with whom we do business, through fraud or other forms of deceiving our employees, contractors, and vendors. Because the techniques used to obtain unauthorized access, or to sabotage systems, change frequently and generally are not recognized until launched against a target, we may be unable to anticipate these techniques or to implement adequate preventative measures. We will continue to incur significant costs to continuously enhance our information security measures to defend against the threat of cybercrime. Any cybersecurity or data privacy incident or breach may result in:

- loss of revenue resulting from the operational disruption;
- loss of revenue or increased bad debt expense due to the inability to invoice properly or to customer dissatisfaction resulting in collection issues;
- loss of revenue due to loss of customers;
- material remediation costs to recreate or restore systems;
- material investments in new or enhanced systems in order to enhance our information security posture;
- cost of incentives offered to customers to restore confidence and maintain business relationships;
- reputational damage resulting in the failure to retain or attract customers;
- costs associated with potential litigation or governmental investigations;
- costs associated with any required notices of a data breach;
- costs associated with the potential loss of critical business data;
- difficulties enhancing or creating new products due to loss of data or data integrity issues; and
- other consequences of which we are not currently aware but will discover through the remediation process.

Our business is subject to a variety of domestic and international laws, rules, policies and other obligations.

We are subject to U.S. and international laws and regulations in multiple areas, including data protection, anticorruption, labor relations, tax, foreign currency, anti-competition, import, export and trade regulations, and we are subject to a complex array of federal, state and international laws relating to the collection, use, retention, disclosure, security and transfer of personally identifiable information. In many cases, these laws apply not only to transfers between unrelated third-parties but also to transfers between us and our subsidiaries. Many jurisdictions have passed laws in this area, and other jurisdictions are considering imposing additional restrictions. The European Commission adopted the European General Data Protection Regulation, or GDPR, which went into effect on May 25, 2018. China adopted a new cybersecurity law as of June 2017. In addition, California adopted significant new consumer privacy laws in June 2018 that will be effective beginning in January 2020. Complying with the GDPR and other requirements may cause us to incur substantial costs and may require us to change our business practices.

Any failure by us, our customers or other parties with whom we do business to comply with our privacy policy or with federal, state or international privacy-related or data protection laws and regulations could result in proceedings against us by governmental entities or others. Any alleged or actual failure to comply with applicable privacy laws and regulations may:

- cause our customers to lose confidence in our solutions;
- harm our reputation;
- expose us to litigation, regulatory investigations and to resulting liabilities including reimbursement of customer costs, damages, penalties or fines imposed by regulatory agencies; and
- require us to incur significant expenses for remediation.

We are also subject to a variety of anticorruption laws in respect of our international operations, including the U.S. Foreign Corrupt Practices Act, the U.K. Bribery Act and the Canadian Corruption of Foreign Public Officials Act, and regulations issued by the U.S. Customs and Border Protection, the U.S. Bureau of Industry and Security, the U.S. Treasury Department's Office of Foreign Assets Control, and various other foreign governmental agencies. We cannot predict the nature, scope or effect of future regulatory requirements to which our international operations might be subject or the manner in which existing laws might be administered or interpreted. Actual or alleged violations of these laws and regulations could lead to enforcement actions and financial penalties that could result in substantial costs.

A significant portion of our revenues are derived, and a significant portion of our research and development activities are based, outside the United States. Our results could be harmed by economic, political, regulatory, foreign currency fluctuations and other risks associated with these international regions.

Because we operate worldwide, our business is subject to risks associated with doing business internationally. We generate most of our international revenue in Europe and Asia, and we anticipate that revenue from international operations could increase in the future. In addition, some of our products are developed outside the United States. We conduct a significant portion of the development of our voice recognition and natural language understanding solutions in Canada and Germany. We also have significant research and development resources in Belgium, China, India, Italy, and the United Kingdom. We are exposed to fluctuating exchange rates of foreign currencies including the euro, British pound, Canadian dollar, Chinese RMB, Japanese yen, Indian rupee and South Korean won. Accordingly, our future results could be harmed by a variety of factors associated with international sales and operations, including:

- adverse political and economic conditions, or changes to such conditions, in a specific region or country;
- trade protection measures, including tariffs and import/export controls, imposed by the United States and/or by other countries or regional authorities such as China, Canada or the European Union;
- the impact on local and global economies of the United Kingdom leaving the European Union;
- changes in foreign currency exchange rates or the lack of ability to hedge certain foreign currencies;
- compliance with laws and regulations in many countries and any subsequent changes in such laws and regulations;
- geopolitical turmoil, including terrorism and war;
- changing data privacy regulations and customer requirements to locate data centers in certain jurisdictions;
- evolving restrictions on cross-border investment, including recent enhancements to the oversight by the Committee on Foreign Investment in the United States pursuant to the Foreign Investment Risk Review Modernization Act and substantial restrictions on investment from China;
- changes in applicable tax laws;
- difficulties in staffing and managing operations in multiple locations in many countries;
- longer payment cycles of foreign customers and timing of collections in foreign jurisdictions; and
- less effective protection of intellectual property than in the United States.

Our business in China is subject to aggressive competition and is sensitive to economic, market and political conditions.

We operate in the highly competitive automotive cognitive assistance market in China and face competition from both international and smaller domestic manufacturers. We anticipate that additional competitors, both international and domestic, may seek to enter the Chinese market resulting in increased competition. Increased competition may result in price reductions, reduced margins and our inability to gain or hold market share. There have been periods of increased market volatility and moderation in the levels of economic growth in China, which resulted in periods of lower automotive production growth rates in China than those previously experienced. In addition, political tensions between China and the United States may negatively impact our ability to conduct business in China. If we are unable to grow or maintain our position in the Chinese market, the pace of growth slows or vehicle sales in China decrease, our business, results of operations and financial condition could be materially adversely effected. Government regulations and business considerations may also require us to conduct business in China through joint ventures with Chinese companies. Our participation in joint ventures would limit our control over Chinese operations and may expose our proprietary technologies to misappropriation by joint venture partners. The above risks, if realized, could have a material adverse effect on our business, results of operations and financial condition.

Interruptions or delays in our services or services from data center hosting facilities or public clouds could impair the delivery of our services and harm our business.

Because our services are complex and incorporate a variety of third-party hardware and software, our services may have errors or defects that could result in unanticipated downtime for our customers and harm to our reputation and our business. We have from time to time, found defects in our services, and new errors in our services may be detected in the future. In addition, we currently serve our customers from data center hosting facilities or third-party public clouds we directly manage. Any damage to, or failure of, the systems and facilities that serve our customers in whole or in part could result in interruptions in our service. Interruptions in our service may reduce our revenue, cause us to issue credits or pay service level agreement penalties, cause customers to terminate their on-demand services, and adversely affect our renewal rates and our ability to attract new customers.

If our goodwill or other intangible assets become impaired, our operating results could be negatively impacted.

We have significant intangible assets, including goodwill and other intangible assets, which are susceptible to valuation adjustments as a result of changes in various factors or conditions. The most significant intangible assets are goodwill, customer relationships and patents and core technologies. Customer relationships are amortized over their estimated economic lives based on the pattern of economic benefits expected to be generated from the use of the asset. Technologies and patents are amortized on a straight-line basis over their estimated useful lives. We assess the potential impairment of goodwill on an annual basis. Whenever events or changes in circumstances indicate that the carrying value may not be recoverable, we will be required to assess the potential impairment of goodwill and other intangible assets. Factors that could trigger an impairment of such assets include the following:

- changes in our organization or management reporting structure that could result in additional reporting units, which may require alternative methods of estimating fair values or greater disaggregation or aggregation in our analysis by reporting unit;
- significant under performance relative to historical or projected future operating results;
- significant changes in the strategy for our overall business;
- significant negative industry or economic trends;
- significant decline in our stock price for a sustained period; and
- our market capitalization declining to below net book value.

Future adverse changes in these or other unforeseeable factors could result in an impairment charge that would impact our results of operations and financial position in the reporting period identified.

Tax matters may cause significant variability in our financial results and may impact our overall financial condition.

Our businesses are subject to income taxation in the United States, as well as in many tax jurisdictions throughout the world. Tax rates in these jurisdictions may be subject to significant change. If our effective tax rate increases, our operating results and cash flow could be adversely affected. Our effective income tax rate can vary significantly between periods due to a number of complex factors including:

- projected levels of taxable income;
- pre-tax income being lower than anticipated in countries with lower statutory rates or higher than anticipated in countries with higher statutory rates;

- increases or decreases to valuation allowances recorded against deferred tax assets;
- tax audits conducted and settled by various tax authorities;
- adjustments to income taxes upon finalization of income tax returns;
- the ability to claim foreign tax credits;
- the repatriation of non-U.S. earnings for which we have not previously provided for income taxes; and
- changes in tax laws and their interpretations in countries in which we are subject to taxation.

We regularly evaluate the need for a valuation allowance on deferred tax assets, considering historical profitability, projected future taxable income, the expected timing of the reversals of existing temporary differences and tax planning strategies. This analysis is heavily dependent upon our current and projected operating results. A decline in future operating results could provide substantial evidence that a full or partial valuation allowance for deferred tax assets is necessary, which could have a material adverse effect on our results of operations and financial condition.

Risks Relating to our Intellectual Property and Technology

Third parties have claimed and may claim in the future that we are infringing their intellectual property, and we could be exposed to significant litigation or licensing expenses or be prevented from selling our products if such claims are successful.

From time to time, we are subject to claims and legal actions alleging that we or our customers may be infringing or contributing to the infringement of the intellectual property rights of others. We may be unaware of intellectual property rights of others that may cover some of our technologies and products. If it appears necessary or desirable, we may seek licenses for these intellectual property rights. However, we may not be able to obtain licenses from some or all claimants, the terms of any offered licenses may not be acceptable to us, and we may not be able to resolve disputes without litigation. Any litigation regarding intellectual property could be costly and time-consuming and could divert the attention of our management and key personnel from our business operations. Intellectual property disputes could subject us to significant liabilities, require us to enter into royalty and licensing arrangements on unfavorable terms, prevent us from licensing certain of our products, cause severe disruptions to our operations or the markets in which we compete, or require us to satisfy indemnification commitments with our customers including contractual provisions under various arrangements. Any of these could seriously harm our business.

Unauthorized use of our proprietary technology and intellectual property could adversely affect our business and results of operations.

Our success and competitive position depend in large part on our ability to obtain and maintain intellectual property rights protecting our products and services. We rely on a combination of patents, copyrights, trademarks, service marks, trade secrets, confidentiality provisions and licensing arrangements to establish and protect our intellectual property and proprietary rights. Unauthorized parties may attempt to copy or discover aspects of our products or to obtain, license, sell or otherwise use information that we regard as proprietary. Policing unauthorized use of our products is difficult and we may not be able to protect our technology from unauthorized use. Additionally, our competitors may independently develop technologies that are substantially the same or superior to our technologies and that do not infringe our rights. In these cases, we would be unable to prevent our competitors from selling or licensing these similar or superior technologies. In addition, the laws of some foreign countries do not protect our proprietary rights to the same extent as the laws of the United States. Although the source code for our proprietary software is protected both as a trade secret and as a copyrighted work, litigation may be necessary to enforce our intellectual property rights, to protect our trade secrets, to determine the validity and scope of the proprietary rights of others, or to defend against claims of infringement or invalidity. Litigation, regardless of the outcome, can be very expensive and can divert management's efforts.

Our software products may have bugs, which could result in delayed or lost revenue, expensive correction, liability to our customers and claims against us.

Complex software products such as ours may contain errors, defects or bugs. Defects in the solutions or products that we develop and sell to our customers could require expensive corrections and result in delayed or lost revenue, adverse customer reaction and negative publicity about us or our products and services. Customers who are not satisfied with any of our products may also bring claims against us for damages, which, even if unsuccessful, would likely be time-consuming to defend, and could result in costly litigation and payment of damages. Such claims could harm our reputation, financial results and competitive position.

We may be unable to respond quickly enough to changes in technology and technological risks and to develop our intellectual property into commercially viable products.

Changes in legislative, regulatory or industry requirements or in competitive technologies may render certain of our products obsolete or less attractive to our customers, which could adversely affect our results of operations. Our ability to anticipate changes in technology and regulatory standards and to successfully develop and introduce new and enhanced products on a timely basis will be a significant factor in our ability to be competitive. There is a risk that we will not be able to achieve the technological advances that may be necessary for us to be competitive or that certain of our products will become obsolete. Moreover, restrictions on the use of our technology over the next five years under the Separation and Distribution Agreement and the Intellectual Property Agreement which we entered into with Nuance in connect with the Spin-Off may limit our ability to adapt to technology and regulatory developments and thereby compete effectively in the market. We are also subject to the risks generally associated with new product introductions and applications, including lack of market acceptance, delays in product development and failure of products to operate properly. These risks could have a material adverse effect on our business, results of operations and financial condition.

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

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

Risks Relating to the Spin-Off

If the Spin-Off were determined not to qualify as tax-free for U.S. federal income tax purposes, we could have an indemnification obligation to Nuance, which could adversely affect our business, financial condition and results of operations.

On October 1, 2019, we were spun off from Nuance. Completion of the Spin-Off was conditioned on Nuance's receipt of a written opinion from its tax counsel to the effect that the Distribution will qualify for non-recognition of gain and loss under Section 355 and related provisions of the Internal Revenue Code of 1986, as amended, or the Code.

The opinion of counsel does not address any U.S. state or local or foreign tax consequences of the Spin-Off. The opinion assumed that the Spin-Off was completed according to the terms of the Separation and Distribution Agreement and relied on the facts as stated in the Separation and Distribution Agreement, the Tax Matters Agreement, the other ancillary agreements, Information Statement included as part of our registration statement on Form 10 and a number of other documents related to the Spin-Off. In addition, the opinion was based on certain assumptions as well as certain representations as to factual matters from, and certain covenants by, Nuance and us. The opinion cannot be relied on if any of the assumptions, representations or covenants are incorrect, incomplete or inaccurate or are violated in any material respect.

If, as a result of any of our representations being untrue or our covenants being breached, the Spin-Off, and certain related transactions or certain transactions, were determined not to qualify for non-recognition of gain or loss under Section 355 and related provisions of the Code, we could be required to indemnify Nuance for the resulting taxes and related expenses. Those amounts could be material. Any such indemnification obligation could adversely affect our business, financial condition and results of operations.

In addition, if we or our stockholders were to engage in transactions that resulted in a 50% or greater change by vote or value in the ownership of our stock during the four-year period beginning on the date that begins two years before the date of the Spin-Off, the Spin-Off would generally be taxable to Nuance, but not to stockholders, under Section 355(e) of the Code, unless it were established that such transactions and the Spin-Off were not part of a plan or series of related transactions. If the Spin-Off were taxable to Nuance due to such a 50% or greater change in ownership of our stock, Nuance would recognize gain equal to the excess of the fair market value on the Distribution Date of our common stock distributed to Nuance stockholders over Nuance's tax basis in our common stock and would also recognize gain in respect of certain reorganization transactions undertaken by Nuance to effect the separation, and we generally would be required to indemnify Nuance for the tax on such gain and related expenses. Those amounts could be material. Any such indemnification obligation could adversely affect our business, financial condition and results of operations.

We have agreed to numerous restrictions to preserve the non-recognition treatment of the Spin-Off, which may reduce our strategic and operating flexibility.

We have agreed in the Tax Matters Agreement to covenants and indemnification obligations that address compliance with Section 355 and related provisions of the Code and are intended to preserve the tax-free nature of the Spin-Off. These covenants include certain restrictions on our activity for a period of two years following the Spin-Off, unless we or Nuance obtain a private letter ruling from the U.S. Internal Revenue Service, or the IRS, or an opinion of counsel, in each case acceptable to Nuance in its reasonable discretion, that the restricted action would not impact the non-recognition treatment of the Spin-Off, or unless Nuance otherwise gives its consent for us to take a restricted action. These covenants and indemnification obligations limit our ability to pursue strategic transactions or engage in new businesses or other transactions that may maximize the value of our business, and might discourage or delay a strategic transaction that our stockholders may consider favorable.

We may be unable to achieve some or all of the benefits that we expect to achieve from the Spin-Off.

We believe that, as an independent, publicly traded company, we will be able to, among other things, design and implement corporate strategies and policies and develop partnerships that are better targeted to our business's areas of strength and differentiation, better focus our financial and operational resources on those specific strategies, create effective incentives for our management and employees that are more closely tied to our business performance, provide investors more flexibility and enable us to achieve alignment with a more natural stockholder base and implement and maintain a capital structure designed to meet our specific needs. We may be unable to achieve some or all of the benefits that we expect to achieve as an independent company in the time we expect, if at all, for a variety of reasons, including:

- as an independent, publicly traded company, we may be more susceptible to market fluctuations and other adverse events than if it were still a part of Nuance; and
- as an independent, publicly traded company, our businesses are less diversified than Nuance's businesses prior to the separation.

If we fail to achieve some or all of the benefits that we expect to achieve as an independent company, or do not achieve them in the time we expect, our business, financial condition and results of operations could be adversely affected.

We may be unable to make, on a timely or cost-effective basis, the changes necessary to operate as an independent, publicly traded company, and we may experience increased costs after the Spin-Off.

Prior to October 1, 2019, we operated as part of Nuance's organization, and Nuance provided us with various corporate functions. Following the Spin-Off, Nuance has no obligation to provide us with assistance other than certain transition and other services pursuant to transition services agreements and other agreements related to the Spin-Off. These services do not include every service that we have received from Nuance in the past, and Nuance is only obligated to provide the transition services for limited periods following the completion of the Spin-Off. The agreements relating to such transition services and to the Spin-Off more generally were negotiated prior to the Spin-Off, at a time when our business was still being operated by Nuance. The agreements were generally entered into on arms-length terms similar to those that would be agreed with an unaffiliated third party such as a buyer in a sale transaction, but we did not have an independent board of directors or a management team independent of Nuance representing our interests while the agreements were being negotiated. It is possible that we might have been able to achieve more favorable terms if the circumstances differed. We will rely on Nuance to satisfy its performance and payment obligations under any transition services agreements and other agreements related to the Spin-Off, and if Nuance does not satisfy such obligations, we could incur operational difficulties or losses.

Following the Spin-Off and the cessation of any transition services agreements, we will need to provide internally or obtain from unaffiliated third parties the services we will no longer receive from Nuance. These services include legal, accounting, information technology, research and software development, human resources and other general administrative and infrastructure support, the effective and appropriate performance of which are critical to our operations. We may be unable to replace these services in a timely manner or on terms and conditions as favorable as those we receive from Nuance. Because our business has historically operated as part of the wider Nuance organization, we may be unable to successfully establish the infrastructure or implement the changes necessary to operate independently, or may incur additional costs that could adversely affect our business. If we fail to obtain the quality of services necessary to operate effectively or incur greater costs in obtaining these services, our business, financial condition and results of operations may be adversely affected.

As we build our information technology infrastructure and transition our data to our own systems, we could incur substantial additional costs and experience temporary business interruptions, and our accounting and other management systems and resources may not be adequately prepared to meet the financial reporting and other requirements to which we will be subject following the Spin-Off.

We are currently installing and implementing information technology infrastructure to support certain of our business functions, including accounting and reporting, human resources, sales operations, customer service, and distribution. We may incur substantially higher costs than previously anticipated as we transition from the transactional and operational systems and data centers we used when we were part of Nuance. If we are unable to transition effectively, we may incur temporary interruptions in business operations. Any delay in implementing, or operational interruptions suffered while implementing, our new information technology infrastructure could disrupt our business and have a material adverse effect on our results of operations.

In addition, if we are unable to replicate or transition certain systems, our ability to comply with regulatory requirements could be impaired. We are currently directly subject to reporting and other obligations under the Securities Exchange Act of 1934, as amended, or the Exchange Act. Beginning with our second required Annual Report on Form 10-K, we intend to comply with Section 404 of the Sarbanes-Oxley Act of 2002, as amended, or the Sarbanes-Oxley Act, which will require annual management assessments of the effectiveness of our internal control over financial reporting. In addition, once we cease to qualify as an emerging growth company, Section 404 of the Sarbanes-Oxley Act will also require a report by our independent registered public accounting firm addressing these assessments in our Annual Report on Form 10-K for the year in which we cease to qualify as an emerging growth company. These reporting and other obligations may place significant demands on management, administrative and operational resources, including accounting systems and resources.

The Exchange Act requires that we file annual, quarterly and current reports with respect to our business and financial condition. Under the Sarbanes-Oxley Act, we are required to maintain effective disclosure controls and procedures and internal controls over financial reporting. To comply with these requirements, we may need to upgrade our systems, implement additional financial and management controls, reporting systems and procedures and hire additional accounting and finance staff. We expect to incur additional annual expenses for the purpose of addressing these, and other public company reporting, requirements. If we are unable to upgrade our financial and management controls, reporting systems, information technology systems and procedures in a timely and effective fashion, our ability to comply with financial reporting requirements and other rules that apply to reporting companies under the Exchange Act could be impaired. Any failure to achieve and maintain effective internal controls could have a material adverse effect on our business, financial condition, results of operations and cash flow.

We are an emerging growth company, and any decision on our part to comply only with certain reduced reporting and disclosure requirements applicable to emerging growth companies could make our common stock less attractive to investors and may make it more difficult to compare our performance with other public companies.

We are an emerging growth company, and, for as long as we continue to be an emerging growth company, we may choose to take advantage of exemptions from various reporting requirements applicable to other public companies but not to emerging growth companies, including, but not limited to, not being required to have our independent registered public accounting firm audit our internal control over financial reporting under Section 404 of the Sarbanes-Oxley Act, reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements, and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved. We could be an emerging growth company for up to five years following the effectiveness of our registration statement on Form 10. We will cease to be an emerging growth company upon the earliest of:

- the end of the fiscal year following the fifth anniversary of the effectiveness of our registration statement on Form 10,
- the first fiscal year after our annual gross revenues are \$1.07 billion or more,
- the date on which we have, during the previous three-year period, issued more than \$1.0 billion in non-convertible debt securities or
- the end of any fiscal year in which the market value of our common stock held by non-affiliates exceeded \$700 million as of the end of the second quarter of that fiscal year.

We cannot predict if investors will find our common stock less attractive if we choose to rely on these exemptions. If some investors find our common stock less attractive as a result of any choices to reduce future disclosure, there may be a less active trading market for our common stock and the price of our common stock may be more volatile.

Under the Jumpstart Our Business Startups Act, or JOBS Act, emerging growth companies can also delay adopting new or revised accounting standards until such time as those standards apply to private companies. The JOBS Act provides that a company can elect to opt out of the extended transition period and comply with the requirements that apply to non-emerging growth companies, but any such election to opt out is irrevocable. We have elected not to opt out of such extended transition period, which means that when a standard is issued or revised and it has different application dates for public or private companies, we, as an emerging growth company, can adopt the new or revised standard at the time private companies adopt the new or revised standard. This may make comparison of our financial statements with other public companies that are not emerging growth companies or emerging growth companies that have opted out of using the extended transition period difficult or impossible because of the potential differences in accounting standards used.

We intend to continue to improve our internal controls over financial reporting and ensure we are able to produce accurate and timely financial statements. However, no assurance can be given that our actions will be successful.

We have no operating history as an independent, publicly traded company, and our historical combined financial information is not necessarily representative of the results we would have achieved as an independent, publicly traded company and may not be a reliable indicator of our future results.

We derived the historical combined financial information included in this Form 10-K from Nuance's consolidated financial statements, and this information does not necessarily reflect the results of operations and financial position we would have achieved as an independent, publicly traded company during the periods presented, or those that we will achieve in the future. This is primarily because of the following factors:

- Prior to the Spin-Off, we operated as part of Nuance's broader organization, and Nuance performed various corporate functions for us. Our historical combined financial information reflects allocations of corporate expenses from Nuance for these and similar functions. These allocations may not reflect the costs we will incur for similar services in the future as an independent publicly traded company.
- We have entered into transactions with Nuance that did not exist prior to the Spin-Off, such as Nuance's provision of transition and other services, and undertaken indemnification obligations, which have caused us, or may in the future cause us, to incur new costs.
- Our historical combined financial information does not reflect changes that we expect to experience in the future as a result of our separation from Nuance, including changes in the financing, cash management, operations, cost structure and personnel needs of our business. As part of Nuance, we enjoyed certain benefits from Nuance's operating diversity, size, purchasing power, borrowing leverage and available capital for investments that we can no longer enjoy after the Spin-Off. As an independent entity, we may be unable to purchase goods, services and technologies, such as insurance and health care benefits and computer software licenses, or access capital markets, on terms as favorable to us as those we obtained as part of Nuance prior to the Spin-Off, and our results of operations may be adversely affected. In addition, our historical combined financial data do not include an allocation of interest expense comparable to the interest expenses we will incur as a result of the Spin-Off and related transactions, including interest expenses in connection with the senior secured credit facilities that we entered into on October 1, 2019, or the Senior Facilities.

Following the Spin-Off, we also face additional costs and demands on management's time associated with being an independent, publicly traded company, including costs and demands related to corporate governance, investor and public relations and public reporting. While we were profitable as part of Nuance, we cannot assure you that our profits will continue at a similar level as an independent, publicly traded company.

We have incurred new indebtedness, and the degree to which we are leveraged could adversely affect our business, financial condition and results of operations.

In connection with the Spin-Off, we entered into the Senior Facilities, which consist of the Term Loan Facility in an aggregate principal amount of \$270.0 million, of which approximately \$153 million of the net proceeds were transferred to Nuance, and the \$75.0 million Revolving Facility, of which nothing was drawn at the time of the Spin-Off.

We historically relied upon Nuance to fund our working capital requirements and other cash requirements. We are no longer able to rely on the earnings, assets or cash flow of Nuance, and Nuance will not provide funds to finance our working capital or other cash requirements. As a result, we are now responsible for servicing our own debt and obtaining and maintaining sufficient working capital and other funds to satisfy our cash requirements. After the Spin-Off, our access to and cost of debt financing is different from the historical access to and cost of debt financing under Nuance. Differences in access to and cost of debt financing may result in differences in the interest rate charged to us on financings, as well as the amount of indebtedness, types of financing structures and debt markets that may be available to us.

Our ability to make payments on and to refinance our indebtedness, including the debt incurred under the Senior Facilities, as well as any future debt that we may incur, will depend on our ability to generate cash in the future from operations, financings or asset sales. Our ability to generate cash is subject to general economic, financial, competitive, legislative, regulatory and other factors that are beyond our control.

The terms of the Senior Facilities restrict our current and future operations, particularly our ability to incur debt that we may need to fund initiatives in response to changes in our business, the industry in which we operate, the economy and governmental regulations.

The terms of the Senior Facilities include a number of restrictive covenants that impose significant operating and financial restrictions on us and our subsidiaries and limit our ability to engage in actions that may be in our long-term best interests. These restrict our and our subsidiaries' ability to take some or all of the following actions:

- incur or guarantee additional indebtedness or sell disqualified or preferred stock;
- pay dividends on, make distributions in respect of, repurchase or redeem capital stock;
- make investments or acquisitions;
- create liens;
- enter into sale/leaseback transactions;
- enter into agreements restricting the ability to pay dividends or make other intercompany transfers;
- enter into transactions with affiliates;
- prepay, repurchase or redeem certain kinds of indebtedness;
- consolidate, merge, sell or otherwise dispose of assets or sell stock of our subsidiaries; and/or
- significantly change the nature of our business.

