

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

Annual Report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934
For the fiscal year ended December 31, 2019
OR

Transition report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934
Commission File Number: 001-35580



(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

20-2056195
(I.R.S. Employer
Identification Number)

ServiceNow, Inc.
2225 Lawson Lane
Santa Clara, California 95054
(408) 501-8550

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

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

Title of each class	Trading Symbol	Name of each exchange on which registered
Common stock, par value \$0.001 per share	NOW	The New York Stock Exchange

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

Not applicable

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 Section 15(d) of 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	<input checked="" type="checkbox"/>	Accelerated Filer	<input type="checkbox"/>
Non-Accelerated Filer	<input type="checkbox"/>	Smaller Reporting Company	<input type="checkbox"/>
		Emerging Growth Company	<input type="checkbox"/>

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

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

Based on the closing price of the Registrant's Common Stock on the last business day of the Registrant's most recently completed second fiscal quarter, which was June 28, 2019, the aggregate market value of its shares (based on a closing price of \$274.57 per share on June 28, 2019 as reported on the New York Stock Exchange) held by non-affiliates was approximately \$37.7 billion.

As of January 31, 2020, there were approximately 189.8 million shares of the Registrant's Common Stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Registrant's definitive proxy statement for its 2020 Annual Meeting of Stockholders (Proxy Statement) to be filed within 120 days of the Registrant's fiscal year ended December 31, 2019, are incorporated by reference in Part III of this Report on Form 10-K. Except with respect to information specifically incorporated by reference in this Form 10-K, the Proxy Statement is not deemed to be filed as part of this Form 10-K.

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PART I

FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K, including the “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” contains forward-looking statements regarding future events and our future results that are based on our current expectations, estimates, forecasts and projections about our business, our results of operations, the industry in which we operate and the beliefs and assumptions of our management. Words such as “believe,” “may,” “will,” “estimate,” “continue,” “anticipate,” “would,” “could,” “should,” “intend” and “expect,” variations of these words, and similar expressions are intended to identify those forward-looking statements. These forward-looking statements are only predictions and are subject to risks, uncertainties and assumptions that are difficult to predict. Therefore, actual results may differ materially and adversely from those expressed in any forward-looking statements. Factors that might cause or contribute to such differences include, but are not limited to, those discussed in this Report under the section entitled “Risk Factors” in Item 1A of Part I and elsewhere herein, and in other reports we file with the Securities and Exchange Commission (SEC). While forward-looking statements are based on the reasonable expectations of our management at the time that they are made, you should not rely on them. We undertake no obligation to revise or update publicly any forward-looking statements for any reason, whether as a result of new information, future events or otherwise, except as may be required by law.

ITEM 1. BUSINESS

ServiceNow’s purpose is to make the world of work, work better for people. We believe that people should work the way they want to, so we build applications that help automate existing processes and create efficient, digitized workflows. Our products and services enable the steps of a job to flow naturally across disparate departments, systems and processes of a business. When work flows naturally, great experiences follow.

We deliver digital workflows on a single enterprise cloud platform called the Now Platform®. Our product portfolio is currently focused on providing Information Technology (IT), Employee and Customer workflows in pre-packaged product offerings. We also enable our customers to use the Now Platform App Engine to design and build workflow applications that are purpose built for their own business.

Getting a job done in an enterprise (what we call a “workflow”) usually requires different people in various functions of an organization to work together. Often they rely on different technology systems and inefficient, manual processes. One example, to illustrate, is the new hire process. When a new employee is hired, he or she needs to be set up in the employer’s HR system of record and payroll, have a desk assigned, get a computer, get access to necessary internal systems, and perform other tasks. Successfully onboarding the new employee requires different departments of the business, utilizing different systems and databases, to coordinate and complete their specific tasks. Our digital workflow platform transforms the old, manual ways of completing these tasks. A new employee’s manager approves the new hire’s specifics in the HR systems; that approval triggers a notification to the facilities team so they can assign a desk to the new employee; that assignment triggers a notification to the IT group for computer and systems access configuration, etc. Each person acting in this workflow only needs to use the Now Platform. The digital management of this workflow is possible because our technology platform hides the complexity of working across multiple, siloed departments and systems of record to make work flow more seamlessly. This enables our customers to deliver their employees the experiences they want and their customers the service they expect. Our digital workflow management tools are applied across an enterprise and in complex and sophisticated workflows.

The Now Platform is the foundation of our IT, Employee and Customer workflow offerings. The Now Platform has one code base and one data model, which allows our applications and those developed by our customers