Furthermore, the lenders under the Senior Facilities have required that we pledge our assets as collateral as security for our repayment obligations and that we abide by certain financial or operational covenants. Our ability to comply with such covenants and restrictions may be affected by events beyond our control, including prevailing economic, financial and industry conditions. If market or other economic conditions deteriorate, our ability to comply with these covenants may be impaired. A breach of any of these covenants, if applicable, could result in an event of default under the terms of the Senior Facilities. If an event of default occurred, the lenders would have the right to accelerate the repayment of such debt, and the event of default or acceleration could result in the acceleration of the repayment of any other debt to which a cross-default or cross-acceleration provision applies. We might not have, or be able to obtain, sufficient funds to make these accelerated payments, and lenders could then proceed against any collateral. Any subsequent replacement of the agreements governing the Senior Facilities or any new indebtedness could have similar or greater restrictions. The occurrence and ramifications of an event of default could adversely affect our business, financial condition and results of operations. Moreover, as a result of all of these restrictions, we may be limited in how we conduct our business and pursue our strategy, unable to raise additional debt financing to operate during general economic or business downturns or unable to compete effectively or to take advantage of new business opportunities.

The commercial and credit environment may adversely affect our access to capital.

Our ability to issue debt or enter into other financing arrangements on acceptable terms could be adversely affected if there is a material decline in the demand for our products or in the solvency of our customers or suppliers or if there are other significantly unfavorable changes in economic conditions. Volatility in the world financial markets could increase borrowing costs or affect our ability to access the capital markets. These conditions may adversely affect our ability to obtain targeted credit ratings.

We may have potential business conflicts of interest with Nuance with respect to our past and ongoing relationships.

Conflicts of interest may arise between Nuance and us in a number of areas relating to our past and ongoing relationships, including:

- labor, tax, employee benefit, indemnification and other matters arising from our separation from Nuance;
- intellectual property matters;
- employee recruiting and retention; and
- business combinations involving our company.

We may not be able to resolve any potential conflicts, and, even if we do so, the resolution may be less favorable to us than if we were dealing with an unaffiliated party.

A certain director may have actual or potential conflicts of interest because of their financial interests in Nuance.

Because of his current position with Nuance, a certain director owns equity interests in Nuance. Continuing ownership of Nuance shares and equity awards could create, or appear to create, potential conflicts of interest if we and Nuance face decisions that could have implications for both of us.

The allocation of intellectual property rights and data between Nuance and Cerence as part of the Spin-Off, the shared use of certain intellectual property rights and data following the Spin-Off and restrictions on the use of intellectual property rights, could adversely impact our reputation, our ability to enforce certain intellectual property rights that are important to us and our competitive position.

In connection with the Spin-Off, we are entered into agreements with Nuance governing the allocation of intellectual property rights and data related to our business. These agreements include restrictions on our use of Nuance's intellectual property rights and data licensed to us, including limitations on the field of use in which we can exercise our license rights. As a result, we may not be able to pursue opportunities that require use of these license rights in industries other than the automotive industry and certain ancillary fields. Moreover, the licenses granted to us under Nuance's intellectual property rights and data are non-exclusive, so Nuance may be able to license the rights and data to third parties that may compete with us. These agreements could adversely affect our position and options relating to intellectual property enforcement, licensing negotiations and monetization and access to data used in our business. We also may not have sufficient rights to grant sublicenses of intellectual property or data used in our business, and we may be subject to third party rights pertaining to the underlying intellectual property or data. These circumstances could adversely affect our ability to protect our competitive position in the industry and otherwise adversely affect our business, financial condition and results of operations.

Risks Relating to Our Common Stock and the Securities Market

Our stock price may fluctuate significantly.

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

- actual or anticipated fluctuations in our results of operations due to factors related to our business;
- success or failure of our business strategies;
- competition and industry capacity;
- changes in interest rates and other factors that affect earnings and cash flow;
- our level of indebtedness, our ability to make payments on or service our indebtedness and our ability to obtain financing as needed;
- our ability to retain and recruit qualified personnel;
- our quarterly or annual earnings, or those of other companies in our industry;
- announcements by us or our competitors of significant acquisitions or dispositions;
- changes in accounting standards, policies, guidance, interpretations or principles;
- the failure of securities analysts to cover, or positively cover, our common stock after the Spin-Off;
- changes in earnings estimates by securities analysts or our ability to meet those estimates;
- the operating and stock price performance of other comparable companies;
- investor perception of our company and our industry;
- overall market fluctuations unrelated to our operating performance;
- results from any material litigation or government investigation;

- changes in laws and regulations (including tax laws and regulations) affecting our business;
- changes in capital gains taxes and taxes on dividends affecting stockholders; and
- general economic conditions and other external factors.

Low trading volume for our stock would amplify the effect of the above factors on our stock price volatility.

Should the market price of our shares drop significantly, stockholders may institute securities class action lawsuits against us. A lawsuit against us could cause us to incur substantial costs and could divert the time and attention of our management and other resources.

Substantial sales of our common stock may occur in connection with the Spin-Off or in the future, either of which could cause our stock price to decline.

Nuance stockholders who received shares of our common stock in the Distribution generally may sell those shares immediately in the public market. It is likely that some Nuance stockholders, including some of its larger stockholders, will sell their shares of our common stock received in the Distribution if, for reasons such as our business profile or market capitalization as an independent company, we do not fit their investment objectives, or, in the case of index funds, we are not a participant in the index in which they are investing. The sales of significant amounts of our common stock or the perception in the market that such sales might occur may decrease the market price of our common stock.

We may evaluate whether to pay cash dividends on our common stock in the future, and the terms of our Senior Facilities limit our ability to pay dividends on our common stock.

Our Board of Directors', or our Board, decisions regarding the payment of dividends depends on consideration of many factors, such as our financial condition, earnings, sufficiency of distributable reserves, opportunities to retain future earnings for use in the operation of our business and to fund future growth, capital requirements, debt service obligations, legal requirements, regulatory constraints and other factors that our Board deems relevant. Additionally, the terms of the Senior Facilities limit our ability to pay cash dividends. There can be no assurance that we will pay a dividend in the future or continue to pay any dividend if we do commence paying dividends.

Your percentage ownership in Cerence may be diluted in the future.

Your percentage ownership in Cerence may be diluted in the future because of equity issuances for acquisitions, capital market transactions or otherwise, including equity awards that we will be granting to our directors, officers, employees and other service providers. Shares of our common stock are issuable upon the future vesting of certain Nuance equity awards held by our employees that are convertible into Cerence equity awards in connection with the Spin-Off. In addition, our Board has adopted the Cerence 2019 Equity Incentive Plan, or the Equity Plan, for the benefit of certain of our current and future employees, service providers and non-employee directors. Such awards will have a dilutive effect on our earnings per share, which could adversely affect the market price of our common stock.

In addition, our Amended and Restated Certificate of Incorporation authorizes us to issue, without the approval of our stockholders, one or more classes or series of preferred stock having such designation, powers, preferences and relative, participating, optional and other special rights, including preferences over our common stock with respect to dividends and distributions, as our Board may generally determine. The terms of one or more classes or series of preferred stock could dilute the voting power or reduce the value of our common stock. For example, we could grant the holders of preferred stock the right to elect some number of the members of our Board in all events or upon the happening of specified events, or the right to veto specified transactions. Similarly, the repurchase or redemption rights or liquidation preferences that we could assign to holders of preferred stock could affect the residual value of our common stock.

From time-to-time, Cerence may opportunistically evaluate and pursue acquisition opportunities, including acquisitions for which the consideration thereof may consist partially or entirely of newly-issued shares of Cerence common stock and, therefore, such transactions, if consummated, would dilute the voting power and/or reduce the value of our common stock.

Certain provisions in our Amended and Restated Certificate of Incorporation and Amended and Restated By-Laws and Delaware law may discourage takeovers.

Several provisions of our Amended and Restated Certificate of Incorporation, Amended and Restated By-Laws and Delaware law may discourage, delay or prevent a merger or acquisition. These include, among others, provisions that:

- provide for staggered terms for directors on our Board for a period following the Spin-Off;
- do not permit our stockholders to act by written consent and require that stockholder action must take place at an annual or special meeting of our stockholders, in each case except as such rights may otherwise be provided to holders of preferred stock;
- provide for the removal of directors only for cause for a period following the Spin-Off;
- establish advance notice requirements for stockholder nominations and proposals;
- provide that a special meeting of our stockholders may only be called by our Board, the Chairman of our Board or our Chief Executive Officer, or at the request of holders of not less than 20% of the outstanding shares of the common stock of Cerence; and
- limit our ability to enter into business combination transactions.

These and other provisions of our Amended and Restated Certificate of Incorporation, Amended and Restated By-Laws and Delaware law may discourage, delay or prevent certain types of transactions involving an actual or a threatened acquisition or change in control of Cerence, including unsolicited takeover attempts, even though the transaction may offer our stockholders the opportunity to sell their shares of our common stock at a price above the prevailing market price.

Our Amended and Restated Certificate of Incorporation will designate the courts of the State of Delaware as the sole and exclusive forum for certain types of actions and proceedings that may be initiated by our stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers or other employees.

Our Amended and Restated Certificate of Incorporation provides, in all cases to the fullest extent permitted by law, unless we consent in writing to the selection of an alternative forum, the Court of Chancery located within the State of Delaware will be the sole and exclusive forum for any derivative action or proceeding brought on behalf of Cerence, any action asserting a claim of breach of a fiduciary duty owed by any director, officer or other employee or stockholder of Cerence to Cerence or Cerence's stockholders, any action asserting a claim arising pursuant to the Delaware General Corporate Law, or DGCL, or as to which the DGCL confers jurisdiction on the Court of Chancery located in the State of Delaware or any action asserting a claim governed by the internal affairs doctrine or any other action asserting an "internal corporate claim" as that term is defined in Section 115 of the DGCL. However, if the Court of Chancery within the State of Delaware does not have jurisdiction, the action may be brought in any other state or federal court located within the State of Delaware. Further, this exclusive forum provision would not apply to suits brought to enforce a duty or liability created by the Exchange Act or the Securities Act of 1933, as amended, or the Securities Act, except that it may apply to such suits if brought derivatively on behalf of Cerence. There is, however, uncertainty as to whether a court would enforce such provision in connection with suits to enforce a duty or liability created by the Exchange Act or the Securities Act if brought derivatively on behalf of Cerence, and our stockholders will not be deemed to have waived our compliance with the federal securities laws and the rules and regulations thereunder.

Any person or entity purchasing or otherwise acquiring or holding any interest in shares of our capital stock will be deemed to have notice of and to have consented to these provisions. This provision may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, officers or other employees, which may discourage such lawsuits. Alternatively, if a court were to find this provision of our Amended and Restated Certificate of Incorporation inapplicable to, or unenforceable in respect of, one or more of the specified types of actions or proceedings, we may incur additional costs associated with resolving such matters in other jurisdictions.

If we fail to maintain proper and effective internal controls, our ability to produce accurate and timely financial statements could be impaired and investors' views of us could be harmed.

The Sarbanes-Oxley Act requires, among other things, that we maintain effective internal control over financial reporting and disclosure controls and procedures. In particular, we must perform system and process evaluation and testing of our internal control over financial reporting to allow management and our independent registered public accounting firm to report on the effectiveness of our internal control over financial reporting, as required by Section 404 of the Sarbanes-Oxley Act, with auditor attestation of the effectiveness of our internal controls, beginning with our Annual Report on Form 10-K for the year in which we cease to qualify as an emerging growth company. If we are not able to comply with the requirements of Section 404 in a timely manner, or if we or our independent registered public accounting firm identify deficiencies in our internal control over financial reporting that are deemed to be material weaknesses, the market price of shares of common stock could decline and we could be subject to sanctions or investigations by the SEC or other regulatory authorities, which would require additional financial and management resources.

Our ability to successfully implement our business plan and comply with Section 404 of the Sarbanes-Oxley Act requires us to be able to prepare timely and accurate financial statements. Any delay in the implementation of, or disruption in the transition to, new or enhanced systems, procedures or controls may cause our operations to suffer, and we may be unable to conclude that our internal control over financial reporting is effective and, once we cease to qualify as an emerging growth company, to obtain an unqualified report on internal controls from our auditors as required under Section 404 of the Sarbanes-Oxley Act. Moreover, we cannot be certain that these measures would ensure that we implement and maintain adequate controls over our financial processes and reporting in the future. Even if we were to conclude, and our auditors were to concur, that our internal control over financial reporting provided reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with United States Generally Accepted Accounting Principles, or GAAP, because of its inherent limitations, internal control over financial reporting might not prevent or detect fraud or misstatements. This, in turn, could have an adverse impact on trading prices for our shares of common stock, and could adversely affect our ability to access the capital markets.

Item 1B. Unresolved Staff Comments.

None.

Item 2. Properties.

Our corporate headquarters is located in Burlington, Massachusetts, and our international headquarters is located in Heerlen, Netherlands. In May 2019, we entered into a lease for our Burlington, Massachusetts headquarters that includes approximately 30,000 square feet of building space. Other large leased sites include properties located in: Montreal, Canada; Bellevue, Washington; Aachen and Ulm, Germany; and Shanghai; Chengdu, China and Merelbeke, Belgium.

We believe our existing facilities and equipment are in good operating condition and are suitable for the conduct of our business.

Item 3. Legal Proceedings.

Similar to many companies in the software industry, we are involved in a variety of claims, demands, suits, investigations and proceedings that arise from time to time relating to matters incidental to the ordinary course of our business, including actions with respect to contracts, intellectual property, employment, benefits and securities matters. We evaluate the probability of adverse outcomes and, as applicable, estimate the amount of probable losses that may result from pending matters. Probable losses that can be reasonably estimated are reflected in our combined financial statements. These recorded amounts are not material to our combined financial statements for any of the periods presented in the accompanying combined financial statements. While it is not possible to predict the outcome of these matters with certainty, we do not expect the results of any of these actions to have a material adverse effect on our results of operations or financial position. However, each of these matters is subject to uncertainties, the actual losses may prove to be larger or smaller than the accruals reflected in our combined financial statements, and we could incur judgments or enter into settlements of claims that could adversely affect our 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 has been listed on the Nasdaq Global Select Market under the symbol “CRNC” since October 2, 2019. Prior to that date, there was no public trading market for our common stock. A “when-issued” trading market for our common stock existed between September 17, 2019 and October 1, 2019 under the symbol “CRNCV”.

Holders of Common Stock

As of December 12, 2019, there were 572 holders of record of our common stock. This number does not reflect beneficial owners whose shares are held in street name.

Securities Authorized for Issuance Under Equity Compensation Plans

As of September 30, 2019, we did not have any equity compensation plans.

Dividend Policy

We have not paid any dividends since our formation. We may evaluate whether to pay cash dividends to our stockholders. The timing, declaration, amount and payment of future dividends to stockholders, if any, will fall within the discretion of our Board. Among the items we are considering in establishing a dividend policy are the capital needs of our business and opportunities to retain future earnings for use in the operation of our business and to fund future growth. Additionally, the terms of the Senior Facilities limit our ability to pay cash dividends. There can be no assurance that we will pay a dividend in the future or continue to pay any dividend if we do commence the payment of dividends.

Performance Graph

As of September 30, 2019, we did not have any securities outstanding.

Recent Sales of Unregistered Securities

In connection with certain reorganization transactions undertaken by Nuance in connection with the Spin-Off, in transactions exempt from registration under Section 4(a)(2) of the Securities Act, the Company issued 36,391,445 shares of common stock to a subsidiary of Nuance, of which 35,740,709 were distributed to our stockholders upon the completion of the Spin-Off and 650,736, or 1.8%, were sold to a non-affiliated third party.

Issuer Purchases of Equity Securities

Not applicable.

Item 6. Selected Financial Data.

The following table presents certain selected combined financial information as of and for each of the years in the three-year period ended September 30, 2019, 2018, and 2017. The selected combined financial data as of and for each of the years ended September 30, 2019, 2018, and 2017 is derived from Combined Financial Statements included elsewhere in this Form 10-K. The Combined Financial Statements for the fiscal year ended September 30, 2019 have been prepared under Financial Accounting Standards Board, or FASB, Accounting Standard Codification, or ASC, Topic 606, "Revenue from Contracts with Customers", or ASC 606, while the Combined Financial Statements for the fiscal years ended September 30, 2018 and 2017 have been prepared under FASB ASC Topic 605, "Revenue Recognition", or ASC 605. In our opinion, both financial statements include all adjustments, consisting of only ordinary recurring adjustments, necessary for a fair statement of the information set forth in this Form 10-K.

ASC 606 was adopted as of October 1, 2018 using the modified retrospective approach from the previous guidance ASC 605. Our transition to ASC 606 represents a change in accounting policy that is reflected in our Combined Financial Statements for the fiscal year ended September 30, 2019. The adoption of ASC 606 limits the comparability of revenue and expenses, including cost of revenue and certain operating expenses when compared to the fiscal years ended September 30, 2018 and other prior reporting periods. Refer to Note 3 to our Combined Financial Statements included elsewhere in this Form 10-K for further details on our adoption of ASC 606 and a reconciliation of our operating results for the fiscal year ended September 30, 2019 under ASC 606 to the results under ASC 605.

The selected combined financial data presented below should be read in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our Combined Financial Statements, including their respective accompanying notes thereto included elsewhere in this Form 10-K. For each of the periods presented, our business was wholly-owned by Nuance. The financial information included herein may not necessarily reflect our financial position, results of operations and cash flows in the future or what our financial position, results of operations and cash flows would have been had we been an independent, publicly traded company during the periods presented. In addition, our historical combined financial information does not reflect changes that we expect to experience in the future as a result of our separation from Nuance, including changes in the financing, operations, cost structure and personnel needs of our business. Further, the historical combined financial information includes allocations of certain Nuance corporate expenses, as described in Note 18 to the Combined Financial Statements. We believe the assumptions and methodologies underlying the allocation of these expenses are reasonable. However, such expenses may not be indicative of the actual level of expense that we would have incurred if we had operated as an independent, publicly traded company or of the costs expected to be incurred in the future.

	Year Ended September 30,			
	2019 (ASC 606)	2019 (ASC 605)	2018 (ASC 605)	2017 (ASC 605)
Operations:				
Total revenues	\$ 303,315	\$ 306,498	\$ 276,984	\$ 244,729
Gross profit	203,972	207,573	194,020	176,195
Income from operations	10,852	14,061	36,852	63,685
(Benefit from) provision for income taxes	(89,084)	(87,656)	30,917	15,926
Net income	100,268	102,080	5,881	47,276
Financial Position:				
Deferred revenue	353,284	362,844	348,649	300,182
Total assets	1,483,829	1,489,406	1,397,548	1,335,752
Total parent company equity	1,068,128	1,064,145	993,319	997,179
Selected Data and Ratios:				
Net working deficit	(36,789)	(47,239)	(38,839)	(13,599)
Depreciation of property and equipment	7,822	7,822	9,159	7,008
Amortization of intangible assets	21,022	21,022	16,606	12,661
Gross margin	67.2%	67.7%	70.0%	72.0%
Operating margin	3.6%	4.6%	13.3%	26.0%

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

The following discussion and analysis presented below should be read in conjunction with the Combined Financial Statements and the corresponding notes, and included elsewhere in this Form 10-K. The information presented in this section includes forward-looking statements, which are described in detail in the section titled "Cautionary Statement Concerning Forward-Looking Statements." The matters discussed in these forward-looking statements are subject to risks, uncertainties, and other factors that could cause actual results to differ materially from those made, projected, or implied in the forward-looking statements. See the section titled "Risk Factors" for a discussion of the risks, uncertainties, and assumptions associated with these statements.

Overview

Cerence builds automotive cognitive assistance solutions to power natural and intuitive interactions between automobiles, drivers and passengers, and the broader digital world. We possess one of the world's most popular software platforms for building automotive virtual assistants. Our customers include all major OEMs or their tier 1 suppliers worldwide. We deliver our solutions on a white-label basis, enabling our customers to deliver customized virtual assistants with unique, branded personalities and ultimately strengthening the bond between automobile brands and end users. Our vision is to enable a more enjoyable, safer journey for everyone.

Our principal offering is our software platform, which our customers use to build virtual assistants that can communicate, find information and take action across an expanding variety of categories. Our software platform has a hybrid architecture combining edge software components with cloud-connected components. Edge software components are installed on a vehicle's head unit and can operate without access to external networks and information. Cloud-connected components are comprised of certain speech and natural language understanding related technologies, AI-enabled personalization and context-based response frameworks, and content integration platform.

We generate revenue primarily by selling software licenses and cloud-connected services. Our edge software components are typically sold under a traditional per unit perpetual software license model, in which a per unit fee is charged for each software instance installed on an automotive head unit. We typically license cloud-connected software components in the form of a service to the vehicle end user, which is paid for in advance. In addition, we generate professional services revenue from our work with our customers during the design, development and deployment phases of the vehicle model lifecycle and through maintenance and enhancement projects. We have existing relationships with all major OEMs or their tier 1 suppliers, and while our customer contracts vary, they generally represent multi-year engagements, giving us visibility into future revenue.

Business Trends

Under ASC 605, we experienced total revenue growth of 10.7% and 13.2%, during fiscal year 2019 and fiscal year 2018, respectively, primarily driven by our connected and professional services revenues due to increased market penetration of our connected and professional services solutions. License revenues increased slightly during fiscal 2019 due to a higher volume of licensing royalties from new and existing customers. Due to the historical strength of licensed edge technologies and our interpretation of industry trends, we believe license revenues will continue to experience growth into the future.

Consistent with the increased revenue and customer demand, fiscal year 2019 was another key investment year for the Cerence business in which we focused on accelerating research and development, or R&D, and expanding our professional services team to improve the end user experience we are able to deliver. Under ASC 605, total cost of revenues increased by 19.2% during fiscal year 2019, primarily driven by the hiring of more professional services staff. Under ASC 605, total operating expenses grew by 23.1% during fiscal year 2019, primarily driven by innovation initiatives in order to increase our competitive position in the market. We hired a significant amount of new engineering and product innovation personnel, resulting in a 15.0% increase in R&D expenses. Our acquisition of Voicebox Technology Corporation, or Voicebox, on April 2, 2018, which provided additional customer relationships and technology, and the incurrence of professional service costs to establish the Cerence business as a standalone public company drove a \$11.5 million increase in restructuring and other costs, net. We anticipate that our R&D expenses will continue to represent the majority of our operating expenses as we focus on developing new products and advancing our core technologies.

Basis of Presentation

The accompanying combined financial data was derived from the consolidated financial statements and accounting records of Nuance. The Combined Financial Statements were prepared for the year ended September 30, 2019 (which we refer to as fiscal year 2019), the year ended September 30, 2018 (which we refer to as fiscal year 2018), and the year ended September 30, 2017 (which we refer to as fiscal year 2017).

Cerence was spun off from Nuance, a leading provider of speech and language solutions for businesses and consumers around the world. The preparation of these financial statements required considerable judgement and reflect significant assumptions and allocations that we believe are reasonable. These financial statements reflect the combined historical results of operations, financial position, and cash flows of the Cerence business in conformity with GAAP. However, the historical combined financial information may not be indicative of our future performance and does not necessarily reflect what our combined results of operations, financial position, and cash flows would have been had our business operated as a separate publicly traded company during the periods presented.

Specifically, the Combined Financial Statements include certain assets and liabilities that have historically been held at the corporate level of Nuance, but are allocable to Cerence. Nuance provided certain services such as legal, accounting, information technology, human resources, treasury and other infrastructure support on our behalf. The cost of these services has been allocated to us based on various financial measures that we determined to most closely align with each service. While we have determined these allocations are a reasonable representation of benefits received and services utilized by the Cerence business, actual costs that would have been incurred if we had been a standalone company would depend on factors such as the organizational structure, infrastructure, information technology, and strategic decision making.

Following the completion of the Spin-Off, we expect to incur expenditures relating to the start-up of our own standalone corporate functions and information technology systems, reorganizing and hiring employees, and other miscellaneous transaction related costs. Since we are publicly traded on Nasdaq following the Spin-Off, we are required to incur costs to establish public company functions such as internal audit, corporate treasury, and investor relations. Additionally, we will incur costs for Nasdaq listing fees, compensation of our newly formed Board, public company insurance, external audit, and external legal counsel. Refer to Note 2 to the accompanying Combined Financial Statements included elsewhere in this Form 10-K for additional information.

Comparability of Results

As of October 1, 2018, we adopted ASC 606 using the modified retrospective approach from the previous guidance, ASC 605. Our transition to ASC 606 represents a change in accounting policy that is reflected in our Combined Financial Statements for the fiscal year ended September 30, 2019. The adoption of ASC 606 limits the comparability of revenue and expenses, including cost of revenue and certain operating expenses, presented in the results of operations for the fiscal year ended September 30, 2019 when compared to prior reporting periods. Refer to Note 3 to our Condensed Combined Financial Statements included elsewhere in this Form 10-K for further details on our adoption of ASC 606 and a reconciliation of our operating results for the fiscal year September 30, 2019 under ASC 606 to the results under ASC 605.

Key Metrics

In evaluating our financial condition and operating performance, we focus on revenue, operating margins, and cash flow from operations.

For the fiscal year 2019 as compared to fiscal year 2018:

- Total revenue under ASC 606 increased by \$26.3 million, or 9.5%, to \$303.3 million from \$277.0 million for fiscal year 2018 under ASC 605. Comparing both periods under ASC 605, total revenue increased by \$29.5 million or 10.7%, from \$277.0 million to \$306.5 million.
- Operating margin under ASC 606 decreased by 9.7 percentage points to 3.6% from 13.3% for fiscal year 2018 under ASC 605. Comparing both periods under ASC 605, operating margin decreased by 8.7 percentage points from 13.3% to 4.6%.
- Cash provided by operating activities for fiscal year 2019 was \$88.1 million, a decrease of \$27.2 million, or 23.6%, from cash provided by operating activities of \$115.3 million for fiscal year 2018.

For fiscal year 2018 as compared to fiscal year 2017:

- Total revenue increased by \$32.3 million, or 13.2%, from \$244.7 million to \$277.0 million.
- Operating margin decreased by 12.7 percentage points from 26.0% to 13.3%.
- Cash provided by operating activities increased by \$18.5 million, or 19.1%, from \$96.8 million to \$115.3 million.

Operating Results

The following table shows the total operating results of the Cerence business for the fiscal year September 30, 2019 under ASC 606 and ASC 605, fiscal year 2018, and fiscal year 2017 (dollars in thousands):

	Year Ended September 30,			
	2019 (ASC 606)	2019 (ASC 605)	2018 (ASC 605)	2017 (ASC 605)
Revenue:				
License	\$ 172,379	\$ 171,933	\$ 171,075	\$ 148,803
Connected services	78,690	79,637	60,227	45,696
Professional services	52,246	54,928	45,682	50,230
Total revenues	<u>303,315</u>	<u>306,498</u>	<u>276,984</u>	<u>244,729</u>
Cost of Revenue:				
License	2,069	2,070	1,156	773
Connected services	37,562	37,845	32,919	25,292
Professional services	51,214	50,512	41,123	35,571
Amortization of intangibles	8,498	8,498	7,766	6,898
Total cost of revenues	<u>99,343</u>	<u>98,925</u>	<u>82,964</u>	<u>68,534</u>
Gross Profit	<u>203,972</u>	<u>207,573</u>	<u>194,020</u>	<u>176,195</u>
Operating Expenses:				
Research and development	93,061	93,061	80,957	56,755
Sales and marketing	36,261	36,653	30,553	29,909
General and administrative	25,926	25,926	19,873	17,485
Amortization of intangible assets	12,524	12,524	8,840	5,763
Restructuring and other costs, net	24,404	24,404	12,863	1,865
Acquisition-related costs	944	944	4,082	733
Total operating expenses	<u>193,120</u>	<u>193,512</u>	<u>157,168</u>	<u>112,510</u>
Income from operations	10,852	14,061	36,852	63,685
Other income (expense), net	332	363	(54)	(483)
Net income before income taxes	11,184	14,424	36,798	63,202
(Benefit from) provision for income taxes	(89,084)	(87,656)	30,917	15,926
Net income	<u>\$ 100,268</u>	<u>\$ 102,080</u>	<u>\$ 5,881</u>	<u>\$ 47,276</u>

Our revenue consists primarily of license revenue, connected services revenue and revenue from professional services. License revenue primarily consists of license royalties associated with our edge software components, with costs of license revenue primarily consisting of third-party royalty expenses for certain external technologies we leverage. Connected services revenue represents the subscription fee that provides access to our connected services components, including the customization and construction of our connected services solutions. Cost of connected service revenue primarily consists of labor costs of software delivery services, infrastructure, and communications fees that support our connected services solutions. Professional services revenue is primarily comprised of porting, integrating, and customizing our embedded solutions, with costs primarily consisting of compensation for services personnel, contractors and overhead.

Our operating expenses include R&D, sales and marketing and general and administrative expenses. R&D expenses primarily consist of salaries, benefits, and overhead relating to research and engineering staff. Sales and marketing expenses includes salaries, benefits, and commissions related to our sales, product marketing, product management, and business unit management teams. General and administrative expenses primarily consist of personnel costs for administration, finance, human resources, general management, fees for external professional advisers including accountants and attorneys, and provisions for doubtful accounts.

Amortization of acquired patents and core technology are included within cost of revenues whereas the amortization of other intangible assets, such as acquired customer relationships, trade names and trademarks, are included within operating expenses. Customer relationships are amortized over their estimated economic lives based on the pattern of economic benefits expected to be generated from the use of the asset. Other identifiable intangible assets are amortized on a straight-line basis over their estimated useful lives.

Restructuring costs are costs related to reorganizing various business units, including costs associated with employee severance, closing and opening facilities, terminating contracts, and separation costs related to establishing Cerence business as a standalone public company.

Acquisition-related costs include transition and integration costs, professional service fees, and fair value adjustments related to business and asset acquisitions, including potential acquisitions.

Other income (expense), net consists primarily of foreign exchange gains (losses).

Fiscal Year 2019 Compared with Fiscal Year 2018 and Fiscal Year 2018 Compared with Fiscal Year 2017

Total Revenues

The following table shows total revenues by product type, including the corresponding percentage change (dollars in thousands):

	Year Ended September 30,						% Change 2019 vs. 2018 (ASC 605)	% Change 2018 vs. 2017 (ASC 605)	
	2019 (ASC 606)	2019 (ASC 605)	% of Total	2018 (ASC 605)	% of Total	2017 (ASC 605)			
License	\$ 172,379	\$ 171,933	56%	\$ 171,075	62%	\$ 148,803	61%	1%	15%
Connected services	78,690	79,637	26%	60,227	22%	45,696	19%	32%	32%
Professional services	52,246	54,928	18%	45,682	16%	50,230	21%	20%	(9)%
Total revenues	<u>\$ 303,315</u>	<u>\$ 306,498</u>		<u>\$ 276,984</u>		<u>\$ 244,729</u>		11%	13%

Fiscal Year 2019 Compared with Fiscal Year 2018

Total revenues under ASC 606 for fiscal year 2019 is \$3.2 million lower compared to revenue for the same period presented under ASC 605 primarily due to the loss of deferred revenue related to professional services upon the adoption of ASC 606. Under ASC 605, certain professional services contracts were accounted for using the completed contract method, whereas under ASC 606, these contracts were accounted for under the percentage of completion method. Under ASC 605, total revenues for fiscal year 2019 were \$306.5 million, an increase of \$29.5 million, or 10.7%, from \$277.0 million from fiscal year 2018. This growth was primarily driven by increased demand for our connected and professional solutions.

Our fixed backlog includes \$353.3 million of future revenue related to remaining performance obligations and \$55.6 million of contractual commitments which have not yet been invoiced, was \$408.9 million as of September 30, 2019. Our variable backlog includes estimated future revenue from variable forecasted royalties related to our embedded and connected businesses, was \$955.7 million as of September 30, 2019. Our estimation of forecasted royalties is based on our royalty rates for embedded and connected technologies from expected car shipments under our existing contracts over the term of the programs. Anticipated shipments are based on historical shipping experience and current customer projections that management believes are reasonable as of the date of this Form 10-K. Both our embedded and connected technologies are priced and sold on a per-vehicle or device basis, where we receive a single fee for either or both the embedded license and the connected service term. However, our fixed and variable backlog may not be indicative of our actual future revenue. The revenue we actually recognize is subject to several factors, including the number and timing of vehicles our customers ship, potential terminations or changes in scope of customer contracts and currency fluctuations. As of September 30, 2019, we estimate that our adjusted backlog includes \$408.9 million of fixed backlog and \$955.7 million of variable backlog, was approximately \$1.36 billion, with approximately 50% of revenue expected to be recognized over the next three years. The growth of our backlog is primarily due to the continued strength of our embedded and connected businesses and the high design win rates that we have achieved over the last several years.

License Revenue

License revenue under ASC 606 for fiscal year 2019 is \$0.4 million higher compared to the same period presented under ASC 605 primarily due to the re-allocation of contract consideration to multiple performance obligations based on standalone selling prices. Under ASC 605, license revenue for fiscal year 2019 was \$171.9 million, an increase of \$0.9 million, or 0.5%, from \$171.1 million for fiscal year 2018. License revenue increased primarily due to a higher volume of licensing royalties from new and existing customers. As a percentage of total revenue, license revenue under ASC 605 decreased by 5.7 percentage points from 61.8% for fiscal year 2018 to 56.1% for fiscal year 2019.

Connected Services Revenue

Connected services revenue under ASC 606 for fiscal year 2019 is \$0.9 million lower compared to the same period presented under ASC 605 primarily due to re-allocation of contract consideration to multiple performance obligations based on standalone selling prices. Under ASC 605, connected services revenue for fiscal year 2019 was \$79.6 million, an increase of \$19.4 million, or 32.2%, from \$60.2 million for fiscal year 2018. This increase was primarily driven by greater demand for our connected services solutions as our customers increasingly deploy hybrid solutions. As a percentage of total revenue, connected services revenue under ASC 605 increased by 4.2 percentage points from 21.7% for fiscal year 2018 to 26.0% for fiscal year 2019.

Professional Services Revenue

Professional services revenue under ASC 606 for fiscal year 2019 is \$2.7 million lower compared to the same period presented under ASC 605 primarily due to the loss of deferred revenue upon the adoption of ASC 606. Under ASC 605, certain professional services contracts were accounted for using the completed contract method, whereas under ASC 606, these contracts were accounted for under the percentage of completion method. Under ASC 605, professional service revenue for fiscal year 2019 was \$54.9 million, an increase of \$9.2 million, or 20.2%, from \$45.7 million for fiscal year 2018. This increase was primarily driven by demand for the integration and customization services related to our edge software and the timing of services rendered. As a percentage of total revenue, professional services revenue under ASC 605 increased by 1.4 percentage points from 16.4% for fiscal year 2018 to 17.9% for fiscal year 2019.

Fiscal Year 2018 Compared with Fiscal Year 2017

Our total revenues for fiscal year 2018 were \$277.0 million, an increase of \$32.3 million, or 13.2%, from \$244.7 million from fiscal year 2017. This growth was primarily driven by license royalties. We also experienced notable growth in connected services revenues resulting from increased demand for our hybrid solutions.

License Revenue

License revenue for fiscal year 2018 was \$171.1 million, an increase of \$22.3 million, or 15.0%, from \$148.8 million for fiscal year 2017. License revenues increased primarily due to a higher volume of licensing royalties from new and existing customers utilizing our technologies. This was a result of an increase in overall cars shipped and more customers licensing suites of our software and technologies rather than individual licenses. As a percentage of total revenue, license revenue increased by 1.0 percentage points from 60.8% for fiscal year 2017 to 61.8% for fiscal year 2018.

Connected Services Revenue

Connected services revenue for fiscal year 2018 was \$60.2 million, an increase of 31.8%, or \$14.5 million, from \$45.7 million for fiscal year 2017. This increase is primarily driven by greater demand for our connected services solutions as our customers shift their preferences from shipping automobiles with fully customized embedded solutions to hybrid solutions. As a percentage of total revenue, connected services revenue increased by 3.0 percentage points from 18.7% for fiscal year 2017 to 21.7% for fiscal year 2018.

Professional Services Revenue

Professional services revenue for fiscal year 2018 was \$45.7 million, a decrease of \$4.5 million, or 9.0%, from \$50.2 million for fiscal year 2017. Professional services revenue decreased primarily due to industry shift towards connected service solutions and a change in our pricing strategy. As a percentage of total revenue, professional services revenue decreased by 3.9 percentage points from 20.3% for fiscal year 2017 to 16.4% for fiscal year 2018.

Total Cost of Revenues and Gross Profits

The following table shows total cost of revenues by product type and the corresponding percentage change (dollars in thousands):

	Year Ended September 30,				% Change	% Change
	2019	2019	2018	2017	2019 vs. 2018	2018 vs. 2017
	(ASC 606)	(ASC 605)	(ASC 605)	(ASC 605)	(ASC 605)	(ASC 605)
License	\$ 2,069	\$ 2,070	\$ 1,156	\$ 773	79%	50%
Connected services	37,562	37,845	32,919	25,292	15%	30%
Professional services	51,214	50,512	41,123	35,571	23%	16%
Amortization of intangibles	8,498	8,498	7,766	6,898	9%	13%
Total cost of revenues	<u>\$ 99,343</u>	<u>\$ 98,925</u>	<u>\$ 82,964</u>	<u>\$ 68,534</u>	19%	21%

The following table shows total gross profit by product type and the corresponding percentage change (dollars in thousands):

	Year Ended September 30,				% Change	% Change
	2019	2019	2018	2017	2019 vs. 2018	2018 vs. 2017
	(ASC 606)	(ASC 605)	(ASC 605)	(ASC 605)	(ASC 605)	(ASC 605)
License	\$ 170,310	\$ 169,863	\$ 169,919	\$ 148,030	(0)%	15%
Connected services	41,128	41,792	27,308	20,404	53%	34%
Professional services	1,032	4,416	4,559	14,659	(3)%	(69)%
Amortization of intangibles	(8,498)	(8,498)	(7,766)	(6,898)	9%	13%
Total gross profit	<u>\$ 203,972</u>	<u>\$ 207,573</u>	<u>\$ 194,020</u>	<u>\$ 176,195</u>	7%	10%

Fiscal Year 2019 Compared with Fiscal Year 2018

Total cost of revenues under ASC 606 for fiscal year 2019 is \$0.4 million higher compared to total cost of revenues for the same period presented under ASC 605. Under ASC 605, total cost of revenues for fiscal year 2019 were \$98.9 million, an increase of \$16.0 million, or 19.2%, from \$83.0 million for fiscal year 2018. The increase in cost of revenues resulted primarily from the growth of our cloud-based connected services revenue, which required an increase in cloud-based infrastructure and employee costs, and our investments in professional services staff to meet customer program demands. We also experienced an increase in amortization of intangible assets that was included in costs of revenues primarily due to our acquisition of Voicebox on April 2, 2018, which increased the carrying value of our total intangible assets.

Total gross profit under ASC 606 for fiscal year 2019 is \$3.6 million lower compared to total gross profit for the same period presented under ASC 605. Under ASC 605, we experienced an increase in total gross profit of \$13.6 million, or 7.0%, from \$194.0 million to \$207.6 million, which was primarily driven by increased demand for our connected services solutions.

Cost of License Revenue

The difference between cost of license revenue under ASC 605 and ASC 606 was immaterial. Under ASC 605, cost of license revenue for fiscal year 2019 was \$2.1 million, an increase of \$0.9 million, or 79.1%, from \$1.2 million for fiscal year 2018. Cost of license revenues increased due to third-party royalty expenses associated with external technologies we leverage in our edge software components. As a percentage of total cost of revenue, cost of license revenue under ASC 605 increased by 0.7 percentage points from 1.4% for fiscal year 2018 to 2.1% for fiscal year 2019.

License gross profit under ASC 606 for the fiscal year ended September 30, 2019 is \$0.4 million higher compared to license gross profit for the same period presented under ASC 605. Under ASC 605, license gross profit increased by \$0.1 million, or 0.0%, since costs associated with license royalties are minimal.

Cost of Connected Services Revenue

Cost of connected services revenue under ASC 606 for fiscal year 2019 is \$0.3 million lower compared to cost of connected services revenue for the same period presented under ASC 605. Under ASC 605, cost of connected services revenue for fiscal year 2019 was \$37.8 million, an increase of \$4.9 million, or 15.0%, from \$32.9 million for fiscal year 2018. Cost of connected services revenue increased primarily as a result of the growth of cloud-based connected services revenue from new and existing customers utilizing our software delivery services for hybrid solutions. As a percentage of total cost of revenue, cost of connected service revenue under ASC 605 decreased by 1.4 percentage points from 39.7% for fiscal year 2018 to 38.3% for fiscal year 2019.

Connected services gross profit under ASC 606 for fiscal year 2019 is \$0.7 million lower compared to connected services gross profit for the same period presented under ASC 605. Under ASC 605, connected services gross profit increased \$14.5 million, or 53.0%, from \$27.3 million to \$41.8 million which was primarily due to connected services revenue growth on relatively fixed cloud infrastructure and employee costs.

Cost of Professional Services Revenue

Cost of professional services revenue under ASC 606 for fiscal year 2019 is \$0.7 million higher compared to cost of professional services revenue for the same period presented under ASC 605. Under ASC 605, cost of professional services revenue for fiscal year 2019 was \$50.5 million, an increase of \$9.4 million, or 22.8%, from \$41.1 million for fiscal year 2018. Cost of professional services revenue increased primarily due to our investments in professional services staff to meet customer program demands. As a percentage of total cost of revenue, cost of professional services revenue under ASC 605 increased by 1.5 percentage points from 49.6% for fiscal year 2018 to 51.1% for fiscal year 2019.

Professional services gross profit under ASC 606 for the fiscal year ended September 30, 2019 is \$3.4 million lower compared to professional services gross profit for the same period presented under ASC 605. Under ASC 605, professional services gross profit decreased \$0.1 million, or 3.1%, from \$4.6 million to \$4.4 million which was primarily due to industry trends and changes made to our professional services pricing strategy.

Fiscal Year 2018 Compared with Fiscal Year 2017

Our total cost of revenues for fiscal year 2018 were \$83.0 million, an increase of \$14.5 million, or 21.1%, from \$68.5 million for fiscal year 2017. The increase in cost of revenues was primarily the result of hiring more professional services staff and higher cloud infrastructure and employee costs for connected services in order to provide our customization and implementation services to our customers. We experienced an increase in our amortization of intangible assets that was included in costs of revenues primarily due to our acquisition of Voicebox, which increased the carrying value of our total intangible assets. We experienced an increase in gross profit of \$17.8 million, or 10.1%, from \$176.2 million to \$194.0 million which was primarily driven by increased demand for our license and connected services solutions.

Cost of License Revenue

Cost of license revenue for fiscal year 2018 were \$1.2 million, an increase of \$0.4 million, or 49.5%, from \$0.8 million for fiscal year 2017. Cost of license revenues increased due to third-party royalty expenses associated with external technologies we leverage in our edge software components. As a percentage of total cost of revenue, cost of license revenue increased by 0.3 percentage points from 1.1% for fiscal year 2017 to 1.4% for fiscal year 2018. License gross profit increased \$21.9 million, or 14.8%, from \$148.0 million to \$169.9 million since costs associated with license royalties are minimal.

Cost of Connected Services Revenue

Cost of connected services revenue for fiscal year 2018 were \$32.9 million, an increase of \$7.6 million, or 30.2%, from \$25.3 million for fiscal year 2017. Cost of connected services revenue increased primarily as a result of the growth of cloud-based connected services revenue from new and existing customers utilizing our software delivery services for hybrid solutions. As a percentage of total cost of revenue, cost of connected service revenue increased by 2.8 percentage points from 36.9% for fiscal year 2017 to 39.7% for fiscal year 2018. Connected services gross profit increased \$6.9 million, or 33.8%, from \$20.4 million to \$27.3 million, which was primarily due to connected services revenue growth on relatively fixed cloud infrastructure and employee costs.

Cost of Professional Services Revenue

Cost of professional services revenue for fiscal year 2018 were \$41.1 million, an increase of \$5.5 million, or 15.6%, from \$35.6 million for fiscal year 2017. Cost of professional services revenue increased primarily due to our investments in professional services staff to meet customer program demands which differentiate our service offerings. As a percentage of total cost of revenue, cost of professional services revenue decreased by 2.3 percentage points from 51.9% for fiscal year 2017 to 49.6% for fiscal year 2018. Professional services gross profit decreased \$9.8 million, or 69.2%, from \$14.1 million to \$4.3 million, which was primarily the result of a change in our pricing strategy and increased hiring of professional services staff as we invest in expanding and differentiating our professional services offerings.

Operating Expenses

The tables below show each component of operating expense. Other income (expense), net and provision for income taxes are non-operating expenses and presented in a similar format (dollars in thousands).

R&D Expenses

	Year Ended September 30,			% Change	% Change
	2019	2018	2017	2019 vs. 2018	2018 vs. 2017
Research and development	\$ 93,061	\$ 80,957	\$ 56,755	15%	43%

Fiscal Year 2019 Compared with Fiscal Year 2018

Historically, R&D expenses are our largest operating expense as we continue to build on our existing software platforms and develop new technologies. R&D expenses for fiscal year 2019 were \$93.1 million, an increase of \$12.1 million, or 15.0%, from \$81.0 million for fiscal year 2018. R&D expense increased primarily as a result of hiring more engineers and other essential product innovation personnel. Investing in R&D personnel is essential to advancing our technologies and enhancing in-car experiences. As a percentage of total operating expenses, R&D expenses decreased by 3.4 percentage points from 51.5% for fiscal year 2018 to 48.1% for fiscal year 2019.

Fiscal Year 2018 Compared with Fiscal Year 2017

Historically, R&D expenses are our largest operating expense as we continue to build on our existing software platforms and develop new technologies. R&D expenses for fiscal year 2018 were \$81.0 million, an increase of \$24.2 million, or 42.6%, from \$56.8 million for fiscal year 2017. R&D expense increased primarily as a result of hiring more engineers and other essential product innovation personnel. Investing in R&D personnel is essential to advancing our technologies and enhancing in-car experiences. As a percentage of total operating expenses, R&D expenses increased by 1.1 percentage points from 50.4% for fiscal year 2017 to 51.5% for fiscal year 2018.

Sales & Marketing Expenses

	Year Ended September 30,				% Change	% Change
	2019 (ASC 606)	2019 (ASC 605)	2018 (ASC 605)	2017 (ASC 605)	2019 vs. 2018 (ASC 605)	2018 vs. 2017 (ASC 605)
Sales and marketing	\$ 36,261	\$ 36,653	\$ 30,553	\$ 29,909	20%	2%

Fiscal Year 2019 Compared with Fiscal Year 2018

Sales and marketing expenses under ASC 606 for fiscal year 2019 are \$0.4 million lower compared to sales and marketing expenses for the same period presented under ASC 605 due to the amortization of capitalized sales commission expenses over the period of benefit. Under ASC 605, sales commissions were expensed as incurred. Under ASC 605, sales and marketing expenses for fiscal year 2019 were \$36.7 million, an increase of \$6.1 million, or 20.0%, from \$30.6 million for fiscal year 2018. Sales and marketing expenses increased primarily as a result of higher sales quota attainment and the expansion of our sales and marketing staff levels. As a percentage of total operating expenses, sales and marketing expenses under ASC 605 decreased by 0.5 percentage points from 19.4% for fiscal year 2018 to 18.9% for fiscal year 2019.

Fiscal Year 2018 Compared with Fiscal Year 2017

Sales and marketing expenses for fiscal year 2018 were \$30.6 million, an increase of \$0.7 million, or 2.2%, from \$29.9 million for fiscal year 2017. Sales and marketing expenses increased primarily as a result of higher compensation expenses associated with our existing sales and marketing staff, third party service fees, and other miscellaneous sales and marketing expenses. This increase was offset by reduced commission expenses resulting from recent changes in our commission plans and stock compensation expenses. As a percentage of total operating expenses, sales and marketing expenses decreased by 7.2 percentage points from 26.6% for fiscal year 2017 to 19.4% for fiscal year 2018.

General & Administrative Expenses

	Year Ended September 30,			% Change	% Change
	2019	2018	2017	2019 vs. 2018	2018 vs. 2017
General and administrative	\$ 25,926	\$ 19,873	\$ 17,485	30%	14%

Fiscal Year 2019 Compared with Fiscal Year 2018

General and administrative expenses for the fiscal year ended September 30, 2019 were \$25.9 million, an increase of \$6.1 million, or 30.5%, from \$19.9 million for the fiscal year ended September 30, 2018. The increase in general and administrative expenses was primarily attributable to professional and legal fees, administrative salaries expenses, and software fees. As a percentage of total operating expenses, general and administrative expenses increased by 0.8 percentage points from 12.6% for fiscal year 2018 to 13.4% for fiscal year 2019.

Fiscal Year 2018 Compared with Fiscal Year 2017

General and administrative expenses for fiscal year 2018 were \$19.9 million, an increase of \$2.4 million, or 13.7%, from \$17.5 million for fiscal year 2017. The increase in general and administrative expenses was primarily attributable to professional and legal fees, administrative salaries expenses, and software fees. As a percentage of total operating expenses, general and administrative expenses decreased by 2.9 percentage points from 15.5% for fiscal year 2017 to 12.6% for fiscal year 2018.

Amortization of Intangible Assets

	Year Ended September 30,			% Change	% Change
	2019	2018	2017	2019 vs. 2018	2018 vs. 2017
Cost of revenues	\$ 8,498	\$ 7,766	\$ 6,898	9%	13%
Operating expense	12,524	8,840	5,763	42%	53%
Total amortization	\$ 21,022	\$ 16,606	\$ 12,661	27%	31%

Fiscal Year 2019 Compared with Fiscal Year 2018

Intangible asset amortization for fiscal year 2019 was \$21.0 million, an increase of \$4.4 million, or 26.6%, from \$16.6 million for fiscal year 2018. The increase primarily relates to our acquisition of Voicebox which resulted in the addition of several customer relationships that increased amortization expense.

As a percentage of total cost of revenues, intangible asset amortization within cost of revenues decreased by 0.8 percentage points from 9.4% for fiscal year 2018 to 8.6% for fiscal year 2019. As a percentage of total operating expenses, intangible asset amortization expenses within operating expenses increased by 0.8 percentage points from 5.6% for fiscal year 2018 to 6.5% for fiscal year 2019.

Fiscal Year 2018 Compared with Fiscal Year 2017

Intangible asset amortization for fiscal year 2018 was \$16.6 million, an increase of \$3.9 million, or 31.2%, from \$12.7 million for fiscal year 2017. The increase primarily relates to our acquisition of Voicebox which resulted in the addition of several customer relationships that increased amortization expense. This increase was partially offset by certain other customer relationships and tradenames becoming fully amortized during fiscal year 2018.

As a percentage of total cost of revenues, intangible asset amortization within cost of revenues decreased by 0.7 percentage points from 10.1% for fiscal year 2017 to 9.4% for fiscal year 2018. As a percentage of total operating expenses, intangible asset amortization expenses within operating expenses increased by 0.5 percentage points from 5.1% for fiscal year 2017 to 5.6% for fiscal year 2018.

Restructuring and Other Costs, Net

	Year Ended September 30,			% Change	% Change
	2019	2018	2017	2019 vs. 2018	2018 vs. 2017
Restructuring and other costs, net	\$ 24,404	\$ 12,863	\$ 1,865	90%	590%

Fiscal Year 2019 Compared with Fiscal Year 2018

Restructuring and other costs, net for fiscal year 2019 were \$24.4 million, an increase of \$11.5 million, from \$12.9 million for fiscal year 2018. Restructuring and other costs, net increased primarily due to professional service fees incurred to establish the Cerence business as a standalone public company. As a percentage of total operating expense, restructuring and other costs, net increased by 4.4 percentage points from 8.2% for fiscal year 2018 to 12.6% for fiscal year 2019.

Fiscal Year 2018 Compared with Fiscal Year 2017

Restructuring and other costs, net for fiscal year 2018 were \$12.9 million, an increase of \$11.0 million, from \$1.9 million for fiscal year 2017. Restructuring and other costs, net increased primarily due to professional service fees incurred to establish the Cerence business as a standalone public company and the reorganization of Voicebox business units in order to achieve process optimization and cost reductions following the acquisition. As a percentage of total operating expense, restructuring and other costs, net increased by 6.5 percentage points from 1.7% for fiscal year 2017 to 8.2% for fiscal year 2018.

Acquisition-related Costs

	Year Ended September 30,			% Change 2019 vs. 2018	% Change 2018 vs. 2017
	2019	2018	2017		
Acquisition-related costs	\$ 944	\$ 4,082	\$ 733	(77)%	457%

Fiscal Year 2019 Compared with Fiscal Year 2018

Acquisition-related costs for fiscal year 2019 were \$0.9 million, a decrease of \$3.1 million, from \$4.1 million for fiscal year 2018. Acquisition costs decreased as a direct result of integration, legal, and other professional fees incurred resulting from the acquisition of Voicebox on April 2, 2018. As a percentage of total operating expense, acquisition-related costs decreased by 2.1 percentage points from 2.6% for fiscal year 2018 to 0.5% for fiscal year 2019.

Fiscal Year 2018 Compared with Fiscal Year 2017

Acquisition-related costs for fiscal year 2018 were \$4.1 million, an increase of \$3.4 million, from \$0.7 million for fiscal year 2017. Acquisition costs increased as a direct result of integration, legal, and other professional fees incurred resulting from the acquisition of Voicebox on April 2, 2018. As a percentage of total operating expense, acquisition-related costs increased by 1.9 percentage points from 0.7% for fiscal year 2017 to 2.6% for fiscal year 2018.

Other Income (Expense), Net

	Year Ended September 30,				% Change 2019 vs. 2018	% Change 2018 vs. 2017
	2019 (ASC 606)	2019 (ASC 605)	2018 (ASC 605)	2017 (ASC 605)		
Other income (expense), net	\$ 332	\$ 363	\$ (54)	\$ (483)	(772)%	(89)%

Fiscal Year 2019 Compared with Fiscal Year 2018

Other income (expense), net for fiscal year 2019 was \$0.4 million, an increase of \$0.4 million, or 772.2%, from \$(0.1) million for fiscal year 2018. The net increase in other income (expense), net over the prior fiscal year was primarily the result of foreign currency differences year over year.

Fiscal Year 2018 Compared with Fiscal Year 2017

Other income (expense), net for fiscal year 2018 was less than \$(0.1) million, a decrease of \$0.4 million, or 88.8%, from \$(0.5) million for fiscal year 2017. The net increase in other income (expense), net over the prior fiscal year was primarily the result of foreign currency gains (losses) year over year.

(Benefit from) Provision for Income Taxes

	Year Ended September 30,			% Change	% Change
	2019	2018	2017	2019 vs. 2018	2018 vs. 2017
(Benefit from) provision for income taxes	\$ (89,084)	\$ 30,917	\$ 15,926	(388)%	94%
Effective income tax rate%	(796.5)%	84.0%	25.2%		

Fiscal Year 2019 Compared with Fiscal Year 2018

Our effective income tax rate for fiscal year 2019 was (796.5)%, compared to 84.0% for fiscal year 2018. Consequently, our benefit from income taxes for fiscal year 2019 was \$89.1 million, a net change of \$120.0 million, or 388.1%, from a provision for income taxes of \$30.9 million for fiscal year 2018. The effective income tax rate for fiscal year 2019 differed from the U.S. statutory rate of 21.0% primarily due to a net tax benefit of \$91.7 million related to intangible property transfers, partially offset by an uncertain tax position. The net tax benefit is also partially offset by global intangible low-taxed income, or GILTI, tax expense of \$3.9 million.

Fiscal Year 2018 Compared with Fiscal Year 2017

Our effective income tax rate for fiscal year 2018 was 84.0%, compared to 25.2% for fiscal year 2017. Consequently, provision for income taxes for fiscal year 2018 was \$30.9 million, an increase of \$15.0 million, or 94.1 %, from \$15.9 million for fiscal year 2017. The effective income tax rate for fiscal year 2018 differed from the blended U.S. statutory rate of 24.5%, primarily due to the net tax provisions resulting from the Tax Cuts and Jobs Act, or TCJA, remeasurement of deferred tax assets and liabilities at the lower enacted rate which yielded approximately \$23.1 million of benefit for the year ended September 30, 2018, our R&D credits, and the domestic production activities deduction. The effective income tax rate for fiscal year 2017 differed from the U.S. statutory rate of 35.0% due to our earnings in foreign jurisdictions that are subject to significantly lower rates, R&D credits, and the domestic production activities deduction.

Liquidity and Capital Resources

Historically, the Cerence business has generated positive cash flows from operations. As part of Nuance, the Cerence business utilized a centralized approach to cash management and financing its operations. Under this approach, the Cerence business did not maintain its own cash and cash equivalent balances. Nuance bills customers and collects cash associated with the Cerence business's operations. Nuance approves and provides all cash required for operating or investing activities outside of the Cerence business's normal course of business. This cash management arrangement is not reflective of the manner in which the Cerence business would have financed its operations if it had been a standalone business during the historical periods presented. Historically, the Cerence business was not allocated cash or cash equivalents from Nuance. Additionally, the Cerence business was not allocated any debt or interest expense since Nuance's corporate borrowings were not specifically identifiable to the Cerence business for any of the historical periods presented.

Our ability to fund future operating needs will depend on our ability to generate positive cash flows from operations and finance additional funding in the capital markets as needed. Upon the Distribution, Nuance allocated \$110.0 million in cash and cash equivalents to the Cerence business, which was adequate to meet the short-term net working capital needs of our business at the close of the Distribution. More specifically, as of September 30, 2019 net working capital of our business, excluding current deferred revenue and deferred cost, was \$42.2 million. This balance is representative of the short-term net cash inflows based on the working capital at that date and is also relatively consistent with the balance at September 30, 2018. Based on our history of generating positive cash flows and the \$110.0 million of allocated cash and cash equivalents coupled with this working capital profile, we believe we will be able to meet our short-term operating cash needs. We believe we will meet all expected future cash requirements and obligations, through a combination of cash flows from operating activities, available cash balances, and available credit via our revolving credit facility. Specifically, we anticipate our cost of revenues, funding our R&D activities, and debt obligations to be our primary uses of cash during the year ended September 30, 2020. Should we need to secure additional sources of liquidity, we believe we could finance our needs through the issuance of equity securities or debt offerings. However, we cannot guarantee that we will be able to obtain financing through the issuance of equity securities or debt offerings on reasonable terms in the future.

Senior Facilities

On October 1, 2019, we incurred substantial indebtedness in the aggregate principal amount of approximately \$270.0 million under our Term Loan Facility, which financed the cash distribution to Nuance and provided initial support for the cash flow needs of the Cerence business. We also entered into a \$75.0 million Revolving Facility to be drawn on in the event that our working capital and other cash needs are not supported by our operating cash flow. As of December 19, 2019, there were no amounts outstanding under the Revolving Facility.

The Revolving Facility matures 54 months after October 1, 2019, with certain extension rights in the discretion of each lender. The Term Loan Facility matures five years after October 1, 2019, with certain extension rights in the discretion of each lender. The Senior Facilities are subject to an interest rate, at our option, of either (a) a base rate determined by reference to the highest of (1) the rate of interest last quoted by The Wall Street Journal as the “prime rate” in the United States, (2) the federal funds effective rate, plus 0.5% and (3) the one month adjusted LIBOR rate, plus 1% per annum, or ABR, or (b) an adjusted LIBOR rate, or LIBOR, (which may not be less than 1% per annum), in each case, plus an applicable margin. The applicable margins for the Senior Facilities are 6.00% per annum (for LIBOR loans) and 5.00% per annum (for ABR loans). Accordingly, the interest rates for the Senior Facilities will fluctuate during the term of the credit agreement based on changes in the ABR or LIBOR.

We are obligated to make quarterly principal payments on the last business day of each quarter in an aggregate annual amount equal to 3.5% of the original principal amount of the Term Loan Facility during the first two years of the Term Loan Facility, and 10% of the original principal amount of the Term Loan Facility thereafter. Quarterly principal payments will commence on March 31, 2020. Borrowings under the credit agreement for the Senior Facilities are prepayable at our option without premium or penalty, subject to a 1.00% prepayment premium in connection with any repricing transaction for the Term Loan Facility in the first six months after the closing date. The credit agreement also contains certain mandatory prepayment provisions in the event that we incur certain types of indebtedness, receive net cash proceeds from certain non-ordinary course asset sales or other dispositions of property or generate excess cash flow, starting with the fiscal year ending on September 30, 2020, 75% of excess cash flow on an annual basis (with step-downs to 50%, 25% and 0% subject to compliance with certain net first lien leverage ratios), in each case subject to terms and conditions customary for financings of this kind.

The credit agreement contains certain affirmative and negative covenants that, among other things, limit our and our subsidiaries’ ability to incur additional indebtedness or liens, to dispose of assets, to make certain fundamental changes, enter into restrictive agreements, to designate subsidiaries as unrestricted, to make certain investments, loans, advances, guarantees and acquisitions to prepay certain indebtedness and to pay dividends, to make other distributions or redemptions/repurchases, in respect of us and our subsidiaries’ equity interests, to engage in transactions with affiliates or to amend certain material documents. In addition, the credit agreement contains a financial covenant requiring the maintenance of a net first lien leverage ratio of not greater than 6.00 to 1.00.

Our obligations under the credit agreement are jointly and severally guaranteed by certain of our existing and future direct and indirect wholly owned domestic subsidiaries, subject to certain exceptions customary for financings of this type. All obligations of the borrowers and the guarantors are secured by certain assets of such borrowers and guarantors, including a perfected first-priority pledge of all (or, in the case of foreign subsidiaries or subsidiaries, or FSHCO, that own no material assets other than equity interests in foreign subsidiaries that are “controlled foreign corporations” or other FSHCOs, 65%) of the equity securities of each wholly owned subsidiary of Cerence held by any loan party, subject to certain customary exceptions and limitations.

Cash Flows

Cash flows from operating, investing and financing activities for the years ended September 2019, 2018, and 2017, as reflected in the audited consolidated and combined statement of cash flows included in Item 8 of this Form 10-K, are summarized in the following table (dollars in thousands):

	Year Ended September 30,			% Change 2019 vs. 2018	% Change 2018 vs. 2017
	2019	2018	2017		
Net cash provided by operating activities	\$ 88,071	\$ 115,259	\$ 96,784	(24)%	19%
Net cash used in investing activities	(4,517)	(86,312)	(4,714)	(95)%	1731%
Net cash used in financing activities	(83,554)	(28,947)	(92,070)	189%	(69)%
Net changes in cash and cash equivalents	\$ —	\$ —	\$ —	—	—

Net Cash Provided by Operating Activities

Net cash provided by operating activities for fiscal year 2019 was \$88.1 million, a net decrease of \$27.2 million, or 23.6%, from net cash provided by operating activities of \$115.3 million for fiscal year 2018. The net decrease in cash provided by operating activities stems from unfavorable changes in working capital, primarily due to the timing of payments, which decreased accrued expenses and other liabilities by \$6.7 million and increased prepaid expenses and other assets by \$5.9 million. In addition, the timing of billing and collections resulted in a decrease in accounts receivable of \$7.6 million compared to the prior year.

Deferred revenue represents a significant portion of our net cash provided by operating activities and, depending on the nature of our contracts with customers, this balance can fluctuate significantly from period to period. Due to the evolution of our connected offerings and architecture, trending away from providing legacy infotainment and connected services and a change in our professional services pricing strategies, we expect our deferred revenue balances to decrease in the future, including due to a wind-down of a legacy connected service relationship with a major OEM, since the majority of cash from the contract has been collected. We do not expect any changes in deferred revenue to affect our ability to meet our obligations.

Net cash provided by operating activities for fiscal year 2018 was \$115.3 million, an increase of \$18.5 million, or 19.1%, from \$96.8 million for fiscal year 2017. The net increase in cash provided by operating activities stems from favorable changes in working capital, primarily due to the timing of billing and collections which resulted in an increase in accounts receivable of \$26.4 million compared to the prior year. This increase was partially offset by other changes in working capital, an increase in operating expenses primarily due to continued investments in R&D, and \$7.9 million of separation costs related to establishing the Cerence business as a standalone public company.

Net Cash Used in Investing Activities

Net cash used in investing activities for the fiscal year 2019 was \$4.5 million, a decrease of \$81.8 million, or 94.8%, from \$86.3 million for fiscal year 2018. The decrease in cash outflows was due to net cash payments of \$79.8 million associated with the acquisition of Voicebox during the fiscal year ended September 30, 2018 and a \$2.0 million decrease in cash outflows for capital expenditures.

Net cash used in investing activities for fiscal year 2018 was \$86.3 million, an increase of \$81.6 million, from \$4.7 million for fiscal year 2017. The increase in cash outflows was due to net cash payments of \$79.8 million associated with the acquisition of Voicebox and a \$1.8 million increase in cash outflows for capital expenditures.

Net Cash Used in Financing Activities

Net cash used in financing activities for the fiscal year 2019 was \$83.6 million, a net increase of \$54.6 million, from cash used in financing activities of \$28.9 million for fiscal year 2018. The change is comparable period over period and relates to the cash distributions associated with Nuance's historical cash management process.

Net cash used in financing activities for fiscal year 2018 was \$28.9 million, a decrease of \$63.2 million, or 68.6%, from net cash used in financing activities of \$92.1 million for fiscal year 2017. The net decrease in cash used in financing activities is the result of cash distributions associated with Nuance's historical cash management process.

Business Acquisitions

Historically, we have made several acquisitions. We approach the market with a focus on our core technologies and acquire companies based on a careful assessment of potential post-acquisition synergies that will help us expand our software platform and connected car services and advance our technologies.

On April 2, 2018, we acquired Voicebox, headquartered in Bellevue, Washington. Voicebox is a provider of conversational artificial intelligence, including voice recognition, natural language understanding, and artificial intelligence services. The aggregate consideration for this transaction was \$94.2 million which included \$79.8 million paid in cash, net of \$6.7 million in cash acquired, a \$12.8 million write-off of deferred revenues related to the Cerence business's pre-existing relationship with Voicebox, and a \$1.6 million deferred acquisition payment which would be paid in cash upon the conclusion of an indemnity period. The transaction was accounted for as a business combination and is included in the accompanying historical Combined Financial Statements beginning on the date of acquisition. Refer to Note 4 to the accompanying historical Combined Financial Statements included elsewhere in this Form 10-K for more detail on the acquisition of Voicebox.

Contractual Obligations, Contingent Liabilities, and Commitments

The table below shows our contractual obligations as of September 30, 2019 (dollars in thousands):

	Payments Due by the Year Ended September 30,				
	2020	2021 and 2022	2023 and 2024	Thereafter	Total
Operating leases	\$ 6,323	\$ 9,914	\$ 6,159	\$ 4,039	\$ 26,435
Capital leases	82	-	-	-	82
	<u>\$ 6,405</u>	<u>\$ 9,914</u>	<u>\$ 6,159</u>	<u>\$ 4,039</u>	<u>\$ 26,517</u>

Contractual obligations may include lease, pension contribution requirements, and other non-current liabilities that are enforceable and legally binding on the Cerence business, excluding contingent liabilities that may arise from litigation, arbitration, regulatory actions, or income taxes. As of September 30, 2019, the Cerence business was subject to contractual obligations regarding operating and capital leases.

Other Matters

Off-Balance Sheet Arrangements

We do not have any off-balance sheet arrangements that have, or are reasonably likely to have, a material current or future effect on our financial condition, changes in financial condition, revenues, expenses, results of operations, liquidity, capital expenditures, or capital resources.

Defined Benefit Plans

We sponsor certain defined benefit plans that are offered primarily by certain of our foreign subsidiaries. Many of these plans were assumed through our acquisitions or are required by local regulatory requirements. We may deposit funds for these plans with insurance companies, third-party trustees, or into government-managed accounts consistent with local regulatory requirements, as applicable. Our total defined benefit plan pension expense was \$0.4 million, \$0.4 million, and \$0.4 million for fiscal years 2019, 2018, and 2017, respectively. The aggregate projected benefit obligation as of fiscal years 2019, 2018, and 2017 was \$7.3 million, \$5.0 million and \$5.1 million, respectively. The aggregate net liability of our defined benefit plans as of September 30, 2019, 2018, and 2017 was \$6.8 million, \$4.2 million, and \$4.2 million, respectively.

Issued Accounting Standards Not Yet Adopted

Refer to Note 3 to the accompanying audited Combined Financial Statements included elsewhere in this Form 10-K for a description of certain issued accounting standards that have not been adopted by us and may impact our results of operations in future reporting periods.

Critical Accounting Policies, Judgments and Estimates

The preparation of financial statements in conformity with GAAP, requires management 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 revenue and expenses during the reporting period. On an ongoing basis, we evaluate our estimates, assumptions and judgments, including those related to revenue recognition; allowance for doubtful accounts and sales returns; accounting for deferred costs; accounting for internally developed software; the valuation of goodwill and intangible assets; accounting for business combinations; accounting for stock-based compensation; accounting for income taxes, deferred tax assets, and related valuation allowances; and loss contingencies. Our management bases its estimates on historical experience, market participant fair value considerations, projected future cash flows, and various other factors that are believed to be reasonable under the circumstances. Actual results could differ from these estimates.

We believe the following critical accounting policies most significantly affect the portrayal of our financial condition and the results of our operations. These policies require our most difficult and subjective judgements.

Revenue Recognition

We primarily derive revenue from the following sources: (1) royalty-based software license arrangements, (2) connected services, and (3) professional services. Revenue is reported net of applicable sales and use tax, value-added tax and other transaction taxes imposed on the related transaction including mandatory government charges that are passed through to our customers. We account for a contract when both parties have approved and committed to the contract, the rights of the parties are identified, payment terms are identified, the contract has commercial substance and collectability of consideration is probable.

Our arrangements with customers may contain multiple products and services. We account for individual products and services separately if they are distinct—that is, if a product or service is separately identifiable from other items in the contract and if a customer can benefit from it on its own or with other resources that are readily available to the customer.

As of October 1, 2018, we adopted ASC 606 using the modified retrospective approach, which requires the results for the current reporting periods be presented under ASC 606, while prior period amounts are not adjusted and continue to be reported in accordance with our historic accounting policies in accordance with ASC 605, with a cumulative adjustment recorded to accumulated deficit. For a reconciliation of our old accounting policy and ASC 606, please refer to Note 3 to the accompanying audited Combined Financial Statements included elsewhere in this Form 10-K. We currently recognize revenue after applying the following five steps:

- identification of the contract, or contracts, with a customer;
- identification of the performance obligations in the contract, including whether they are distinct within the context of the contract;
- determination of the transaction price, including the constraint on variable consideration;
- allocation of the transaction price to the performance obligations in the contract; and
- recognition of revenue when, or as, the performance obligations are satisfied.

We allocate the transaction price of the arrangement based on the relative estimated standalone selling price, or SSP, of each distinct performance obligation. In determining SSP, we maximize observable inputs and consider a number of data points, including:

- the pricing of standalone sales (in the instances where available);
- the pricing established by management when setting prices for deliverables that are intended to be sold on a standalone basis;
- contractually stated prices for deliverables that are intended to be sold on a standalone basis; and
- other pricing factors, such as the geographical region in which the products are sold and expected discounts based on the customer size and type.

We only include estimated amounts in the transaction price to the extent it is probable that a significant reversal of cumulative revenue recognized will not occur when the uncertainty associated with the variable consideration is resolved. We reduce transaction prices for estimated returns and other allowances that represent variable consideration under ASC 606, which we estimate based on historical return experience and other relevant factors, and record a corresponding refund liability as a component of accrued expenses and other current liabilities. Other forms of contingent revenue or variable consideration are infrequent.

Revenue is recognized when control of these services are transferred to our customers, in an amount that reflects the consideration we expect to be entitled to in exchange for those services.

We assess the timing of the transfer of products or services to the customer as compared to the timing of payments to determine whether a significant financing component exists. In accordance with the practical expedient in ASC 606-10-32-18, we do not assess the existence of a significant financing component when the difference between payment and transfer of deliverables is a year or less. If the difference in timing arises for reasons other than the provision of finance to either the customer or us, no financing component is deemed to exist. The primary purpose of our invoicing terms is to provide customers with simplified and predictable ways of purchasing our services, not to receive or provide financing from or to customers. We do not consider set-up fees nor other upfront fees paid by our customers to represent a financing component.

Performance Obligations

License

Software and technology licenses sold with non-distinct professional services to customize and/or integrate the underlying software and technology are accounted for as a combined performance obligation. Revenue from the combined performance obligation is recognized over time based upon the progress towards completion of the project, which is measured based on the labor hours already incurred to date as compared to the total estimated labor hours. For income statement presentation purposes, we separate license revenue from professional services revenue based on their SSPs.

Revenue from distinct software and technology licenses, which do not require professional service to customize and/or integrate the software license, is recognized at the point in time when the software and technology is made available to the customer and control is transferred.

Revenue from software and technology licenses sold on a royalty basis, where the license of intellectual property is the predominant item to which the royalty relates, is recognized in the period the usage occurs in accordance with the practical expedient in ASC 606-10-55-65(A).

Connected Services

Connected services, which allow our customers to use the hosted software over the contract period without taking possession of the software, are provided on a usage basis as consumed or on a fixed fee subscription basis. Subscription basis revenue represents a single promise to stand-ready to provide access to our connected services. Our connected services contract terms generally range from one to five years.

As each day of providing services is substantially the same and the customer simultaneously receives and consumes the benefits as access is provided, we have determined that our connected services arrangements are a single performance obligation comprised of a series of distinct services. These services include variable consideration, typically a function of usage. We recognize revenue as each distinct service period is performed (i.e., recognized as incurred).

Our connected service arrangements generally include services to develop, customize, and stand-up applications for each customer. In determining whether these services are distinct, we consider dependence of the cloud service on the up-front development and stand-up, as well as availability of the services from other vendors. We have concluded that the up-front development, stand-up and customization services are not distinct performance obligations, and as such, revenue for these activities is recognized over the period during which the cloud-connected services are provided, and is included within connected services revenue.

Professional Services

Revenue from distinct professional services, including training, is recognized over time based upon the progress towards completion of the project, which is measured based on the labor hours already incurred to date as compared to the total estimated labor hours.

Significant Judgements

Determining whether products and services are considered distinct performance obligations that should be accounted for separately versus together may require significant judgment. Our license contracts often include professional services to customize and/or integrate the licenses into the customer's environment. Judgment is required to determine whether the license is considered distinct and accounted for separately, or not distinct and accounted for together with professional services.

Judgments are required to determine the SSP for each distinct performance obligation. When the SSP is directly observable, we estimate the SSP based upon the historical transaction prices, adjusted for geographic considerations, customer classes, and customer relationship profiles. In instances where the SSP is not directly observable, we determine the SSP using information that may include market conditions and other observable inputs. We may have more than one SSP for individual products and services due to the stratification of those products and services by customers and circumstances. In these instances, we may use information such as the size of the customer and geographic region in determining the SSP. Determining the SSP for performance obligations which we never sell separately also requires significant judgment. In estimating the SSP, we consider the likely price that would have resulted from established pricing practices had the deliverable been offered separately and the prices a customer would likely be willing to pay.

Contract Acquisition Costs

In conjunction with the adoption of ASC 606, we are required to capitalize certain contract acquisition costs. The capitalized costs primarily relate to paid commissions. In accordance with the practical expedient in ASC 606-10-10-4, we apply a portfolio approach to estimate contract acquisition costs for groups of customer contracts. We elect to apply the practical expedient in ASC 340-40-25-4 and will expense contract acquisition costs as incurred where the expected period of benefit is one year or less. Contract acquisition costs are deferred and amortized on a straight-line basis over the period of benefit, which we have estimated to be between one and five years. The period of benefit was determined based on an average customer contract term, expected contract renewals, changes in technology and our ability to retain customers, including canceled contracts. We assess the amortization term for all major transactions based on specific facts and circumstances. Contract acquisition costs are classified as current or noncurrent assets based on when the expense will be recognized. The current and noncurrent portions of contract acquisition costs are included in prepaid expenses and other current assets and in other assets, respectively. As of September 30, 2019, we had \$2.7 million of contract acquisition costs. We had amortization expense of \$0.7 million related to these costs during the fiscal year ended September 30, 2019. There was no impairment related to contract acquisition costs.

Capitalized Contract Costs

We capitalize incremental costs incurred to fulfill our contracts that (i) relate directly to the contract, (ii) are expected to generate resources that will be used to satisfy our performance obligation under the contract, and (iii) are expected to be recovered through revenue generated under the contract. Our capitalized costs consist primarily of setup costs, such as costs to standup, customize and develop applications for each customer, which are incurred to satisfy our stand-ready obligation to provide access to our connected offerings. These contract costs are expensed to cost of revenue as we satisfy our stand-ready obligation over the contract term which we estimate to be between one and five years, on average. The contract term was determined based on an average customer contract term, expected contract renewals, changes in technology, and our ability to retain customers, including canceled contracts. We classify these costs as current or noncurrent based on the timing of when we expect to recognize the expense. The current and noncurrent portions of capitalized contract fulfillment costs are presented as deferred costs. As of September 30, 2019, we had \$41.6 million of capitalized contract costs. We had amortization expense of \$10.6 million related to these costs during the fiscal year ended September 30, 2019. There was no impairment related to contract fulfillment costs capitalized.

Trade Accounts Receivable and Contract Balances

We classify our right to consideration in exchange for deliverables as either a receivable or a contract asset. A receivable is a right to consideration that is unconditional (i.e., only the passage of time is required before payment is due). We present such receivables in accounts receivable, net in our condensed combined balance sheets at their net estimated realizable value. We maintain an allowance for doubtful accounts to provide for the estimated amount of receivables that may not be collected. The allowance is based upon an assessment of customer creditworthiness, historical payment experience, the age of outstanding receivables and other applicable factors.

Our contract assets and liabilities are reported in a net position on a contract-by-contract basis at the end of each reporting period. Contract assets include unbilled amounts from long-term contracts when revenue recognized exceeds the amount billed to the customer, and right to payment is not solely subject to the passage of time. Contract assets are included in prepaid expenses and other current assets. As of September 30, 2019, we had \$9.2 million of contract assets.

Our contract liabilities, or deferred revenue, consist of advance payments and billings in excess of revenues recognized. We classify deferred revenue as current or noncurrent based on when we expect to recognize the revenues. As of September 30, 2019, we had \$353.3 million of deferred revenue.

Business Combinations

We determine and allocate the purchase price of an acquired company to the tangible and intangible assets acquired and liabilities assumed as of the business combination date. Results of operations and cash flows of acquired companies are included in our operating results from the date of acquisition. The purchase price allocation process requires us to use significant estimates and assumptions as of the date of the business acquisition, including fair value estimates such as:

- estimated fair values of intangible assets;
- estimated fair values of legal performance commitments to customers, assumed from the acquiree under existing contractual obligations (classified as deferred revenue) at the date of acquisition;
- estimated income tax assets and liabilities assumed from the acquiree; and
- estimated fair value of pre-acquisition contingencies from the acquiree.

While we use our best estimates and assumptions to determine the fair values of assets acquired and liabilities assumed at the date of acquisition, our estimates and assumptions are inherently uncertain and subject to refinement. As a result, within the measurement period, which is generally one year from the date of acquisition, we record adjustments to the assets acquired and liabilities assumed against goodwill in the period the amounts are determined. Adjustments identified subsequent to the measurement period are recorded within Acquisition-related costs, net.

Although we believe the assumptions and estimates we have made in the past have been reasonable and appropriate, they are based in part on historical experience and information obtained from the management of the acquired companies and are inherently uncertain. Examples of critical estimates in valuing certain of the intangible assets we have acquired or may acquire in the future include but are not limited to:

- future expected cash flows from software license sales, support agreements, consulting contracts, connected services, other customer contracts and acquired developed technologies and patents;
- expected costs to develop in-process R&D projects into commercially viable products and the estimated cash flows from the projects when completed;
- the acquired company's brand and competitive position, as well as assumptions about the period during which the acquired brand will continue to be used in the combined company's product portfolio; and
- discount rates.

Unanticipated events and circumstances may occur which may affect the accuracy or validity of such assumptions, estimates or actual results.

In connection with the purchase price allocations for our acquisitions, we estimate the fair market value of legal performance commitments to customers, which are classified as deferred revenue. The estimated fair market value of these obligations is determined and recorded as of the acquisition date.

We may identify certain pre-acquisition contingencies. If, during the purchase price allocation period, we are able to determine the fair values of a pre-acquisition contingencies, we will include that amount in the purchase price allocation. If we are unable to determine the fair value of a pre-acquisition contingency at the end of the measurement period, we will evaluate whether to include an amount in the purchase price allocation based on whether it is probable a liability had been incurred and whether an amount can be reasonably estimated. Subsequent to the end of the measurement period, any adjustment to amounts recorded for a pre-acquisition contingency will be included within acquisition-related cost, net in the period in which the adjustment is determined.

Goodwill Impairment Analysis

Goodwill represents the excess of the purchase price in a business combination over the fair value of net tangible and intangible assets acquired. Goodwill and intangible assets with indefinite lives are not amortized, but rather the carrying amounts of these assets are assessed for impairment at least annually or whenever events or changes in circumstances indicate that the carrying value of these assets may not be recoverable. Goodwill is tested for impairment annually on July 1, the first day of the fourth quarter of the fiscal year. In fiscal year 2017, we elected to early adopt ASU 2017-04, "*Simplifying the Test for Goodwill Impairment*", or ASU 2017-04, for our annual goodwill impairment test. ASU 2017-04 removes Step 2 of the goodwill impairment test requiring a hypothetical purchase price allocation. Goodwill impairment, if any, is determined by comparing the reporting unit's fair value to its carrying value. An impairment loss is recognized in an amount equal to the excess of the reporting unit's carrying value over its fair value, up to the amount of goodwill allocated to the reporting unit. There was no goodwill impairment in any of the periods presented.

For the purpose of testing goodwill for impairment, all goodwill acquired in a business combination is assigned to one or more reporting units. A reporting unit represents an operating segment or a component within an operating segment for which discrete financial information is available and is regularly reviewed by segment management for performance assessment and resource allocation. Components of similar economic characteristics are aggregated into one reporting unit for the purpose of goodwill impairment assessment. Reporting units are identified annually and re-assessed periodically for recent acquisitions or any changes in segment reporting structure.

Corporate assets and liabilities are allocated to each reporting unit based on the reporting unit's revenue, total operating expenses or operating income as a percentage of the consolidated amounts. Corporate debt and other financial liabilities that are not directly attributable to the reporting unit's operations and would not be transferred to hypothetical purchasers of the reporting units are excluded from a reporting unit's carrying amount.

The fair value of a reporting unit is generally determined using a combination of the income approach and the market approach. For the income approach, fair value is determined based on the present value of estimated future after-tax cash flows, discounted at an appropriate risk-adjusted rate. We use our internal forecasts to estimate future after-tax cash flows and estimate the long-term growth rates based on our most recent views of the long-term outlook for each reporting unit. Actual results may differ from those assumed in our forecasts. We derive our discount rates using a capital asset pricing model and analyzing published rates for industries relevant to our reporting units to estimate the weighted average cost of capital. We adjust the discount rates for the risks and uncertainty inherent in the respective businesses and in our internally developed forecasts. For the market approach, we use a valuation technique in which values are derived based on valuation multiples of comparable publicly traded companies. We assess each valuation methodology based upon the relevance and availability of the data at the time we perform the valuation and weight the methodologies appropriately.

Long-Lived Assets with Definite Lives

Our long-lived assets consist principally of technology, customer relationships, internally developed software, land, building, and equipment. Customer relationships are amortized over their estimated economic lives based on the pattern of economic benefits expected to be generated from the use of the asset. Other definite-lived assets are amortized over their estimated economic lives using the straight-line method. The remaining useful lives of long-lived assets are re-assessed periodically at the asset group level for any events and circumstances that may change the future cash flows expected to be generated from the long-lived asset or asset group.

Internally developed software consists of capitalized costs incurred during the application development stage, which include costs related design of the software configuration and interfaces, coding, installation and testing. Costs incurred during the preliminary project stage and post-implementation stage are expensed as incurred. Internally developed software is amortized over the estimated useful life, commencing on the date when the asset is ready for its intended use. Land, building and equipment are stated at cost and depreciated over their estimated useful lives. Leasehold improvements are depreciated over the shorter of the related lease term or the estimated useful life. Depreciation is computed using the straight-line method. Repair and maintenance costs are expensed as incurred. The cost and related accumulated depreciation of sold or retired assets are removed from the accounts and any gain or loss is included in the results of operations for the period.

Long-lived assets with definite lives are tested for impairment whenever events or changes in circumstances indicate the carrying value of a specific asset or asset group may not be recoverable. We assess the recoverability of long-lived assets with definite-lives at the asset group level. Asset groups are determined based upon the lowest level for which identifiable cash flows are largely independent of the cash flows of other assets and liabilities. When the asset group is also a reporting unit, goodwill assigned to the reporting unit is also included in the carrying amount of the asset group. For the purpose of the recoverability test, we compare the total undiscounted future cash flows from the use and disposition of the assets with its net carrying amount. When the carrying value of the asset group exceeds the undiscounted future cash flows, the asset group is deemed to be impaired. The amount of the impairment loss represents the excess of the asset or asset group's carrying value over its estimated fair value, which is generally determined based upon the present value of estimated future pre-tax cash flows that a market participant would expect from use and disposition of the long-lived asset or asset group. There were no long-lived asset impairments in any of the periods presented.

Stock-Based Compensation

We recognize stock-based compensation expense over the requisite service period, based on the grant date fair value of the awards and the number of the awards expected to be vested based upon service and performance conditions. The fair value of restricted stock units is determined based on the number of shares granted and the quoted price of our common stock, and the fair value of stock options is estimated on the date of grant using the Black-Scholes model. Determining the fair value of share-based awards at the grant date requires judgment, including estimating expected dividends, share price volatility, forfeiture rates and the number of performance-based restricted stock units expected to be granted. If actual results differ significantly from these estimates, the actual stock-based compensation expense may significantly differ from our estimates.

Income Taxes

Income taxes as presented herein attribute current and deferred income taxes of Nuance to the Cerence business's standalone financial statements in a manner that is systematic, rational, and consistent with the asset and liability method prescribed by ASC No. 740, "Income Taxes", or ASC 740. Accordingly, the Cerence business's income tax provision was prepared following the "Separate Return Method." The Separate Return Method applies ASC 740 to the standalone financial statements of each member of the consolidated group as if the group member were a separate taxpayer and a standalone enterprise. As a result, actual tax transactions included in the consolidated financial statements of Nuance may not be included in the combined financial statements of the Cerence business. Similarly, the tax treatment of certain items reflected in the combined financial statements of Cerence may not be reflected in the consolidated financial statements and tax returns of Nuance; therefore, such items as net operating losses, credit carryforwards and valuation allowances may exist in the standalone financial statements that may or may not exist in Nuance's consolidated financial statements.

The breadth of the Cerence business's operations and the global complexity of tax regulations require assessments of uncertainties and judgments in estimating taxes that the Cerence business would have paid if it had been a separate taxpayer. The final taxes that would have been paid are dependent upon many factors, including negotiations with taxing authorities in various jurisdictions, outcomes of tax litigation and resolution of disputes arising from federal, state and international tax audits in the normal course of business. The provision for income taxes is determined using the asset and liability approach of accounting for income taxes. Under this approach, deferred taxes represent the future tax consequences expected to occur when the reported amounts of assets and liabilities are recovered or paid. This method also requires the recognition of future tax benefits relating to net operating loss carryforwards and tax credits, to the extent that realization of such benefits is more likely than not after consideration of all available evidence. The provision for income taxes represents income taxes paid by Nuance or payable for the current year plus the change in deferred taxes during the year. Deferred taxes result from differences between the financial and tax basis of the Cerence business's assets and liabilities and are adjusted for changes in tax rates and tax laws when changes are enacted.

Valuation allowances are recorded to reduce deferred tax assets when it is more likely than not that a tax benefit will not be realized. In assessing the need for a valuation allowance, we consider both positive and negative evidence related to the likelihood of realization of the deferred tax assets. The weights assigned to the positive and negative evidence are commensurate with the extent to which the evidence may be objectively verified. If positive evidence regarding projected future taxable income, exclusive of reversing taxable temporary differences, existed, it would be difficult for it to outweigh objective negative evidence of recent financial reporting losses.

In general, the taxable income (loss) of the various Cerence business entities was included in Nuance's consolidated tax returns, where applicable in jurisdictions around the world. As such, separate income tax returns were not prepared for any Cerence business entities. Consequently, income taxes currently payable are deemed to have been remitted to Nuance, in cash, in the period the liability arose and income taxes currently receivable are deemed to have been received from Nuance in the period that a refund could have been recognized by the Cerence business had the Cerence business been a separate taxpayer.

Loss Contingencies

Cerence may be subject to legal proceedings, lawsuits and other claims relating to labor, service, intellectual property, and other matters that arise from time to time in the ordinary course of business. On a quarterly basis, we review the status of each significant matter and assess our potential financial exposure. If the potential loss from any claim or legal proceeding is considered probable and the amount can be reasonably estimated, we accrue a liability for the estimated loss. Significant judgments are required for the determination of probability and the range of the outcomes. Due to the inherent uncertainties, estimates are based only on the best information available at the time. Actual outcomes may differ from our estimates. As additional information becomes available, we reassess the potential liability related to our pending claims and litigation and may revise our estimates. Such revisions may have a material impact on our results of operations and financial position.

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

We are exposed to market risk from changes in foreign currency exchange rates, interest rates and equity prices which could affect operating results, financial position and cash flows. We manage our exposure to these market risks through our regular operating and financing activities and, when appropriate, through the use of derivative financial instruments.

Exchange Rate Sensitivity

We are exposed to changes in foreign currency exchange rates. Any foreign currency transaction, defined as a transaction denominated in a currency other than the local functional currency, will be reported in the functional currency at the applicable exchange rate in effect at the time of the transaction. A change in the value of the functional currency compared to the foreign currency of the transaction will have either a positive or negative impact on our financial position and results of operations.

Assets and liabilities of our foreign entities are translated into U.S. dollars at exchange rates in effect at the balance sheet date and income and expense items are translated at average rates for the applicable period. Therefore, the change in the value of the U.S. dollar compared to foreign currencies will have either a positive or negative effect on our financial position and results of operations. Historically, our primary exposure has been related to transactions denominated in the Canadian dollar, Chinese yuan, Euro, Indian rupee, Japanese yen, and Korean won. Based on the nature of the transactions for which our contracts are purchased, a hypothetical 10% change in exchange rates would not have a material impact on the financial results of the Cerence business.

We have the ability to enter into forward exchange contracts to hedge against foreign currency fluctuations when necessary. The Cerence business did not maintain any hedging instruments in any of the historical or interim periods presented in the accompanying combined financial statements.

Interest Rate Sensitivity

Historically, the Cerence business has not maintained financial instruments that would be exposed to interest rate risk. Since interest bearing financial instruments maintained at Nuance were not specifically identifiable to the Cerence business, interest rate risk has not impacted any of the historical or interim periods presented in the accompanying combined financial statements.

We are exposed to interest rate risk as a result of our indebtedness related to the Senior Facilities. We are subject to interest rate risk because the borrowings under our Senior Facilities are subject to interest rates based on LIBOR. As of September 30, 2019, assuming a 1% increase in interest rates and our Revolving Facility is fully drawn, our interest expense on our Senior Facilities would increase by approximately \$3.45 million per annum.

Item 8. Financial Statements and Supplementary Data.

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Report of Independent Registered Public Accounting Firm

Board of Directors and Stockholders
Cerence Inc.
Burlington, Massachusetts

Opinion on the Combined Financial Statements

We have audited the accompanying combined balance sheets of the Cerence business (“Cerence”) of Nuance Communications, Inc. (the “Company”) as of September 30, 2019 and 2018, the related combined statements of operations, comprehensive income, changes in parent company equity, and cash flows for each of the three years in the period ended September 30, 2019, and the related notes (collectively referred to as the “combined financial statements”). In our opinion, the combined financial statements present fairly, in all material respects, the financial position of Cerence at September 30, 2019 and 2018, and the results of their operations and their cash flows for each of the three years in the period ended September 30, 2019, in conformity with accounting principles generally accepted in the United States of America.

Change in Accounting Principle

As discussed in Note 3 to the combined financial statements, the Company has changed its method of accounting for revenues and certain contract costs in fiscal 2019 due to the adoption of Accounting Standards Update 2014-09, Revenue from Contracts with Customers (Topic 606).

Basis for Opinion

These combined financial statements are the responsibility of the Company’s management. Our responsibility is to express an opinion on the Cerence’s combined financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (“PCAOB”) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the combined financial statements are free of material misstatement, whether due to error or fraud. Cerence is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Cerence’s internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the combined 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 combined 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 combined financial statements. We believe that our audits provide a reasonable basis for our opinion.

Emphasis of Matter

As discussed in Note 2, the Cerence business is not a standalone entity. The combined financial statements of the Cerence business reflect the assets, liabilities, revenues and expenses directly attributable to the Cerence business, as well as allocations deemed reasonable by management, to present the financial position, results of operations, changes in parent company equity, and cash flows of the Cerence business on a standalone basis and do not necessarily reflect the financial position, results of operations, changes in parent company equity, and cash flows of the Cerence business in the future or what they would have been had the Cerence business been a separate, standalone entity during the years presented.

/s/ BDO USA, LLP

We have served as Cerence’s auditor since 2017.

Boston, Massachusetts

December 19, 2019

CERENCE
(A Business of Nuance Communications, Inc.)
COMBINED STATEMENTS OF OPERATIONS
(Dollars in thousands except share and per share data)

	Year Ended September 30,		
	2019 (ASC 606)	2018 (ASC 605)	2017 (ASC 605)
Revenues:			
License	\$ 172,379	\$ 171,075	\$ 148,803
Connected services	78,690	60,227	45,696
Professional services	52,246	45,682	50,230
Total revenues	303,315	276,984	244,729
Cost of revenues:			
License	2,069	1,156	773
Connected services	37,562	32,919	25,292
Professional services	51,214	41,123	35,571
Amortization of intangible assets	8,498	7,766	6,898
Total cost of revenues	99,343	82,964	68,534
Gross profit	203,972	194,020	176,195
Operating expenses:			
Research and development	93,061	80,957	56,755
Sales and marketing	36,261	30,553	29,909
General and administrative	25,926	19,873	17,485
Amortization of intangible assets	12,524	8,840	5,763
Restructuring and other costs, net	24,404	12,863	1,865
Acquisition-related costs	944	4,082	733
Total operating expenses	193,120	157,168	112,510
Income from operations	10,852	36,852	63,685
Other income (expense), net	332	(54)	(483)
Income before income taxes	11,184	36,798	63,202
(Benefit from) provision for income taxes	(89,084)	30,917	15,926
Net income	\$ 100,268	\$ 5,881	\$ 47,276
Net income per share:			
Basic	\$ 2.76	\$ 0.16	\$ 1.30
Diluted	\$ 2.76	\$ 0.16	\$ 1.30
Weighted-average common share outstanding:			
Basic	36,391,445	36,391,445	36,391,445
Diluted	36,391,445	36,391,445	36,391,445

Refer to accompanying Notes to the Combined Financial Statements.

CERENCE
(A Business of Nuance Communications, Inc.)
COMBINED STATEMENTS OF COMPREHENSIVE INCOME
(Dollars in thousands)

	Year Ended September 30,		
	2019	2018	2017
	(ASC 606)	(ASC 605)	(ASC 605)
Net income	\$ 100,268	\$ 5,881	\$ 47,276
Other comprehensive (loss) income:			
Foreign currency translation adjustments	(3,866)	(1,906)	8,020
Pension adjustments	(1,176)	562	460
Total other comprehensive (loss) income	(5,042)	(1,344)	8,480
Comprehensive income	<u>\$ 95,226</u>	<u>\$ 4,537</u>	<u>\$ 55,756</u>

Refer to accompanying Notes to the Combined Financial Statements.

CERENCE
(A Business of Nuance Communications, Inc.)
COMBINED BALANCE SHEETS
(Dollars in thousands)

	<u>September 30,</u> <u>2019</u>	<u>September 30,</u> <u>2018</u>
	(ASC 606)	(ASC 605)
ASSETS		
Current assets:		
Accounts receivable, net	\$ 65,787	\$ 72,084
Deferred costs	9,195	6,793
Prepaid expenses and other current assets	17,343	4,090
Total current assets	<u>92,325</u>	<u>82,967</u>
Property and equipment, net	20,113	13,406
Deferred costs	32,428	44,238
Goodwill	1,119,329	1,119,946
Intangible assets, net	65,561	84,812
Deferred tax assets	150,629	51,053
Other assets	3,444	1,126
Total assets	<u>\$ 1,483,829</u>	<u>\$ 1,397,548</u>
LIABILITIES AND PARENT COMPANY EQUITY		
Current liabilities:		
Accounts payable	\$ 16,687	\$ 6,510
Deferred revenue	88,233	84,862
Accrued expenses and other current liabilities	24,194	30,434
Total current liabilities	<u>129,114</u>	<u>121,806</u>
Deferred revenue, net of current portion	265,051	263,787
Other liabilities	21,536	18,636
Total liabilities	<u>415,701</u>	<u>404,229</u>
Commitments and contingencies (Note 16)		
Parent company equity:		
Net parent investment	1,097,127	1,017,276
Accumulated other comprehensive loss	(28,999)	(23,957)
Total parent company equity	<u>1,068,128</u>	<u>993,319</u>
Total liabilities and parent company equity	<u>\$ 1,483,829</u>	<u>\$ 1,397,548</u>

Refer to accompanying Notes to the Combined Financial Statements.

CERENCE
(A Business of Nuance Communications, Inc.)
COMBINED STATEMENTS OF CHANGES IN PARENT COMPANY EQUITY
(Dollars in thousands)

	Net Parent Investment	Accumulated Other Comprehensive Loss	Total
Balance at October 1, 2016	\$ 1,042,483	\$ (31,093)	\$ 1,011,390
Net income	47,276	—	47,276
Other comprehensive loss	—	8,480	8,480
Net transfer to Parent	(69,967)	—	(69,967)
Balance at September 30, 2017	1,019,792	(22,613)	997,179
Accumulated adjustment due to the adoption of ASU 2016-16	(1,510)	—	(1,510)
Net income	5,881	—	5,881
Other comprehensive income	—	(1,344)	(1,344)
Net transfer to Parent	(6,887)	—	(6,887)
Balance at September 30, 2018	1,017,276	(23,957)	993,319
Accumulated adjustment related to the adoption of ASC 606	6,974	—	6,974
Net income	100,268	—	100,268
Other comprehensive loss	—	(5,042)	(5,042)
Net transfer to Parent	(27,391)	—	(27,391)
Balance at September 30, 2019	<u>\$ 1,097,127</u>	<u>\$ (28,999)</u>	<u>\$ 1,068,128</u>

Refer to accompanying Notes to the Combined Financial Statements.

CERENCE
(A Business of Nuance Communications, Inc.)
COMBINED STATEMENTS OF CASH FLOWS
(Dollars in thousands)

	Year Ended September 30,		
	2019 (ASC 606)	2018 (ASC 605)	2017 (ASC 605)
Cash flows from operating activities:			
Net income	\$ 100,268	\$ 5,881	\$ 47,276
Adjustments to reconcile net income to net cash provided by operations:			
Depreciation and amortization	28,844	25,765	19,669
Stock-based compensation	29,682	22,043	19,794
Deferred tax (benefit) expense	(101,223)	12,473	(17,718)
Changes in operating assets and liabilities, net of effects from acquisitions:			
Accounts receivable	904	8,472	(17,937)
Prepaid expenses and other assets	(8,836)	(2,960)	(308)
Deferred costs	4,339	(12,528)	(10,477)
Accounts payable	10,130	(6,291)	(1,025)
Accrued expenses and other liabilities	6,289	12,946	2,485
Deferred revenue	17,674	49,458	55,025
Net cash provided by operating activities	<u>88,071</u>	<u>115,259</u>	<u>96,784</u>
Cash flows from investing activities:			
Capital expenditures	(4,517)	(6,510)	(4,714)
Payments for business acquisitions, net of cash acquired	—	(79,802)	—
Net cash used in investing activities	<u>(4,517)</u>	<u>(86,312)</u>	<u>(4,714)</u>
Cash flows from financing activities:			
Net advancement to Parent	(83,554)	(28,947)	(92,070)
Net cash used in financing activities	<u>(83,554)</u>	<u>(28,947)</u>	<u>(92,070)</u>
Net change in cash and cash equivalents	—	—	—
Cash and cash equivalents at beginning of year	—	—	—
Cash and cash equivalents at end of year	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>

Refer to accompanying Notes to the Combined Financial Statements.

CERENCE
(A Business of Nuance Communications, Inc.)
NOTES TO THE COMBINED FINANCIAL STATEMENTS

1. Organization and Presentation

The accompanying combined financial statements present the combined assets, liabilities, revenues and expenses related to Cerence (“we” or “Cerence”), a business of Nuance Communications, Inc. (“Nuance” or “the Parent”), a leading provider of voice recognition and natural language understanding solutions for businesses and consumers around the world. The Cerence business operates through indirect, wholly-owned subsidiaries of Nuance and not as a standalone company. Cerence operates primarily in the automotive segment.

Cerence is primarily engaged in providing automotive manufacturers and their suppliers branded and personalized virtual assistants and connected car services built on our voice recognition and natural language understanding technologies. Demand for our embedded and cloud-based automotive solutions is driven by the growth in personalized automotive virtual assistants, connected services for automobiles, and by auto manufacturers’ desire to create a branded and personalized experience, capable of integrating and intelligently managing customers’ personal smart phone and home device preferences and technologies.

2. Basis of Presentation

Standalone financial statements have not been historically prepared for the Cerence business. The accompanying combined financial statements have been prepared from the Parent’s historical accounting records and are presented on a “carve out” basis to include the historical financial position, results of operations and cash flows applicable to the Cerence business. As a direct ownership relationship did not exist among all the various business units comprising the Cerence business, Nuance’s investment in the Cerence business is shown in lieu of stockholder’s equity in the combined financial statements.

The Combined Statements of Operations include all revenues and costs directly attributable to Cerence as well as an allocation of expenses related to functions and services performed by centralized Parent organizations. These corporate expenses have been allocated to the Cerence business based on direct usage or benefit, where identifiable, with the remainder allocated on a pro rata basis of revenues, headcount, number of transactions or other measures as determined appropriate. The Combined Statements of Cash Flows present these corporate expenses that are cash in nature as cash flows from operating activities, as this is the nature of these costs at the Parent. Non-cash expenses allocated from the Parent include corporate depreciation and amortization and stock-based compensation included as add-back adjustments to reconcile net income to net cash provided by operations. As described in Note 3(j) and Note 19, current and deferred income taxes and related tax expense have been determined based on the standalone results of the Cerence business by applying Accounting Standards Codification No. 740, *Income Taxes* (“ASC 740”), to the Cerence business’s operations in each country as if it were a separate taxpayer (i.e. following the Separate Return Methodology).

Cerence is dependent upon technologies which are owned by various entities within the Parent structure. While these combined financial statements use various methods to allocate the cost of these technologies to the Cerence business, this does not purport to reflect the cost of an arm’s length license arrangement.

The combined financial statements include the allocation of certain assets and liabilities that have historically been held at the Nuance corporate level or by shared entities but which are specifically identifiable or allocable to the Cerence business. These shared assets and liabilities have been allocated to the Cerence business on the basis of direct usage when identifiable, or allocated on a pro rata basis of revenue, headcount or other systematic measures that reflect utilization of the services provided to or benefits received by Cerence. The Parent uses a centralized approach to cash management and financing its operations. Accordingly, none of the cash, cash equivalents, marketable securities, foreign currency hedges or debt and related interest expense has been allocated to the Cerence business in the combined financial statements. The Parent’s short and long-term debt has not been pushed down to the Cerence business’s combined financial statements because the Cerence business is not the legal obligor of the debt and the Parent’s borrowings were not directly attributable to the Cerence business.

Nuance maintains various stock-based compensation plans at a corporate level. Cerence employees participate in those programs and a portion of the cost of those plans is included in the Cerence business’s Combined Statements of Operations. However, the stock-based compensation expense has been included within the net parent investment. Refer to Note 15 for further description of the accounting for stock-based compensation.

Transactions between the Parent and the Cerence business are considered to be effectively settled in the combined financial statements at the time the transaction is recorded. The total net effect of the settlement of these intercompany transactions is reflected in the Combined Statements of Cash Flows as a financing activity and in the Combined Balance Sheets as net parent investment. Refer to Note 3(n) for further description.

All of the allocations and estimates in the combined financial statements are based on assumptions that management believes are reasonable. However, the combined financial statements included herein may not be indicative of the financial position, results of operations and cash flows of the Cerence business in the future or if the Cerence business had been a separate, standalone entity during the periods presented.

3. Summary of Significant Accounting Policies

These financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America (“GAAP”).

(a) Principles of Combination

These combined financial statements present the financial position, statement of operations, Parent company equity and cash flows of the Cerence business. All significant balances and transactions between entities in the Cerence business have been eliminated for these combined financial statements. All significant balances between Parent (excluding the Cerence business) and the Cerence business are included in Parent company equity in the Combined Balance Sheets.

(b) Use of Estimates

The combined financial statements are prepared in accordance with GAAP, which requires management to make estimates and assumptions. These estimates, judgments and assumptions can affect the reported amounts in the financial statements and the footnotes thereto. Actual results could differ materially from these estimates. On an ongoing basis, we evaluate our estimates, assumptions and judgments. Significant estimates inherent to the preparation of financial statements include: revenue recognition; the allowances for doubtful accounts; accounting for deferred costs; accounting for internally developed software; the valuation of goodwill and intangible assets; accounting for business combinations; accounting for stock-based compensation; accounting for income taxes, deferred tax assets, and related valuation allowances; and loss contingencies. We base our estimates on historical experience, market participant fair value considerations, projected future cash flows, and various other factors that are believed to be reasonable under the circumstances. Actual amounts could differ significantly from these estimates.

(c) Revenue Recognition under ASC 605 for fiscal years 2018 and 2017

Cerence derives revenue from the following sources: (1) software license agreements, primarily royalty arrangements, (2) connected services, and (3) professional services. Generally, we recognize revenue when (i) persuasive evidence of an arrangement exists, (ii) delivery has occurred, (iii) the fee is fixed or determinable and (iv) collectability is probable. The revenue recognition policies for these revenue streams are discussed below.

The sale and/or license of software products and technology is deemed to have occurred when a customer either has taken possession of or has access to take immediate possession of the software or technology. In select situations, we sell or license non-exclusive intellectual property in conjunction with, or in place of, embedding our intellectual property in software. We also have non-software arrangements including connected services where the customer does not take possession of the software at the outset of the arrangement either because they have no contractual right to do so or because significant penalties preclude them from doing so.

Revenue from royalties on sales of our software products by original equipment manufacturers (“OEMs”), where no services are included, is recognized in the period earned so long as we have been notified by the OEM that such royalties are due, and provided that all other revenue recognition criteria are met.

For our software and technology-related multiple element arrangements, where customers purchase both software or technology related products and software or technology related services, we use vendor-specific objective evidence (“VSOE”) of fair value for software and software-related services to separate the elements and account for them separately. VSOE exists when a company can support what the fair value of its software and/or software-related services is based on evidence of the prices charged when the same elements are sold separately. VSOE of fair value is required, generally, in order to separate the accounting for various elements in a software and related services arrangement. We have established VSOE of fair value for the majority of our professional services.

When we provide professional services considered essential to the functionality of the software or technology, we recognize revenue from the professional services as well as any related software or technology licenses on a percentage-of-completion basis whereby the arrangement consideration is recognized as the services are performed, as measured by an observable input. In these circumstances, we separate license revenue from professional service revenue for the Combined Statement of Operations by allocating VSOE of fair value of the professional services as professional services and connected services revenue and the residual portion as license revenue. We generally determine the percentage-of-completion by comparing the labor hours incurred to-date to the estimated total labor hours required to complete the project. We generally consider labor hours to be the most reliable, available measure of progress on these projects. Adjustments to estimates to complete are made in the periods in which facts resulting in a change become known. When the estimate indicates that a loss will be incurred, such loss is recorded in the period identified. Significant judgments and estimates are involved in determining the percent complete of each contract. Different assumptions could yield materially different results.

We offer some of our products via a Software-as-a-Service (“SaaS”) model also known as a hosted model. In this type of arrangement, we are compensated in two ways: (1) fees for up-front set-up of the service environment and (2) fees charged for hosted service subscriptions. Our up-front set-up fees are nonrefundable. We recognize the up-front set-up fees ratably over the longer of the contract lives, or the expected lives of the customer relationships. The on-demand service subscription fees are recognized ratably over our estimate of useful life of devices on which the connected service is provided.

We enter into multiple-element arrangements that may include a combination of our various software or technology related and non-software related products and services offerings including software or technology licenses, professional services and our connected services. In such arrangements, we allocate total arrangement consideration to software or technology-related elements and any non-software element separately based on the selling price hierarchy group following the guidance in ASC No. 985, *Software*, and our policies. We determine the selling price for each deliverable using VSOE of selling price, if it exists, or Third Party Evidence (“TPE”) of selling price. Typically, we are unable to determine TPE of selling price. Therefore, when neither VSOE nor TPE of selling price exist for a deliverable, we use our Estimate of Selling Price (“ESP”) for the purposes of allocating the arrangement consideration. We determine ESP for a product or service by considering multiple factors including, but not limited to, major project groupings, market conditions, competitive landscape, price list and discounting practices. Revenue allocated to each element is then recognized when the basic revenue recognition criteria are met for each element.

We record reimbursements received for out-of-pocket expenses as revenue, with offsetting costs recorded as cost of revenue. Out-of-pocket expenses generally include, but are not limited to, expenses related to transportation, lodging and meals. We record shipping and handling costs billed to customers as revenue with offsetting costs recorded as cost of revenue.

See Note 5 for revenue recognition under ASC 606 for fiscal year 2019.

(d) Business Combinations

We determine and allocate the purchase price of an acquired company to the tangible and intangible assets acquired and liabilities assumed as of the date of acquisition. Results of operations and cash flows of acquired companies are included in our operating results from the date of acquisition. The purchase price allocation process requires us to use significant estimates and assumptions, which include:

- estimated fair values of intangible assets;
- estimated fair values of legal performance commitments to customers, assumed from the acquiree under existing contractual obligations (classified as deferred revenue);
- estimated income tax assets and liabilities assumed from the acquiree;
- estimated fair value of pre-acquisition contingencies assumed from the acquiree; and
- estimated fair value of any contingent consideration which is established at the acquisition date and included in the total purchase price. The contingent consideration is then adjusted to fair value, with any measurement-period adjustment recorded against goodwill. Adjustments identified subsequent to the measurement period are recorded within acquisition-related costs.

While we use our best estimates and assumptions as part of the purchase price allocation process to accurately value assets acquired and liabilities assumed at the business combination date, our estimates and assumptions are inherently uncertain and subject to refinement. As a result, during the measurement period, which is generally one year from the acquisition date, any adjustment to the assets acquired and liabilities assumed is recorded against goodwill in the period in which the amount is determined. Any adjustment identified subsequent to the measurement period is included in operating results in the period in which the amount is determined.

(e) Goodwill

Goodwill represents the excess of the purchase price in a business combination over the fair value of net assets acquired. Goodwill and intangible assets with indefinite lives are not amortized, but rather the carrying amounts of these assets are assessed for impairment at least annually or whenever events or changes in circumstances indicate that the carrying value of these assets may not be recoverable. Goodwill is tested for impairment annually on July 1, the first day of the fourth quarter of the fiscal year. In the year ended September 30, 2017, we elected to early adopt ASU 2017-04, “*Simplifying the Test for Goodwill Impairment*” for its annual goodwill impairment test. ASU 2017-04 removes Step 2 of the goodwill impairment test requiring a hypothetical purchase price allocation. Goodwill impairment, if any, is determined by comparing the reporting unit’s fair value to its carrying value. An impairment loss is recognized in an amount equal to the excess of the reporting unit’s carrying value over its fair value, up to the amount of goodwill allocated to the reporting unit. There is no goodwill impairment for the years ended September 30, 2019, 2018, and 2017.

For the purpose of testing goodwill for impairment, all goodwill acquired in a business combination is assigned to one or more reporting units. A reporting unit represents an operating segment or a component within an operating segment for which discrete financial information is available and is regularly reviewed by segment management for performance assessment and resource allocation. Components of similar economic characteristics are aggregated into one reporting unit for the purpose of goodwill impairment assessment. Reporting units are identified annually and re-assessed periodically for recent acquisitions or any changes in segment reporting structure. The Cerence business has a single reporting unit.

Corporate assets and liabilities are allocated to the reporting unit based on the reporting unit’s revenue, total operating expenses or operating income as a percentage of the consolidated amounts. Corporate debt and other financial liabilities that are not directly attributable to the reporting unit’s operations and would not be transferred to hypothetical purchasers of the reporting units are excluded from a reporting unit’s carrying amount.

Goodwill has been allocated to Cerence based upon its relative fair value as of March 31, 2018, when Cerence became a reporting unit of Nuance. The fair value of a reporting unit is generally determined using a combination of the income approach and the market approach. For the income approach, fair value is determined based on the present value of estimated future after-tax cash flows, discounted at an appropriate risk-adjusted rate. We use our internal forecasts to estimate future after-tax cash flows and estimate the long-term growth rates based on our most recent views of the long-term outlook for each reporting unit. Actual results may differ from those assumed in our forecasts. We derive our discount rates using a capital asset pricing model and analyzing published rates for industries relevant to our reporting units to estimate the weighted average cost of capital. We adjust the discount rates for the risks and uncertainty inherent in the respective businesses and in our internally developed forecasts. For the market approach, we use a valuation technique in which values are derived based on valuation multiples of comparable publicly traded companies. We assess each valuation methodology based upon the relevance and availability of the data at the time we perform the valuation and weight the methodologies appropriately.

(f) Long-Lived Assets with Definite Lives

Our long-lived assets consist principally of technology and patents, customer relationships, internally developed software, property and equipment. Customer relationships are amortized over their estimated economic lives based on the pattern of economic benefits expected to be generated from the use of the asset. Other definite-lived assets are amortized over their estimated economic lives using the straight-line method. The remaining useful lives of long-lived assets are re-assessed periodically for any events and circumstances that may change the future cash flows expected to be generated from the long-lived asset or asset group.

Internally developed software consists of capitalized costs incurred during the application development stage, which include costs to design the software configuration and interfaces, coding, installation and testing. Costs incurred during the preliminary project stage, along with post-implementation stages of internally developed software, are expensed as incurred. Internally developed software costs that have been capitalized are typically amortized over the estimated useful life, commencing with the date when an asset is ready for its intended use. Equipment is stated at cost and depreciated over the estimated useful life. Leasehold improvements are depreciated over the shorter of the related lease term or the estimated useful life. Depreciation is computed using the straight-line method. Repair and maintenance costs are expensed as incurred. The cost and related accumulated depreciation of sold or retired assets are removed from the accounts and any gain or loss is included in the results of operations for the period.

Long-lived assets with definite lives are tested for impairment whenever events or changes in circumstances indicate the carrying value of a specific asset or asset group may not be recoverable. We assess the recoverability of long-lived assets with definite-lives at the asset group level. Asset groups are determined based upon the lowest level for which identifiable cash flows are largely independent of the cash flows of other assets and liabilities. When the asset group is also a reporting unit, goodwill assigned to the reporting unit is also included in the carrying amount of the asset group. For the purpose of the recoverability test, we compare the total undiscounted future cash flows from the use and disposition of the assets with its net carrying amount. When the carrying value of the asset group exceeds the undiscounted future cash flows, the asset group is deemed to be impaired. The amount of the impairment loss represents the excess of the asset or asset group's carrying value over its estimated fair value, which is generally determined based upon the present value of estimated future pre-tax cash flows that a market participant would expect from use and disposition of the long-lived asset or asset group. During the years ended September 30, 2019, 2018, and 2017, there was no indication that the carrying value of our assets or asset groups may not be recoverable.

(g) Accounts Receivable Allowances

We record allowances for doubtful accounts for the estimated probable losses on uncollected accounts receivable. The allowance is based upon the credit worthiness of our customers, our historical experience, the age of the receivable, and current market and economic conditions. Receivables are written off against these allowances in the period they are determined to be uncollectible. For the years ended September 30, 2019, 2018, and 2017, the activity related to the allowance for doubtful accounts was as follows (dollars in thousands):

	Allowance for Doubtful Accounts
Balance at October 1, 2016	\$ 564
Bad debt provisions	427
Write-offs, net of recoveries	(159)
Balance at September 30, 2017	832
Bad debt provisions	366
Write-offs, net of recoveries	(244)
Balance at September 30, 2018	954
Bad debt provisions	401
Write-offs, net of recoveries	(490)
Balance at September 30, 2019	<u>\$ 865</u>

(h) Research and Development

Research and development ("R&D") costs related to software that is or will be sold or licensed externally to third-parties, or for which a substantive plan exists to sell or license such software in the future, incurred subsequent to the establishment of technological feasibility, but prior to the general release of the product, are capitalized and amortized to cost of revenue over the estimated useful life of the related products. The Cerence business has determined that technological feasibility is reached shortly before the general release of the software products. Costs incurred after technological feasibility is established have not been material. R&D costs are otherwise expensed as incurred.

(i) Acquisition-related Costs

Acquisition-related costs include those costs incurred by the Cerence business related to potential and realized acquisitions. These costs consist of (i) transition and integration costs, including retention payments, transitional employee costs and earn-out payments, and other costs related to integration activities and (ii) professional service fees, including financial advisory, legal, accounting, and other outside services incurred in connection with acquisition activities and disputes.

The components of acquisition-related costs are as follows (dollars in thousands):

	Year Ended September 30,		
	2019	2018	2017
Transition and integration costs	\$ 563	\$ 1,616	\$ —
Professional service fees	381	2,466	733
Total	<u>\$ 944</u>	<u>\$ 4,082</u>	<u>\$ 733</u>

(j) Income Taxes

Income taxes as presented herein attribute current and deferred income taxes of the Parent to the Cerence business's standalone financial statements in a manner that is systematic, rational, and consistent with the asset and liability method prescribed by *ASC 740, Income Taxes*. Accordingly, the Cerence business's income tax provision was prepared following the "Separate Return Method." The Separate Return Method applies *ASC 740* to the standalone financial statements of each member of the consolidated group as if the group member were a separate taxpayer and a standalone enterprise. As a result, actual tax transactions included in the consolidated financial statements of the Parent may not be included in the combined financial statements of the Cerence business. Similarly, the tax treatment of certain items reflected in the combined financial statements of the Cerence business may not be reflected in the consolidated financial statements and tax returns of the Parent; therefore, such items as net operating losses, credit carryforwards and valuation allowances may exist in the standalone financial statements that may or may not exist in the Parent's consolidated financial statements.

The breadth of the Cerence business's operations and the global complexity of tax regulations require assessments of uncertainties and judgments in estimating taxes that the Cerence business would have paid if it had been a separate taxpayer. The final taxes that would have been paid are dependent upon many factors, including negotiations with taxing authorities in various jurisdictions, outcomes of tax litigation and resolution of disputes arising from federal, state and international tax audits in the normal course of business. The provision for income taxes is determined using the asset and liability approach of accounting for income taxes. Under this approach, deferred taxes represent the future tax consequences expected to occur when the reported amounts of assets and liabilities are recovered or paid. This method also requires the recognition of future tax benefits relating to net operating loss carryforwards and tax credits, to the extent that realization of such benefits is more likely than not after consideration of all available evidence. The provision for income taxes represents income taxes paid by the parent or payable for the current year plus the change in deferred taxes during the year. Deferred taxes result from differences between the financial and tax basis of the Cerence business's assets and liabilities and are adjusted for changes in tax rates and tax laws when changes are enacted.

Valuation allowances are recorded to reduce deferred tax assets when it is more likely than not that a tax benefit will not be realized. In assessing the need for a valuation allowance, we consider both positive and negative evidence related to the likelihood of realization of the deferred tax assets. The weights assigned to the positive and negative evidences are commensurate with the extent to which the evidence may be objectively verified. If positive evidence regarding projected future taxable income, exclusive of reversing taxable temporary differences, existed, it would be difficult for it to outweigh objective negative evidence of recent financial reporting losses.

In general, the taxable income (loss) of the various Cerence business entities was included in the Parent's consolidated tax returns, where applicable in jurisdictions around the world. As such, separate income tax returns were not prepared for any Cerence business entities. Consequently, income taxes currently payable are deemed to have been remitted to the Parent, in cash, in the period the liability arose and income taxes currently receivable are deemed to have been received from the Parent in the period that a refund could have been recognized by the Cerence business had the Cerence business been a separate taxpayer.

(k) Accumulated Other Comprehensive Loss

The components of accumulated other comprehensive loss, reflected in the Combined Statements of Changes in Parent Company Equity, consists of the following (dollars in thousands):

	September 30,	
	2019	2018
Foreign currency translation adjustments	\$ (26,216)	\$ (22,349)
Net unrealized losses on post-retirement benefits	(2,783)	(1,608)
Accumulated other comprehensive loss	<u>\$ (28,999)</u>	<u>\$ (23,957)</u>

No income tax provisions or benefits are recorded for foreign currency translation adjustments as the undistributed earnings in our foreign subsidiaries are expected to be indefinitely reinvested.

(l) Concentration of Risk

Financial instruments that potentially subject us to significant concentrations of credit risk primarily consist of trade accounts receivable. We perform ongoing credit evaluations of our customers' financial condition and limit the amount of credit extended when deemed appropriate. Two customers accounted for 12.9% and 10.0% of our accounts receivable balance, net at September 30, 2019. Two customers accounted for 15.3% and 12.4% of our accounts receivable, net balance at September 30, 2018, and for 26.3% and 19.0% of our accounts receivable, net balance at September 30, 2017. Two customers accounted for 20.7% and 12.3% of our revenues for the year ended September 30, 2019. One customer accounted for 18.4% of our revenues for the year ended September 30, 2018, and two customers accounted for 16.6% and 15.4% of our revenues for the year ended September 30, 2017.

(m) Foreign Currency Translation

The functional currency of a foreign subsidiary is generally the local currency. We translate the financial statements of foreign subsidiaries to U.S. dollars using month-end exchange rates for assets and liabilities, and average rates for the reporting period for revenues, costs, and expenses. We record translation gains and losses in accumulated other comprehensive loss as a component of parent company equity. We record net foreign exchange transaction gains and losses resulting from the conversion of the transaction currency to the functional currency within other income (expense), net. Foreign currency transaction (gains) losses for the years ended September 30, 2019, 2018 and 2017 were (\$0.3) million, \$0.1 million, and \$0.5 million, respectively.

(n) Net Parent Investment

In the Combined Balance Sheets, net parent investment represents the Parent's historical investment in the Cerence business, accumulated net earnings after taxes and the net effect of transactions with, and allocations from, the Parent.

(o) Stock-Based Compensation

The Parent maintains certain stock compensation plans for the benefit of certain of its officers, directors and employees, including grants of employee stock options, purchases under employee stock purchase plans and restricted awards. These combined financial statements include certain expenses of the Parent that were allocated to the Cerence business for stock-based compensation. The stock-based compensation expense is recognized over the requisite service period, based on the grant date fair value of the awards and the number of the awards expected to be vested based on service and performance conditions, net of forfeitures. The Cerence business's Combined Balance Sheets do not include any Parent outstanding equity related to these stock-based compensation programs. Effective the fourth quarter of fiscal year 2017, as a result of the early adoption of ASU No. 2016-09, *Improvements to Employee Share-Based Payment Accounting* ("ASU 2016-09"), we record any tax effect related to stock-based awards through the Combined Statements of Operations. Excess tax benefits are recognized as deferred tax assets upon settlement and are subject to regular review for valuation allowance.

(p) Recently Adopted Accounting Standards

Revenue Recognition

In May 2014, the FASB issued ASU No. 2014-09, *Revenue from Contracts with Customers: Topic 606* ("ASC 606"), under which revenue is recognized when a customer obtains control of promised goods or services in an amount that reflects the consideration the entity expects to receive for those goods or services. ASU 2014-09 defines a five-step process to achieve this core principle and, in doing so, it is possible more judgment and estimates may be required within the revenue recognition process than required under previous guidance ASC Topic 605, *Revenue Recognition* ("ASC 605"), including identifying performance obligations in the contract, estimating the amount of variable consideration to include in the transaction price and allocating the transaction price to each separate performance obligation. ASU 2014-09 permits two methods of adoption: (i) retrospective to each prior reporting period presented; or (ii) retrospective with the cumulative effect of initially applying the guidance recognized at the date of initial application. In August 2015, the FASB issued ASU No. 2015-14, *Revenue from Contracts with Customers: Deferral of the Effective Date* which deferred the effective date of the new revenue standard for periods beginning after December 15, 2016 to December 15, 2017, with early adoption permitted but not earlier than the original effective date. ASC 606 became effective for us beginning on October 1, 2018 and we adopted ASC 606 using the cumulative catch-up transition method, with a cumulative adjustment to net parent investment as opposed to retrospectively adjusting prior periods.

The most significant impact of the adoption of ASC 606 relates to our accounting for arrangements that include term-based software licenses bundled with other performance obligations including (i) maintenance and support and (ii) professional services. Under ASC 605, the revenue attributable to these software licenses is recognized ratably over the term of the arrangement because VSOE does not exist for the undelivered maintenance and support element as it is not sold separately. Under ASC 606, the requirement to have VSOE for undelivered elements to enable the separation of revenue for the delivered software licenses is eliminated. Accordingly, under the new standard we are required to recognize term-based software revenue as control is transferred and based upon the amount proportionally allocated to the term-based software license from the contract transaction price.

The following tables summarize the impact of adopting ASC 606 on the Company's Combined Statement of Operations for the fiscal year ended September 30, 2019 and the Combined Balance Sheet as of September 30, 2019 (dollars in thousands):

	Fiscal Year Ended September 30, 2019		
	As reported, ASC 606	Effect of Implementation	As adjusted, ASC 605
Revenues:			
License	\$ 172,379	\$ (446)	\$ 171,933
Connected services	78,690	947	79,637
Professional service	52,246	2,682	54,928
Total Revenue	<u>\$ 303,315</u>	<u>\$ 3,183</u>	<u>\$ 306,498</u>
Cost of Revenues:			
License	\$ 2,069	\$ 1	\$ 2,070
Connected services	37,562	283	37,845
Professional service	51,214	(702)	50,512
Amortization of intangible assets	8,498	-	8,498
Total cost of revenues	<u>\$ 99,343</u>	<u>\$ (418)</u>	<u>\$ 98,925</u>
Sales and marketing	\$ 36,261	\$ 392	\$ 36,653
Other income (expense), net	332	31	363
Provision for income taxes	\$ (89,084)	\$ 1,428	\$ (87,656)
As of September 30, 2019			
	As reported, ASC 606	Effect of Implementation	As adjusted, ASC 605
Assets:			
Accounts receivable, net	\$ 65,787	\$ 7,038	\$ 72,825
Deferred costs, current	9,195	4,437	13,632
Prepaid expenses and other current assets	17,343	(10,326)	7,017
Deferred costs, noncurrent	32,428	4,293	36,721
Deferred tax asset	150,629	1,678	152,307
Other assets	\$ 3,444	\$ (1,542)	\$ 1,902
Liabilities:			
Deferred revenue	\$ 88,233	\$ 11,600	\$ 99,833
Deferred revenue, net of current portion	\$ 265,051	\$ (2,040)	\$ 263,011
Parent company equity:			
Net parent investment	\$ 1,097,127	\$ (4,316)	\$ 1,092,811

Other Accounting Pronouncements

In October 2016, the FASB issued ASU 2016-16, "Income Taxes (Topic 740): Intra-Entity Transfers of Assets Other Than Inventory" ("ASU 2016-16"), which requires income tax consequences of inter-company transfers of assets other than inventory to be recognized when the transfer occurs. ASU 2016-16 is effective for fiscal years beginning after December 15, 2017, with early adoption permitted. We early adopted the guidance during the first quarter of the year ended September 30, 2018. As a result, deferred charges of \$1.5 million arising from inter-company transfers in prior years were recognized and recorded against the beginning balance of net parent investment in the first quarter of the year ended September 30, 2018. The adoption of the guidance did not have a material impact on our combined financial statements for any period presented.

In August 2016, the FASB issued ASU 2016-15, *Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments* (“ASU 2016-15”), which provides guidance on the classification of certain specific cash flow issues including debt prepayment or extinguishment costs, settlement of certain debt instruments, contingent consideration payments made after a business combination, proceeds from the settlement of certain insurance claims and distributions received from equity method investees. The standard requires the use of a retrospective approach for all periods presented, but may be applied prospectively if retrospective application would be impractical. ASU 2016-15 became effective for us in the first quarter of fiscal year 2019 and did not have a material impact on our condensed combined financial statements.

In January 2016, the FASB issued ASU No. 2016-01, *Recognition and Measurement of Financial Assets and Financial Liabilities* (“ASU 2016-01”). ASU 2016-01 amends the guidance on the classification and measurement of financial instruments. Although ASU 2016-01 retains many current requirements, it significantly revises accounting related to the classification and measurement of investments in equity securities and the presentation of certain fair value changes for financial liabilities measured at fair value. ASU 2016-01 also amends certain disclosure requirements associated with the fair value of financial instruments and became effective for us in the first quarter of fiscal year 2019. Based on the composition of our investment portfolio, the adoption of ASU 2016-01 did not have a material impact on our condensed combined financial statements.

(q) Issued Accounting Standards Not Yet Adopted

From time to time, new accounting pronouncements are issued by the FASB and are adopted by us as of the specified effective dates. Unless otherwise discussed, such pronouncements did not have or will not have a significant impact on our combined financial position, results of operations or cash flows, or do not apply to our operations.

Leases

In February 2016, the FASB issued ASU No. 2016-02, *“Leases”* (“ASU 2016-02”), and codified as ASC 842, which became effective for fiscal years beginning after December 15, 2018 and interim periods therein, with early adoption permitted. The guidance requires lessees to recognize on the balance sheet a right-of-use, or ROU, asset, representing its right to use the underlying asset for the lease term, and a lease liability for all leases with terms greater than 12 months. The guidance also requires qualitative and quantitative disclosures designed to assess the amount, timing, and uncertainty of cash flows arising from leases. ASC 842 is effective for us in the first quarter of fiscal year 2020, and early application is permitted.

In July 2018, the FASB issued ASU 2018-10, *“Codification Improvements to “Topic 842, Leases”* and ASU 2018-11, *“Leases Topic Targeted Improvements”*, which provides an additional and optional transition method whereby the new lease standard is applied at the adoption date and recognized as an adjustment to retained earnings. Additionally, in March 2019, the FASB issued ASU 2019-01, *“Codification Improvements to Topic 842”*, which provides guidance in the following areas: (1) determining the fair value of the underlying asset by lessors that are not manufacturers or dealers and (2) clarification of interim disclosure requirements during transition.

We adopted the new standard effective October 1, 2019 under the modified retrospective transition approach. We elected the package of practical expedients permitted under the transition guidance. We are currently evaluating the impact of ASC 842 and expect to recognize ROU assets to be in the range of approximately \$17 million to \$19 million, and lease liabilities to be in the range of approximately \$20 million to \$22 million as of October 1, 2019. We do not expect the adoption of the new standard to have a material impact on our consolidated statement of operations and cash flows. We expect applying ASC 842 will have an immaterial cumulative-effect adjustment to retained earnings, as of October 1, 2019. We will provide additional disclosures as required by the new standard in our Form 10-Q for the quarter ended December 31, 2019.

In August 2018, the FASB issued ASU 2018-15, *“Intangibles—Goodwill and Other—Internal-Use Software (Subtopic 350-40): Customer’s Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract”*, which is effective for fiscal years beginning after December 15, 2019, and interim periods within those fiscal years, with early adoption permitted. The guidance requires that implementation costs related to a hosting arrangement that is a service contract be capitalized and amortized over the term of the hosting arrangement, starting when the module or component of the hosting arrangement is ready for its intended use. The guidance will be applied retrospectively to each period presented. We do not expect the implementation to have a material impact on our combined financial statements.

Other Accounting Pronouncements

In January 2018, the FASB issued ASU 2018-02, *Income Statement—Reporting Comprehensive Income (Topic 220): Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income* (“AOCI”), which is effective for fiscal years beginning after December 15, 2018 and interim periods therein, with early adoption permitted. The guidance gives entities the option to reclassify to retained earnings the tax effects resulting from the Tax Cuts and Jobs Act (“TCJA”) related to items in AOCI. The new guidance may be applied retrospectively to each period in which the effect of the Act is recognized in the period of adoption. We do not expect the implementation to have a material impact on our combined financial statements.

4. Business Acquisitions

As part of our business strategy, we have acquired, and may acquire in the future, certain businesses and technologies primarily to expand our products and service offerings.

On April 2, 2018, we completed the acquisition of Voicebox Technologies Corporation (“Voicebox”). Voicebox is a provider of conversational artificial intelligence, including voice recognition, natural language understanding, and artificial intelligence services. We expect this acquisition to expand our current automotive solutions with a range of new predictive intelligence, embedded natural language, and hybrid virtual assistant capabilities. We expect to be able to provide an end-to-end automotive intelligence platform that merges automated speech recognition, natural language understanding, and information management to increase customer satisfaction, strengthen customer loyalty and improve business results. The aggregate consideration for this transaction was \$94.2 million which included \$79.8 million in cash, net of \$6.7 million cash acquired, a \$12.8 million write-off of deferred revenues related to the Cerence business’s pre-existing relationship with Voicebox, and a \$1.6 million deferred acquisition payment which would be paid in cash upon the conclusion of an indemnity period. Acquisition costs related to Voicebox were \$4.1 million. For further detail, refer to Note 3(i). The results of operations of Voicebox are included within these combined financial statements beginning on the date of acquisition.

A summary of the final allocation of the purchase consideration for the acquisition of Voicebox adjusted for measurement period adjustments is as follows (dollars in thousands):

	Voicebox
Purchase consideration:	
Cash	\$ 79,802
Settlement of pre-existing relationship	12,751
Deferred acquisition payment	1,600
Total purchase consideration	<u>\$ 94,153</u>
Allocation of purchase consideration:	
Accounts receivable	\$ 6,545
Prepaid expenses and other current assets	620
Property and equipment	4,008
Goodwill	50,508
Intangible assets	49,600
Deferred tax asset	124
Other assets	9
Total assets acquired	<u>111,414</u>
Current liabilities	(7,332)
Deferred tax liability	(3,762)
Other liabilities	(6,167)
Total liabilities assumed	<u>(17,261)</u>
Net assets acquired	<u>\$ 94,153</u>

The measurement period adjustments reflect new information obtained about facts and circumstances that existed at the date of the acquisition and primarily related to the recognition of a deferred tax liability.

Goodwill from the Voicebox acquisition is not tax deductible. The following are the identifiable intangible assets acquired and their respective weighted average useful lives, as determined based on final valuations (dollars in thousands):

	Voicebox	
	Amount	Weighted Average Life (Years)
Core and completed technology	\$ 12,700	4.0
Customer relationships	36,900	5.0
Total	<u>\$ 49,600</u>	

The results of Voicebox for the post-acquisition period from April 2, 2018 to September 30, 2018 are as follows:

Total revenue	\$ 5,631
Net loss	\$ (9,238)

The following unaudited pro forma information has been prepared as if the acquisition of Voicebox had occurred on October 1, 2016. The acquisition was not material to Nuance, therefore information for the year ended September 30, 2016 is not available:

	Year Ended September 30,	
	2018	2017
	(ASC 605)	(ASC 605)
Total revenue	\$ 285,119	\$ 258,051
Net (loss) income	\$ (3,965)	\$ 19,704

5. Revenue Recognition

We primarily derive revenue from the following sources: (1) software license arrangements, primarily royalty arrangements, (2) connected services, and (3) professional services. Revenue is reported net of applicable sales and use tax, value-added tax and other transaction taxes imposed on the related transaction including mandatory government charges that are passed through to our customers. We account for a contract when both parties have approved and committed to the contract, the rights of the parties are identified, payment terms are identified, the contract has commercial substance and collectability of consideration is probable.

Our arrangements with customers may contain multiple products and services. We account for individual products and services separately if they are distinct—that is, if a product or service is separately identifiable from other items in the contract and if a customer can benefit from it on its own or with other resources that are readily available to the customer.

We currently recognize revenue after applying the following five steps:

- identification of the contract, or contracts, with a customer;
- identification of the performance obligations in the contract, including whether they are distinct within the context of the contract;
- determination of the transaction price, including the constraint on variable consideration;
- allocation of the transaction price to the performance obligations in the contract;
- recognition of revenue when, or as, performance obligations are satisfied.

We allocate the transaction price of the arrangement based on the relative estimated standalone selling price (“SSP”) of each distinct performance obligation. In determining SSP, we maximize observable inputs and consider a number of data points, including:

- the pricing of standalone sales (in the instances where available);
- the pricing established by management when setting prices for deliverables that are intended to be sold on a standalone basis;
- contractually stated prices for deliverables that are intended to be sold on a standalone basis; and
- other pricing factors, such as the geographical region in which the products are sold and expected discounts based on the customer size and type.

We only include estimated amounts in the transaction price to the extent it is probable that a significant reversal of cumulative revenue recognized will not occur when the uncertainty associated with the variable consideration is resolved. We reduce transaction prices for estimated returns and other allowances that represent variable consideration under ASC 606, which we estimate based on historical return experience and other relevant factors, and record a corresponding refund liability as a component of accrued expenses and other current liabilities. Other forms of contingent revenue or variable consideration are infrequent.

Revenue is recognized when control of these services is transferred to our customers, in an amount that reflects the consideration we expect to be entitled to in exchange for those services.

We assess the timing of the transfer of products or services to the customer as compared to the timing of payments to determine whether a significant financing component exists. In accordance with the practical expedient in ASC 606-10-32-18, we do not assess the existence of a significant financing component when the difference between payment and transfer of deliverables is a year or less. If the difference in timing arises for reasons other than the provision of finance to either the customer or us, no financing component is deemed to exist. The primary purpose of our invoicing terms is to provide customers with simplified and predictable ways of purchasing our services, not to receive or provide financing from or to customers. We do not consider set-up fees nor other upfront fees paid by our customers to represent a financing component.

Reimbursements for out-of-pocket costs generally include, but are not limited to, costs related to transportation, lodging and meals. Revenue from reimbursed out-of-pocket costs is accounted for as variable consideration.

(a) Performance Obligations

Licenses

Software and technology licenses sold with non-distinct professional services to customize and/or integrate the underlying software and technology are accounted for as a combined performance obligation. Revenue from the combined performance obligation is recognized over time based upon the progress towards completion of the project, which is measured based on the labor hours already incurred to date as compared to the total estimated labor hours. For income statement presentation purposes, we separate license revenue from professional services revenue based on their SSPs.

Revenue from distinct software and technology licenses, which do not require professional service to customize and/or integrate the software license, is recognized at the point in time when the software and technology is made available to the customer and control is transferred.

Revenue from software and technology licenses sold on a royalty basis, where the license of non-exclusive intellectual property is the predominant item to which the royalty relates, is recognized in the period the usage occurs in accordance with the practical expedient in ASC 606-10-55-65(A).

Connected Services

Connected services, which allow our customers to use the hosted software over the contract period without taking possession of the software, are provided on a usage basis as consumed or on a fixed fee subscription basis. Subscription basis revenue represents a single promise to stand-ready to provide access to our connected services. Our connected services contract terms generally range from one to five years.

As each day of providing services is substantially the same and the customer simultaneously receives and consumes the benefits as access is provided, we have determined that our connected services arrangements are a single performance obligation comprised of a series of distinct services. These services include variable consideration, typically a function of usage. We recognize revenue as each distinct service period is performed (i.e., recognized as incurred).

Our connected service arrangements generally include services to develop, customize, and stand-up applications for each customer. In determining whether these services are distinct, we consider dependence of the Cloud service on the up-front development and stand-up, as well as availability of the services from other vendors. We have concluded that the up-front development, stand-up and customization services are not distinct performance obligations, and as such, revenue for these activities is recognized over the period during which the cloud-connected services are provided, and is included within connected services revenue.

Professional Services

Revenue from distinct professional services, including training, is recognized over time based upon the progress towards completion of the project, which is measured based on the labor hours already incurred to date as compared to the total estimated labor hours.

(b) Significant Judgments

Determining whether products and services are considered distinct performance obligations that should be accounted for separately versus together may require significant judgment. Our license contracts often include professional services to customize and/or integrate the licenses into the customer's environment. Judgment is required to determine whether the license is considered distinct and accounted for separately, or not distinct and accounted for together with professional services.

Judgments are required to determine the SSP for each distinct performance obligation. When the SSP is directly observable, we estimate the SSP based upon the historical transaction prices, adjusted for geographic considerations, customer classes, and customer relationship profiles. In instances where the SSP is not directly observable, we determine the SSP using information that may include market conditions and other observable inputs. We may have more than one SSP for individual products and services due to the stratification of those products and services by customers and circumstances. In these instances, we may use information such as the size of the customer and geographic region in determining the SSP. Determining the SSP for performance obligations which we never sell separately also requires significant judgment. In estimating the SSP, we consider the likely price that would have resulted from established pricing practices had the deliverable been offered separately and the prices a customer would likely be willing to pay.

(c) Disaggregated Revenue

Revenues, classified by the major geographic region in which our customers are located, for the years ended September 30, 2019, 2018 and 2017 (dollars in thousands):

	September 30,		
	2019 (ASC 606)	2018 (ASC 605)	2017 (ASC 605)
Revenues:			
United States	\$ 131,877	\$ 109,564	\$ 80,181
Other Americas	1,044	1,492	2,051
Germany	78,258	64,417	74,474
Other Europe, Middle East and Africa	20,478	16,755	15,192
Japan	44,472	57,303	43,894
Other Asia-Pacific	27,186	27,453	28,937
Total net revenues ⁽¹⁾	\$ 303,315	\$ 276,984	\$ 244,729

- (1) As a result of our adoption of ASC 606 effective October 1, 2018 using the modified retrospective method, prior period amounts have not been adjusted to conform with ASC 606 and therefore may not be comparable.

Revenues within the United States, Germany, and Japan accounted for more than 10% of revenue for all periods presented.

Revenues relating to two customers accounted for \$62.7 million, or 20.7%, and \$37.4 million, or 12.3% of revenue for the fiscal year ended September 30, 2019. One customer accounted for \$51.0 million, or 18.4% of revenue for the fiscal year ended September 30, 2018, and two customers accounted for \$40.6 million, or 16.6% and \$37.7 million, or 15.4% of revenue for the fiscal year ended September 30, 2017.

(d) Contract Acquisition Costs

In conjunction with the adoption of ASC 606, we are required to capitalize certain contract acquisition costs. The capitalized costs primarily relate to paid commissions. In accordance with the practical expedient in ASC 606-10-10-4, we apply a portfolio approach to estimate contract acquisition costs for groups of customer contracts. We elect to apply the practical expedient in ASC 340-40-25-4 and will expense contract acquisition costs as incurred where the expected period of benefit is one year or less. Contract acquisition costs are deferred and amortized on a straight-line basis over the period of benefit, which we have estimated to be, on average, between one and five years. The period of benefit was determined based on an average customer contract term, expected contract renewals, changes in technology and our ability to retain customers, including canceled contracts. We assess the

amortization term for all major transactions based on specific facts and circumstances. Contract acquisition costs are classified as current or noncurrent assets based on when the expense will be recognized. The current and noncurrent portions of contract acquisition costs are included in prepaid expenses and other current assets, and in other assets, respectively. As of September 30, 2019, we had \$2.7 million of contract acquisition costs. We had amortization expense of \$0.7 million related to these costs during the fiscal year ended September 30, 2019. There was no impairment related to contract acquisition costs.

(e) Capitalized Contract Costs

We capitalize incremental costs incurred to fulfill our contracts that (i) relate directly to the contract, (ii) are expected to generate resources that will be used to satisfy our performance obligation under the contract, and (iii) are expected to be recovered through revenue generated under the contract. Our capitalized costs consist primarily of setup costs, such as costs to standup, customize and develop applications for each customer, which are incurred to satisfy our stand-ready obligation to provide access to our connected offerings. These contract costs are expensed to cost of revenue as we satisfy our stand-ready obligation over the contract term which we estimate to be between one and five years, on average. The contract term was determined based on an average customer contract term, expected contract renewals, changes in technology, and our ability to retain customers, including canceled contracts. We classify these costs as current or noncurrent based on the timing of when we expect to recognize the expense. The current and noncurrent portions of capitalized contract fulfillment costs are presented as deferred costs. As of September 30, 2019, we had \$41.6 million of capitalized contract costs.

We had amortization expense of \$10.6 million related to these costs during the fiscal year ended September 30, 2019. There was no impairment related to contract costs capitalized.

(f) Trade Accounts Receivable and Contract Balances

We classify our right to consideration in exchange for deliverables as either a receivable or a contract asset. A receivable is a right to consideration that is unconditional (i.e. only the passage of time is required before payment is due). We present such receivables in accounts receivable, net at their net estimated realizable value. We maintain an allowance for doubtful accounts to provide for the estimated amount of receivables that may not be collected. The allowance is based upon an assessment of customer creditworthiness, historical payment experience, the age of outstanding receivables and other applicable factors.

Our contract assets and liabilities are reported in a net position on a contract-by-contract basis at the end of each reporting period.

Contract assets include unbilled amounts from long-term contracts when revenue recognized exceeds the amount billed to the customer, and right to payment is not solely subject to the passage of time. Contract assets are included in prepaid expenses and other current assets. As of September 30, 2019, we had \$9.2 million of current contract assets. The table below shows significant changes in contract assets (dollars in thousands):

	<u>Contract assets</u>
Balance as of October 1, 2018	\$ 13,492
Revenues recognized but not billed	11,025
Amounts reclassified to accounts receivable, net	<u>(15,298)</u>
Balance as of September 30, 2019	<u>\$ 9,219</u>

Our contract liabilities, which we present as deferred revenue, consist of advance payments and billings in excess of revenues recognized. We classify deferred revenue as current or noncurrent based on when we expect to recognize the revenues. As of September 30, 2019, we had \$353.3 million of deferred revenue. The table below shows significant changes in deferred revenue (dollars in thousands):

	<u>Deferred revenue</u>
Balance as of October 1, 2018	\$ 350,224
Amounts billed but not recognized	22,150
Revenue recognized	<u>(19,090)</u>
Balance as of September 30, 2019	<u>\$ 353,284</u>

(g) Remaining Performance Obligations

The following table includes estimated revenue expected to be recognized in the future related to performance obligations that are unsatisfied or partially unsatisfied at September 30, 2019 (dollars in thousands):

	<u>Within One Year</u>	<u>Two to Five Years</u>	<u>Greater than Five Years</u>	<u>Total</u>
Total revenue	\$ 120,344	\$ 200,444	\$ 88,141	\$ 408,929

The table above includes fixed backlogs and does not include variable backlogs derived from contingent usage-based activities, such as royalties and usage-based connected services.

6. Earnings Per Share

Basic earnings per share is computed by dividing net income by the weighted-average number of shares of common stock outstanding during the period. Diluted earnings per share is computed by dividing net income by the weighted-average number of shares of common stock outstanding during the period, increased to include the number of shares of common stock that would have been outstanding had potential dilutive shares of common stock been issued. The dilutive effect of stock options and restricted stock units are reflected in diluted net income per share by applying the treasury stock method. There were no Cerence equity awards outstanding prior to the Spin-off, thus the computation of basic and diluted earnings per common share (EPS) for all periods disclosed was calculated using the shares issued in connection with the Spin-Off totaling 36.4 million shares.

The numerator for both basic and diluted EPS is net income.

The following is a reconciliation of basic shares to diluted shares:

<i>in thousands</i>	<u>September 30,</u>		
	<u>2019</u>	<u>2018</u>	<u>2017</u>
Basic shares	36,391	36,391	36,391
Effect of dilutive shares	—	—	—
Diluted shares	36,391	36,391	36,391

7. Goodwill and Intangible Assets

(a) Goodwill

The changes in the carrying amount of goodwill for the years ended September 30, 2019 and 2018 were as follows (dollars in thousands):

	<u>Total</u>
Balance as of October 1, 2017	\$ 1,075,443
Acquisitions	46,918
Effect of foreign currency translation	(2,415)
Balance as of September 30, 2018	1,119,946
Acquisitions	3,591
Effect of foreign currency translation	(4,208)
Balance as of September 30, 2019	\$ 1,119,329

(b) Intangible Assets, Net

The following tables summarizes the gross carrying amounts and accumulated amortization of intangible assets by major class (dollars in thousands):

	September 30, 2019			Weighted Average Remaining Life (Years)
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	
Customer relationships	\$ 104,783	\$ (58,568)	\$ 46,215	4.0
Technology and patents	116,757	(97,411)	19,346	2.5
Total	<u>\$ 221,540</u>	<u>\$ (155,979)</u>	<u>\$ 65,561</u>	

	September 30, 2018			Weighted Average Remaining Life (Years)
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	
Customer relationships	\$ 99,797	\$ (40,699)	\$ 59,098	4.9
Technology and patents	47,900	(22,186)	25,714	3.3
Total	<u>\$ 147,697</u>	<u>\$ (62,885)</u>	<u>\$ 84,812</u>	

Amortization expense for acquired technology and patents is included in the cost of revenue in the accompanying statements of operations and amounted to \$8.5 million, \$6.6 million, and \$5.0 million for the years ended September 30, 2019, 2018, and 2017, respectively. Additionally, amortization expense for intangible assets of the Parent utilized by the Cerence business amounted to \$22 thousand, \$1.2 million, and \$1.9 million in the years ended September 30, 2019, 2018, and 2017, respectively, and is included in the cost of revenue as shown in Note 18. Amortization expense for customer relationships is included in operating expenses and amounted to \$12.5 million, \$8.8 million, and \$5.8 million in the years ended September 30, 2019, 2018, and 2017, respectively. Estimated amortization for each of the five succeeding years and thereafter as of September 30, 2019, is as follows (dollars in thousands):

Year Ending September 30,	Cost of Revenues	Operating Expenses	Total
2020	\$ 8,318	\$ 12,468	\$ 20,786
2021	7,528	12,468	19,996
2022	2,984	11,509	14,493
2023	414	5,901	6,315
2024	102	2,211	2,313
Thereafter	—	1,658	1,658
Total	<u>\$ 19,346</u>	<u>\$ 46,215</u>	<u>\$ 65,561</u>

8. Accounts Receivable, Net

Accounts receivable, net consisted of the following (dollars in thousands):

	September 30,	
	2019 (ASC 606)	2018 (ASC 605)
Trade accounts receivable	\$ 65,532	\$ 72,913
Unbilled accounts receivable under long-term contracts	1,120	125
Gross accounts receivable	66,652	73,038
Less: allowance for doubtful accounts	(865)	(954)
Total	<u>\$ 65,787</u>	<u>\$ 72,084</u>

9. Property and Equipment, Net

Property and equipment, net consisted of the following (dollars in thousands):

	Useful Life (In years)	September 30,	
		2019	2018
Machinery and equipment	3-5	\$ 8,424	\$ 7,519
Computers, software and equipment	3-5	32,894	21,620
Leasehold improvements	2-15	9,147	5,226
Furniture and fixtures	5-7	3,819	1,167
Construction in progress		1,043	—
Subtotal		55,327	35,532
Less: accumulated depreciation		(35,214)	(22,126)
Total		\$ 20,113	\$ 13,406

As of September 30, 2019 and 2018, the net book value of capitalized internal-use software costs was \$2.2 million and \$5.0 million, respectively, which are included within computers, software, and equipment. Depreciation expense for the years ended September 30, 2019, 2018, and 2017 was \$6.2 million, \$7.7 million, and \$5.0 million, respectively, which included amortization expense of \$2.7 million, \$4.2 million, and \$3.0 million, respectively, for internally developed software costs.

The following table presents our property, equipment and other long-term assets, excluding intangible assets, by geography at September 30, 2019 and 2018 (dollars in thousands):

	September 30,	
	2019	2018
Long-lived assets:		
United States	\$ 10,333	\$ 8,902
Canada	3,889	1,286
Germany	2,390	1,038
Other countries	3,501	2,180
Total long-lived assets	\$ 20,113	\$ 13,406

10. Deferred Revenue

Deferred maintenance revenue consists of prepaid fees received for post-contract customer support for our products, including telephone support and the right to receive unspecified upgrades/enhancements on a when-and-if-available basis.

Unearned revenue includes fees for upfront setup of the service environment, fees charged for on-demand service and certain software arrangements for which we do not have fair value of post-contract customer support, resulting in ratable revenue recognition for the entire arrangement on a straight-line basis and fees in excess of estimated earnings on percentage of completion service contracts.

Deferred revenue consisted of the following (dollars in thousands):

	September 30,	
	2019	2018
Current Liabilities:		
Deferred maintenance revenue	\$ —	\$ 61
Unearned revenue	88,233	84,801
Total	\$ 88,233	\$ 84,862
Non-current Liabilities:		
Unearned revenue	265,051	263,787
Total	\$ 265,051	\$ 263,787

11. Accrued Expenses and Other Current Liabilities

Accrued expenses and other current liabilities consisted of the following (dollars in thousands):

	September 30,	
	2019	2018
Compensation	\$ 13,031	\$ 25,262
Cost of revenue related liabilities	1,668	1,427
Sales and other taxes payable	219	1,472
Professional fees	3,863	768
Facilities related liabilities	273	486
Other	5,140	1,019
Total	\$ 24,194	\$ 30,434

12. Asset Retirement Obligations

Asset retirement obligations consist primarily of costs related to restoring long-lived assets to their original condition. Asset retirement obligations may include disposal costs, maintenance of buildings, and costs to remove leasehold improvements. The balance of the asset retirement obligations for the periods presented are classified as noncurrent liabilities and included in other liabilities in the Combined Balance Sheets. The balance of asset retirement obligations at September 30, 2019, 2018, and 2017 was \$1.1 million, \$1.2 million, and \$0.8 million, respectively. Activity related to asset retirement obligations was as follows (dollars in thousands):

	September 30,		
	2019	2018	2017
Balance at the beginning of period	\$ 1,155	\$ 784	\$ 414
Additions	5	398	401
Remeasurement/translation	(51)	(8)	17
Settlements/payments	(58)	(19)	(48)
Balance at the end of the period	\$ 1,051	\$ 1,155	\$ 784

13. Restructuring and Other Costs, Net

Restructuring and other costs, net include restructuring expenses as well as other charges that are unusual in nature, are the result of unplanned events, and arise outside of the ordinary course of our business such as employee severance costs, costs for consolidating duplicate facilities, and separation costs directly attributable to the Cerence business becoming a standalone public company.

Restructuring and other costs related to personnel and facilities are included in accrued expenses and other current liabilities in the Combined Balance Sheets. Separation costs are included in accounts payable. The following table sets forth the year ended September 30, activity relating to restructuring charges (dollars in thousands):

	Personnel	Facilities	Separation	Total
Balance at October 1, 2016	\$ 145	\$ 302	\$ —	\$ 447
Restructuring and other costs, net	1,842	23	—	1,865
Cash payments	(1,879)	(211)	—	(2,090)
Balance at September 30, 2017	108	114	—	222
Restructuring and other costs, net	4,130	20	8,713	12,863
Cash payments	(1,969)	(128)	(7,936)	(10,033)
Balance at September 30, 2018	2,269	6	777	3,052
Restructuring and other costs, net	130	1,704	22,570	24,404
Cash payments	(1,910)	(1,684)	(19,471)	(23,065)
Balance at September 30, 2019	\$ 489	\$ 26	\$ 3,876	\$ 4,391

Fiscal Year 2019

For the year ended September 30, 2019, we recorded restructuring charges of \$24.4 million, which included \$0.1 million severance charge related to the elimination of personnel across multiple functions, \$1.7 million primarily resulting from the restructuring of facilities that will no longer be utilized, and \$22.6 million related to professional service fees incurred to establish Cerence business as a standalone public company.

Fiscal Year 2018

For the year ended September 30, 2018, we recorded restructuring charges of \$12.9 million, which included a \$4.1 million severance charge related to the elimination of personnel across multiple functions, \$20 thousand primarily resulting from the restructuring of facilities that will no longer be utilized, and \$8.7 million related to professional services fees incurred to establish the Cerence business as a standalone public company.

Fiscal Year 2017

For the year ended September 30, 2017, we recorded restructuring charges of \$1.9 million, which included a \$1.8 million severance charge related to the elimination of personnel across multiple functions and \$23 thousand primarily resulting from the restructuring of facilities that will no longer be utilized. These actions were part of our initiatives to reduce costs and optimize processes.

14. Supplemental Cash Flow Information

Income taxes settled through Parent company net investment were as follows (dollars in thousands):

	Year Ended September 30,		
	2019	2018	2017
Income taxes settled through net parent investment	\$ 12,139	\$ 18,444	\$ 33,644

15. Stock-Based Compensation

The Parent maintains a number of stock-based compensation programs at the corporate level in which the Cerence business's employees participate. All awards granted under the programs relate to the Parent's common stock. Accordingly, the amounts presented are not necessarily indicative of future performance and do not necessarily reflect the results that the Cerence business would have experienced as an independent, publicly-traded company for the periods presented. The stock-based compensation expense recorded by the Cerence business, in the years presented, includes the expense associated with the employees historically attributable to the Cerence business's operations and the expense associated with the allocation of stock compensation expense for corporate employees.

The following table presents stock-based compensation expense included in the Cerence business's Combined Statements of Operations related to the Parent's stock-based compensation programs which are described in more detail further below (dollars in thousands):

	Year Ended September 30,		
	2019	2018	2017
Cost of licensing	\$ 21	\$ 12	\$ 1
Cost of connected services	827	495	1,740
Cost of professional services	1,048	1,569	447
Research and development	15,946	11,112	7,762
Sales and marketing	6,137	3,985	5,001
General and administrative	5,703	4,870	4,843
Total	\$ 29,682	\$ 22,043	\$ 19,794

Restricted Awards

The Parent is authorized to issue equity incentive awards in the form of Restricted Awards, including Restricted Units and Restricted Stock. Unvested Restricted Awards may not be sold, transferred or assigned. The fair value of the Restricted Awards is measured based upon the market price of the underlying common stock as of the date of grant, reduced by the purchase price of \$0.001 per share of the awards. The Restricted Awards generally are subject to vesting over a period of two to four years, and may have opportunities for acceleration for achievement of defined goals. Nuance also issued certain Restricted Awards with vesting solely dependent on the achievement of specified performance targets. The fair value of the Restricted Awards is amortized to expense over the awards' applicable requisite service periods using the straight-line method. In the event that the employee's employment terminates, or in the case of awards with only performance goals, if those goals are not met, any unvested shares are forfeited and revert to the Parent.

As discussed within Note 18, Cerence entered into an Employee Matters Agreement with Nuance, which provides for the treatment of Nuance long-term incentive compensation awards, including stock options and restricted stock units, held by Cerence employees.

16. Commitments and Contingencies

Operating Leases

The Parent has various operating leases for office space around the world and has assumed facility lease obligations in connection with past acquisitions identified to the Cerence business. Among these assumed obligations are lease payments related to office locations that were vacated by certain of the acquired companies prior to the acquisition date. Additionally, certain of our lease obligations have been included in various restructuring charges. Refer to Note 13 for more detail.

The Parent's operating lease and other contractual obligations range from \$2.9 million to \$6.3 million annually over the next 5 years. The following table outlines gross future minimum payments under all non-cancelable operating leases that are specific to the Cerence business as of September 30, 2019 (dollars in thousands):

Year Ending September 30,	Operating Leases
2020	\$ 6,323
2021	5,421
2022	4,493
2023	3,237
2024	2,922
Thereafter	4,039
Total	<u>\$ 26,435</u>

Total rent expense was approximately \$3.1 million, \$3.0 million, and \$2.9 million for the years ended September 30, 2019, 2018, and 2017, respectively.

Capital Leases

As part of our acquisition of Voicebox, we assumed certain leases for various equipment accounted for as capital leases. As of September 30, 2019, future minimum lease payments under the capital leases are immaterial.

Litigation and Other Claims

Like many companies in the software industry, Cerence has been notified of claims that it may be infringing on, or contributing to the infringement of, the intellectual property rights of others. These claims have been referred to counsel, and they are in various stages of evaluation and negotiation. If it appears necessary or desirable, we may seek licenses for these intellectual property rights. There is no assurance that licenses will be offered by all claimants, that the terms of any offered licenses will be acceptable to us or that in all cases the dispute will be resolved without litigation, which may be time consuming and expensive, and may result in injunctive relief or the payment of damages by us. We do not believe that the resolution of any such claim or litigation will have a material adverse effect on the Cerence business's financial position and results of operations. However, resolution of any such claim or litigation could require significant management time and adversely impact our operating results, financial position and cash flows.

We include indemnification provisions in the contracts we enter into with customers and business partners. Generally, these provisions require us to defend claims arising out of our products' infringement of third-party intellectual property rights, breach of contractual obligations and/or unlawful or otherwise culpable conduct. The indemnity obligations generally cover damages, costs and attorneys' fees arising out of such claims. In most, but not all cases, our total liability under such provisions is limited to either the value of the contract or a specified, agreed upon amount. In some cases our total liability under such provisions is unlimited. In many, but not all cases, the term of the indemnity provision is perpetual. While the maximum potential amount of future payments we could be required to make under all the indemnification provisions is unlimited, we believe the estimated fair value of these provisions is minimal due to the low frequency with which these provisions have been triggered.

17. Pension and Other Post-Retirement Benefits

Nuance offers various long-term benefits to its eligible employees, including employees of the Cerence business. As Nuance provides these benefits to eligible employees and retirees of the Cerence business, the costs, assets and liabilities of participating employees of the Cerence business in these plans are reflected in these combined financial statements.

Defined Contribution Plans

Nuance has established a retirement savings plan under Section 401(k) of the Internal Revenue Code (the "401(k) Plan"). The 401(k) Plan covers substantially all of Nuance's U.S. employees who meet minimum age and service requirements, and allows participants to defer a portion of their annual compensation on a pre-tax basis. Effective July 1, 2003, Nuance's match of employees' contributions was established. Nuance matches 50% of employee contributions up to 4% of eligible salary. Employer's contributions vest one-third annually over a three-year period. Cerence was allocated charges for contributions to these 401(k) defined contribution plans of \$1.0 million, \$0.7 million, and \$0.7 million for the years ended September 30, 2019, 2018, and 2017, respectively.

Defined Benefit Pension Plans

Nuance sponsors certain defined benefit pension plans that are offered primarily by their foreign subsidiaries. Many of these plans were assumed through acquisitions or are required by local regulatory requirements. Nuance may deposit funds for these plans with insurance companies, third party trustees or into government-managed accounts consistent with local regulatory requirements, as applicable.

Cerence sponsors certain aforementioned defined benefit plans. The total defined benefit plan pension expenses incurred by Cerence for these plans were \$0.4 million, \$0.4 million, and \$0.4 million for the years ended September 30, 2019, 2018, and 2017, respectively. Cerence's aggregate projected benefit obligation and aggregate net liability for Cerence's defined benefit plans as of September 30, 2018 was \$7.3 million and \$6.8 million, as of September 30, 2018 was \$5.0 million and \$4.2 million, and as of September 30, 2017 was \$5.1 million and \$4.2 million, respectively.

Total expense related to the participation in defined benefit pension plans sponsored by Nuance was not material to the Cerence business's Combined Statements of Operations in 2019, 2018, and 2017.

As discussed within Note 18, Cerence entered into an Employee Matters Agreement with Nuance, which provides that Cerence establish certain compensation and benefit plans for the benefit of our employees following the Spin-Off, including a 401(k) savings plan, which accepts direct rollovers of account balances from the Nuance 401(k) savings plan for any of our employees who elect to do so. In addition, Cerence assumed certain assets and liabilities with respect to our current and former employees under certain of Nuance's U.S. and non-U.S. defined benefit pension plans (with assets and liabilities allocated based on formulas specified in the Employee Matters Agreement for each pension plan).

18. Relationship with Parent and Related Entities

Historically, the Cerence business has been managed and operated in the normal course of business consistent with other affiliates of the Parent. Accordingly, certain shared costs have been allocated to the Cerence business and reflected as expenses in the standalone combined financial statements. Management considers the allocation methodologies used to be reasonable and appropriate reflections of the historical Parent expenses attributable to the Cerence business for purposes of the standalone financial statements. However, the expenses reflected in the combined financial statements may not be indicative of the actual expenses that would have been incurred during the periods presented if the Cerence business historically operated as a separate, standalone entity. In addition, the expenses reflected in the combined financial statements may not be indicative of related expenses that will be incurred in the future by the Cerence business.

(a) General Corporate Overhead Allocation

The Parent provides facilities, information services and certain corporate and administrative services to the Cerence business. Expenses relating to these services have been allocated to the Cerence business and are reflected in the combined financial statements. Where direct assignment is not possible or practical, these costs were allocated on a pro rata basis of revenues, headcount or other measures. The following table summarizes the components of general allocated corporate expenses for the years ended September 30, 2019, 2018, and 2017 (dollars in thousands):

	Year Ended September 30,		
	2019	2018	2017
Facility	\$ 6,299	\$ 6,125	\$ 5,789
Depreciation	1,637	1,467	2,057
Amortization	22	1,150	1,869
Facility and other usage charges	7,958	8,742	9,715
Information services	8,633	7,947	6,609
Corporate and administrative services	22,166	18,414	16,326
Total	\$ 38,757	\$ 35,103	\$ 32,650

(b) Cash Management and Financing

The Cerence business participates in the Parent's centralized cash management and financing programs. Disbursements are made through centralized accounts payable systems, which are operated by the Parent.

Cash receipts are transferred to centralized accounts which are also maintained by the Parent. As cash is disbursed and received by the Parent, it is accounted for by the Cerence business through the net parent investment.

Historically, the Cerence business has received funding from the Parent for the Cerence business's operating and investing cash needs. Parent's third-party debt and the related interest expense have not been allocated to the Cerence business for any of the years presented as the Cerence business is not the legal obligor of the debt and the Parent's borrowings were not directly attributable to the Cerence business.

(c) Intercompany Receivables/Payables

All significant intercompany transactions between the Cerence business and the Parent and its non-Cerence businesses have been included in these combined financial statements and are considered to be effectively settled for cash at the time the transaction is recorded. The total net effect of the settlement of these intercompany transactions have been accounted for through parent company net investment in the Combined Balance Sheets and is reflected in the Combined Statements of Cash Flows as a financing activity.

The following table summarizes the components of the net transfers to Parent for the years ended September 30, 2019, 2018, and 2017 (dollars in thousands):

	Year Ended September 30,		
	2019	2018	2017
Net advancement from Parent	\$ (83,554)	\$ (28,947)	\$ (92,070)
Stock-based compensation	29,682	22,043	19,794
Accrued bonus	9,478	(2,859)	283
Corporate depreciation and amortization	1,659	2,617	3,926
Fixed asset reclasses from the Parent	10,088	259	(1,900)
Voicebox Purchase Accounting Adjustment	3,591	—	—
Intangible asset reclasses from the Parent	1,665	—	—
Net transfer to Parent	<u>\$ (27,391)</u>	<u>\$ (6,887)</u>	<u>\$ (69,967)</u>

Agreements with Nuance

On September 30, 2019, in connection with the Spin-Off, Cerence entered into several agreements with Nuance that set forth the principal actions taken or to be taken in connection with the Spin-Off and that govern the relationship of the parties following the Spin-Off, including the following:

- **Separation and Distribution Agreement:** We entered into a Separation and Distribution Agreement with Nuance in advance of the Distribution. The Separation and Distribution Agreement sets forth our agreements with Nuance regarding the principal actions to be taken in connection with the Spin-Off. It also sets forth other agreements that govern aspects of our relationship with Nuance following the Spin-Off.
- **Tax Matters Agreement:** We entered into a Tax Matters Agreement with Nuance that governs the respective rights, responsibilities and obligations of Nuance and us after the Distribution with respect to all tax matters (including tax liabilities, tax attributes, tax returns and tax contests).
- **Transition Services Agreement:** We entered into a Transition Services Agreement pursuant to which Nuance will provide us, and we will provide Nuance, with certain specified services for a limited time to help ensure an orderly transition following the Distribution.
- **Employee Matters Agreement:** We entered into an Employee Matters Agreement with Nuance that addresses employment and employee compensation and benefits matters. The Employee Matters Agreement addresses the allocation and treatment of assets and liabilities relating to employees and compensation and benefit plans and programs in which our employees participated prior to the Spin-Off.
- **Intellectual Property Agreement:** We entered into an Intellectual Property Agreement with Nuance, pursuant to which we granted to Nuance, and Nuance granted to us, perpetual, non-exclusive, royalty-free licenses to certain patents and technology, as well as certain other intellectual property that have historically been shared between us and Nuance.
- **Transitional Trademark License Agreement:** We entered into a Transitional Trademark License Agreement with Nuance, pursuant to which Nuance granted us a non-exclusive, royalty free license to continue using certain of Nuance’s trademarks, trade names and service marks with respect to the “Nuance” and “Dragon” brands in connection with the sale, marketing and other commercialization of our products and services.
- **OEM and Distribution License Agreements:** We entered into four OEM and Distribution License Agreements with Nuance. Under three of the four agreements, Cerence licenses to Nuance designated Cerence technologies for Nuance’s internal use and for distribution to Nuance end-users and resellers. Under the final agreement, Nuance licenses to Cerence designated Nuance technologies for Cerence’s internal use and for distribution to Cerence end-users and resellers. All agreements contain customary commercial terms for arrangements of this nature.

19. Income Taxes

Although Cerence was historically included in consolidated income tax returns of the Parent, Cerence's income taxes are computed and reported herein under the "separate return method." The use of the separate return method may result in differences when the sum of the amounts allocated to standalone tax provisions are compared with amounts presented in the combined financial statements. In that event, the related deferred tax assets and liabilities could be significantly different from those presented herein. Certain tax attributes, e.g., net operating loss carryforwards, which were reflected in the Parent's consolidated financial statements may or may not exist at the standalone Cerence level.

Furthermore, the combined financial statements do not reflect any amounts due to the Parent for income tax related matters as it is assumed that all such amounts due to the Parent were settled on September 30 of each year.

Recent Tax Legislation

On December 22, 2017, the Tax Cuts and Jobs Act ("TCJA") was signed into law. The TCJA significantly revises the U.S. corporate income tax by, among other things, lowering corporate income tax rates, implementing a hybrid territorial tax system and imposing a one-time repatriation tax on foreign cash and earnings.

We are subject to additional requirements of the TCJA during the year ended September 30, 2019. Those provisions include a tax on global intangible low-taxed income ("GILTI") and foreign-derived intangible income ("FDII"). We have elected to account for GILTI as a period cost and therefore included GILTI expense in the effective tax rate calculation. Our estimates may be revised in future period as we obtain additional data and as the IRS issues new guidance implementing the law changes.

As a result of the TCJA, in fiscal year 2018 we re-measured certain deferred tax assets and liabilities at the lower rates and recorded approximately \$23.1 million of tax expense.

Provision for Income Taxes

The components of (loss) income before income taxes are as follows (dollars in thousands):

	Year Ended September 30,		
	2019	2018	2017
Domestic	\$ (22,904)	\$ 16,371	\$ 38,095
Foreign	34,088	20,427	25,107
(Loss) income before income taxes	<u>\$ 11,184</u>	<u>\$ 36,798</u>	<u>\$ 63,202</u>

The components of (benefit) provision for income taxes are as follows (dollars in thousands):

	Year Ended September 30,		
	2019	2018	2017
Current:			
Federal	\$ 5,352	\$ 11,413	\$ 26,191
State	1,059	2,500	3,695
Foreign	5,728	4,531	3,758
Total current	<u>\$ 12,139</u>	<u>\$ 18,444</u>	<u>\$ 33,644</u>
Deferred:			
Federal	(6,210)	14,393	(14,846)
State	(1,593)	(1,284)	(1,884)
Foreign	(93,420)	(636)	(988)
Total deferred	<u>(101,223)</u>	<u>12,473</u>	<u>(17,718)</u>
(Benefit from) provision for income taxes	<u>\$ (89,084)</u>	<u>\$ 30,917</u>	<u>\$ 15,926</u>
Effective income tax rate	(796.5)%	84.0%	25.2%

The (benefit) provision for income taxes differed from the amount computed by applying the federal statutory rate to our (loss) income before income taxes as follows (dollars in thousands):

	Year Ended September 30,		
	2019	2018	2017
Federal tax provision at statutory rate	\$ 2,270	\$ 9,026	\$ 22,121
State tax, net of federal benefit	(490)	917	1,177
Foreign tax rate and other foreign related tax items	(4,764)	(104)	(5,312)
Uncertain tax positions	57,631	(95)	840
Stock-based compensation	—	—	1,288
Global intangible low-taxed income	3,923	—	—
Foreign-derived intangible income	(547)	—	—
Capital losses	8,187	—	—
Change in U.S. valuation allowance	(8,187)	—	—
Non-deductible expenditures	2,707	514	56
U.S. and Canadian R&D credits	(1,675)	(1,313)	(1,974)
Domestic Production Activities Deduction	—	(1,143)	(2,270)
TCJA impact	—	23,115	—
Intangible property transfers	(148,139)	—	—
(Benefit from) provision for income taxes	<u>\$ (89,084)</u>	<u>\$ 30,917</u>	<u>\$ 15,926</u>

The effective income tax rate is based upon the income for the year, the composition of the income in different countries, and adjustments, if any, for the potential tax consequences, benefits or resolutions of audits or other tax contingencies. Our aggregate income tax rate in foreign jurisdictions is lower than our income tax rate in the United States. Our effective tax rate may be adversely affected by earnings being lower than anticipated in countries where we have lower statutory tax rates and higher than anticipated in countries where we have higher statutory tax rates. We believe that it is not more likely than not that the tax benefit from the U.S. capital loss will be realized. As a result, we recorded a full valuation allowance against the capital loss.

The effective income tax rate in fiscal year 2019 differs from the U.S. federal statutory rate of 21.0% primarily due to a net tax benefit of \$91.7 million related to intangible property transfers, partially offset by an uncertain tax position. The net tax benefit is also partially offset by GILTI tax expense of \$3.9 million.

The effective income tax rate in fiscal year 2018 differs from the U.S. federal statutory rate of 24.5% primarily due to the net tax expense resulting from the TCJA re-measurement of deferred tax assets and liabilities at the lower enacted rate, our research and development credits and the domestic production activities deduction.

The effective income tax rate in fiscal year 2017 differs from the U.S. federal statutory rate of 35% primarily due to our earnings in foreign jurisdictions that are subject to significantly lower tax rates, our research and development credits and the domestic production activities deduction.

As of September 30, 2019, we have not provided taxes on undistributed earnings of our foreign subsidiaries, which may be subject to foreign withholding taxes upon repatriation, as we consider these earnings indefinitely reinvested. Our indefinite reinvestment determination is based on the future operational and capital requirements of our domestic and foreign operations. We expect our international cash and cash equivalents and marketable securities will continue to be used for our foreign operations and therefore do not anticipate repatriating these funds. As of September 30, 2019, it is not practical to calculate the unrecognized deferred tax liability on these earnings due to the complexities of the utilization of foreign tax credits and other tax assets.

Deferred tax assets (liabilities) consist of the following as of September 30, 2019 and 2018 (dollars in thousands):

	September 30,	
	2019	2018
Deferred tax assets:		
Net operating loss carryforwards	\$ 6,567	\$ 4,969
Capital loss carryforwards	8,187	—
Federal credit carryforwards	9,367	8,791
Accrued expenses and other reserves	2,830	2,422
Difference in timing of revenue related items	50,677	47,662
Acquired intangibles	83,456	—
Pension obligation	1,969	1,267
Total deferred tax assets	\$ 163,053	\$ 65,111
Valuation allowance for deferred tax assets	(11,064)	(2,420)
Deferred tax assets	\$ 151,989	\$ 62,691
Deferred tax liabilities:		
Depreciation	\$ (1,360)	\$ (1,539)
Acquired intangibles	—	(10,099)
Total deferred tax liabilities	(1,360)	(11,638)
Net deferred tax assets	\$ 150,629	\$ 51,053

Deferred tax assets are reduced by a valuation allowance if, based on the weight of available positive and negative evidence, it is more likely than not that some portion or all the deferred tax assets will not be realized. During fiscal year 2019, the valuation allowance for deferred tax assets increased by \$8.6 million. This increase primarily relates to the valuation allowance for the U.S. capital loss of \$8.2 million. We believe that it is not more likely than not that the tax benefit from the U.S. capital loss will be realized. As a result, we recorded a full valuation allowance against the capital loss. The remaining increase in valuation allowance was driven by return to provision adjustments to acquired VoiceBox net operating loss carryforwards and tax credits with a corresponding valuation allowance. This was recorded as part of purchase accounting for VoiceBox within the measurement period. As of September 30, 2019, we have \$11.03 million and \$0.03 million in valuation allowance against our net domestic and foreign deferred tax assets, respectively. As of September 30, 2018, we had \$2.4 million and \$0 in valuation allowance against our net domestic and foreign deferred tax assets, respectively.

At September 30, 2019, and 2018, we had U.S. federal net operating loss carryforwards of \$14.2 million and \$21.5 million, respectively. The net operating loss and credit carryforwards are subject to an annual limitation due to the ownership change limitations provided by the Internal Revenue Code of 1986 and similar state provisions. At September 30, 2019, and 2018, we had foreign net operating loss carryforwards of \$16.6 million and \$0.9 million, respectively. These carryforwards will expire at various dates beginning in 2026 and extending up to an unlimited period.

At September 30, 2019 and 2018, we have federal research and development carryforwards and foreign tax credit carryforwards of \$9.4 million and \$8.8 million, respectively.

Uncertain Tax Positions

Upon audit, taxing authorities may challenge all or part of an uncertain income tax position. While Cerence has no history of tax audits on a standalone basis, the Parent is routinely audited by state and foreign taxing authorities. Accordingly, the Parent (and Cerence) regularly assesses the outcome of potential examinations in each of the taxing jurisdictions when determining the adequacy of the amount of unrecognized tax benefit recorded. We recognize tax benefits from uncertain tax positions only if it is more likely than not that the tax position will be sustained on examination by the taxing authorities, based on the technical merits of the position. The tax benefits recognized in the financial statements from such positions are then measured based on the largest benefit which is more likely than not to be realized upon ultimate settlement. We recognize interest and penalties related to unrecognized tax positions in our provision for income taxes line of our Combined Statements of Operations.

The aggregate changes in the balance of our gross unrecognized tax benefits were as follows (dollars in thousands):

	September 30,		
	2019	2018	2017
Balance at the beginning of the year	\$ 5,738	\$ 5,833	\$ 4,993
Increases related to tax positions taken from prior periods	1,312	103	1,132
Decreases related to tax positions taken from prior periods	(120)	(198)	(77)
Increases related to tax positions taken during current period	56,439	—	—
Decreases for tax settlements and lapse in statutes	—	—	(215)
Balance at the end of the year	<u>\$ 63,369</u>	<u>\$ 5,738</u>	<u>\$ 5,833</u>

As of September 30, 2019, \$63.4 million of the unrecognized tax benefits, if recognized, would impact our effective tax rate. In fiscal year 2019, there was an increase in unrecognized tax benefits of \$56.4 million related to intercompany intangible property transfers. We do not expect a significant change in the amount of unrecognized tax benefits within the next 12 months. We recorded \$1.2 million and \$0.8 million of interest and penalties related to uncertain tax positions as of September 30, 2019 and September 30, 2018, respectively.

We are subject to U.S. federal income tax, various state and local taxes and international income taxes in numerous jurisdictions. The 2017 through 2019 years remain open for all purposes of examination by the IRS and other taxing authorities in material jurisdictions.

20. Subsequent Events

Consummation of the spin-off and distribution of stock of Cerence Inc.

On October 1, 2019, Nuance completed the previously announced complete legal and structural separation and distribution to its stockholders of all of the outstanding shares of Cerence in a tax free spin-off. The distribution was made in the amount of one share of Cerence common stock for every eight shares of Nuance common stock owned by Nuance's stockholders as of 5:00 p.m. Eastern Time on September 17, 2019, the record date of such distribution.

Senior Facilities

On October 1, 2019, in connection with the previously announced Spin-Off, Cerence entered into a Credit Agreement, by and among Cerence, the lenders and issuing banks party thereto and Barclays Bank PLC, as administrative agent (the "Credit Agreement") consisting of a five-year senior secured term loan facility in the aggregate principal amount of \$270.0 million, which is primarily intended to finance a cash distribution of approximately \$153.0 million to Nuance and provide approximately \$110.0 million initial support for the cash flow needs of the Cerence business. We also entered into a 54-month senior secured first-lien revolving credit facility in an aggregate principal amount of \$75.0 million, which shall be drawn on in the event that our working capital and other cash needs are not supported by our operating cash flow. As of December 19, 2019, there were no amounts outstanding under the revolving credit facility.

Cerence's obligations under the Credit Agreement are jointly and severally guaranteed by certain of its existing and future direct and indirect wholly owned domestic subsidiaries, subject to certain exceptions customary for financings of this type. All obligations are secured by substantially all of its tangible and intangible personal property and material real property, including a perfected first-priority pledge of all (or, in the case of foreign subsidiaries or subsidiaries ("FSHCO") that own no material assets other than equity interests in foreign subsidiaries that are "controlled foreign corporations" or other FSHCOs, 65%) of the equity securities of our subsidiaries held by any loan party, subject to certain customary exceptions and limitations.

Cerence is obligated to make quarterly principal payments on the last business day of each quarter in an aggregate annual amount equal to 3.5% of the original principal amount of the Term Loan Facility during the first two years of the Term Loan Facility, and 10% of the original principal amount of the Term Loan Facility thereafter, with the balance payable at the maturity date. Quarterly principal payments will commence on March 31, 2020. Interest accrues on outstanding borrowings under the Senior Facilities at a rate of either a base rate (as defined in the Credit Agreement) plus 5.00% or a LIBOR rate (as defined in the Credit Agreement) plus 6.00%. Interest payments with respect to the Senior Facilities are required either on a quarterly basis (for ABR loans) or at the end of each interest period (for LIBOR loans) or, if the duration of the applicable interest period exceeds three months, then every three months.

Borrowings under the Credit Agreement are prepayable at Cerence's option without premium or penalty, subject to a 1.00% prepayment premium in connection with any repricing transaction for the term loan facility in the first six months after the closing date. Cerence may request to extend the maturity date of all or a portion of the Senior Facilities subject to certain conditions customary for financings of this type. The Credit Agreement also contains certain mandatory prepayment provisions in the event that Cerence incurs certain types of indebtedness or receive net cash proceeds from certain non-ordinary course asset sales or other dispositions of property or generate positive excess cash flow, in each case subject to terms and conditions customary for financings of this type.

The Credit Agreement contains certain affirmative and negative covenants customary for financings of this type that, among other things, limit our and our subsidiaries' ability to incur additional indebtedness or liens, to dispose of assets, to make certain fundamental changes, to designate subsidiaries as unrestricted, to make certain investments, to prepay certain indebtedness and to pay dividends, or to make other distributions or redemptions/repurchases, in respect of the our and our subsidiaries' equity interests. In addition, the Credit Agreement contains a financial covenant requiring the maintenance of a net first lien leverage ratio of not greater than 6.00 to 1.00. The Credit Agreement also contains events of default customary for financings of this type, including certain customary change of control events.

21. Quarterly Data (Unaudited)

The following information has been derived from unaudited condensed combined financial statements that, in the opinion of management, include all recurring adjustments necessary for a fair statement of such information (dollars in thousands).

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Fiscal Year
2019					
Total revenues	\$ 72,484	\$ 70,304	\$ 77,569	\$ 82,958	\$ 303,315
Gross profit	\$ 48,277	\$ 45,860	\$ 53,894	\$ 55,941	\$ 203,972
Net (loss) income	\$ 2,255	\$ 454	\$ 1,770	\$ 95,789	\$ 100,268
	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Fiscal Year
2018					
Total revenues	\$ 61,955	\$ 67,496	\$ 72,177	\$ 75,356	\$ 276,984
Gross profit	\$ 42,455	\$ 48,022	\$ 50,430	\$ 53,113	\$ 194,020
Net (loss) income	\$ (18,740)	\$ 9,463	\$ 6,534	\$ 8,624	\$ 5,881

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

Not Applicable.

Item 9A. Controls and Procedures.

Evaluation of disclosure controls and procedures. Based on the evaluation of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act required by Exchange Act) Rules 13a-15(b) or 15d-15(b), our principal executive officer and principal financial officer have concluded that as of the end of the period covered by this report, our disclosure controls and procedures were effective to ensure that information required to be disclosed by Cerence in reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in SEC rules and forms, and include controls and procedures designed to ensure that information required to be disclosed by us in such reports is accumulated and communicated to our management, including the principal executive officer and principal financial officer, as appropriate, to allow timely decisions regarding required disclosure.

Report of management on internal control over financial reporting. This Annual Report on Form 10-K does not include a report of management's assessment regarding internal control over financial reporting or an attestation report of our independent registered public accounting firm due to a transition period established by the rules of the SEC for newly public companies.

Changes in internal control over financial reporting. There were no changes in our internal control over financial reporting that occurred during our fourth fiscal quarter of fiscal year 2019 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information.

In November 2019, the Compensation Committee approved a new Change of Control and Severance Agreement for use with named executive officers, including Mr. Gallenberger, (“Change of Control Agreement”) other than the Chief Executive Officer. The Change of Control Agreement provides that in the event of a named executive officer’s employment is involuntarily terminated without cause and not for death or disability he will be eligible to receive severance benefits consisting of (i) one hundred percent (100%) of the annual base salary, payable in a lump sum payment, (ii) one hundred percent (100%) of the target bonus and a pro-rated percentage of his target bonus for the fiscal year in which the termination occurs, (iii) vesting of the prorated portion of the time-based equity that would have vested in the year in which the termination occurs, and (iv) twelve (12) months Company-paid health insurance under COBRA. If a named executive officer’s employment is terminated without cause or for good reason within twelve (12) months following a change of control of the Company, he or she will instead be eligible to receive, (i) one hundred and fifty percent (150%) months base salary, payable in a lump sum payment, (ii) a lump sum payment equal to the greater of: one hundred and fifty percent (150%) of the annual target bonus for the year of termination, or the year preceding the change of control, and (iii) one hundred percent of the named executive officers unvested and time-based equity awards will become vested in full; and (iv) upon a change of control, performance shares for the year of the change of control will convert to time-based shares and vest in full at target based on continued service through the end of the performance period, or upon earlier termination without “cause” or for “good reason”, and (v) if the named executive officers employment is terminated without cause or for good reason during the twelve (12) months post-change of control protection period he or she will receive acceleration of fifty percent (50%) of all remaining performance shares at target, and for United States executive officers, twelve (12) months Company-paid health insurance under COBRA. To receive the foregoing severance payments and benefits, the named executive officer would be required to enter into a separation and release agreement with the Company and continuing to comply with his existing confidentiality and restrictive covenant agreements.

The Change of Control Agreement provides for an initial term through September 30, 2022 and for automatic renewal of additional one-year terms unless the Company or the named executive officer provides timely notice of non-renewal.

PART III

Item 10. Directors, Executive Officers and Corporate Governance.

Our Board of Directors adopted a Code of Business Conduct and Ethics for all of our directors, officers and employees on October 2, 2019. Our Code of Business Conduct and Ethics can be found at our website: www.cerence.com. We will provide to any person without charge, upon request, a copy of our Code of Business Conduct and Ethics. Such a request should be made in writing and addressed to Investor Relations, Cerence Inc., 15 Wayside Road, Burlington, MA 01803.

To date, there have been no waivers under our Code of Business Conduct and Ethics. We will post any waivers, if and when granted, of our Code of Business Conduct and Ethics on our website at www.cerence.com.

The additional information required by this Item for the Company will be set forth in the Company's Proxy Statement for the 2020 Annual Meeting of Stockholders, which information is hereby incorporated by reference.

Item 11. Executive Compensation.

The information required by this Item for the Company will be set forth in the Company's Proxy Statement for the 2020 Annual Meeting of Stockholders, which information is hereby incorporated herein by reference.

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

The information required by this Item for the Company will be set forth in Company's Proxy Statement for the 2020 Annual Meeting of Stockholders, which information is hereby incorporated herein by reference.

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

The information required by this Item for the Company will be set forth in the Company's Proxy Statement for the 2020 Annual Meeting of Stockholders, which information is hereby incorporated herein by reference.

Item 14. Principal Accounting Fees and Services.

The information required by this Item for the Company will be set forth in Company's Proxy Statement for the 2020 Annual Meeting of Stockholders, which information is hereby incorporated herein by reference.

PART IV

Item 15. Exhibits, Financial Statement Schedules.

- (a) The following documents are filed as a part of this Report:
- (1) All Financial Statements— See Index to Financial Statements in Item 8 of this Report;
 - (2) Financial Statement Schedules — All schedules have been omitted as the requested information is inapplicable or the information is presented in the financial statements or related notes included as part of this Report.
 - (3) Exhibits — See Item 15(b) of this Report below.
- (b) Exhibits.

EXHIBIT INDEX						
Exhibit Index #	Exhibit Description	Filed Herewith	Incorporated by Reference			Filing Date
			Form	File No.	Exhibit	
2.1	Separation and Distribution Agreement between Nuance Communications, Inc. and Cerence Inc.		8-K	001-39030	2.1	October 2, 2019
3.1	Amended and Restated Certificate of Incorporation of Cerence Inc.		8-K	001-39030	3.1	October 2, 2019
3.2	Amended and Restated By-Laws of Cerence Inc.		8-K	001-39030	3.2	October 2, 2019
10.1	Tax Matters Agreement between Nuance Communications, Inc. and Cerence Inc.		8-K	001-39030	10.1	October 2, 2019
10.2	Transition Services Agreement between Nuance Communications, Inc. and Cerence Operating Company.		8-K	001-39030	10.2	October 2, 2019
10.3	Employee Matters Agreement between Nuance Communications, Inc. and Cerence Inc.		8-K	001-39030	10.3	October 2, 2019
10.4	Intellectual Property Agreement between Nuance Communications, Inc. and Cerence Inc.		8-K	001-39030	10.4	October 2, 2019
10.5	Transitional Trademark License Agreement between Nuance Communications, Inc. and Cerence Inc.		8-K	001-39030	10.5	October 2, 2019
10.6†	Offer Letter of Sanjay Dhawan, dated February 14, 2019		10	001-39030	10.6	August 21, 2019
10.7†	Change of Control and Severance Agreement between Sanjay Dhawan and Nuance Communications, Inc.		10	001-39030	10.7	August 21, 2019
10.8†	Amendment to Offer Letter of Sanjay Dhawan, dated August 26, 2019		10/A	001-39030	10.8	September 4, 2019
10.9†	Cerence 2019 Equity Incentive Plan		S-8	333-234040	4.3	October 2, 2019
10.10†	Cerence 2019 Employee Stock Purchase Plan		S-8	333-234040	4.6	October 2, 2019
10.11	Credit Agreement, dated as of October 1, 2019, among Cerence Inc., Barclays Bank PLC, as administrative agent, and the other lenders and financial institutions party thereto		8-K	001-39030	10.6	October 2, 2019
10.12	Subsidiary Guarantee Agreement, dated as of October 1, 2019, among the subsidiaries of Cerence Inc. named therein and Barclays Bank PLC, as administrative agent		8-K	001-39030	10.7	October 2, 2019
10.13	Collateral Agreement, dated as of October 1, 2019, among Cerence Inc., the subsidiary loan parties thereto and Barclays Bank PLC, as collateral agent		8-K	001-39030	10.8	October 2, 2019

10.14†	Form of Change of Control and Severance Agreement - NEO	X
10.15	Indemnification Agreement	X
10.16†	Restricted Stock Unit Award Agreement	X
10.17†	Performance-Based Restricted Stock Unit Award Agreement	X
21.1	Subsidiaries of the Registrant	X
23.1	BDO USA, LLP, Independent Registered Public Accounting Firm.	X
24.1	Power of Attorney (including in signature pages hereto)	X
31.1	Certification of Principal Executive Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.	X
31.2	Certification of Principal Financial Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.	X
32.1	Certification of Principal Executive Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.	X
32.2	Certification of Principal Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.	X

† Management contract or compensatory plan or arrangement

Item 16. Form 10-K Summary

Not applicable.

SIGNATURES

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

CERENCA INC.

Date: December 19, 2019

By: _____ /s/ Sanjay Dhawan
Sanjay Dhawan
Chief Executive Officer
(Principal Executive Officer)

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each individual whose signature appears below constitutes and appoints each of Sanjay Dhawan, Mark Gallenberger and Leanne Fitzgerald, acting singly, his or her true and lawful agent, proxy and attorneys-in-fact, each with full power of substitution and resubstitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign any and all amendments to this Annual Report on Form 10-K and to file the same with all exhibits thereto, and all documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done, as fully to all intents and purposes as he or she might or could do in person, and hereby ratifying and confirming all that said attorneys-in-fact and agents or any of them, or their or his or her substitute or substitutes, may lawfully do or cause to be done by virtue hereof. This power of attorney may be executed in counterparts.

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

<u>Name</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Sanjay Dhawan</u> Sanjay Dhawan	Chief Executive Officer and Director (Principal Executive Officer)	December 19, 2019
<u>/s/ Mark Gallenberger</u> Mark Gallenberger	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	December 19, 2019
<u>/s/ Arun Sarin</u> Arun Sarin	Chairman of the Board	December 19, 2019
<u>/s/ Thomas Beaudoin</u> Thomas Beaudoin	Director	December 19, 2019
<u>/s/ Marianne Budnik</u> Marianne Budnik	Director	December 19, 2019
<u>/s/ Sanjay Jha</u> Sanjay Jha	Director	December 19, 2019
<u>/s/ Kristi Ann Matus</u> Kristi Ann Matus	Director	December 19, 2019
<u>/s/ Alfred Nietzel</u> Alfred Nietzel	Director	December 19, 2019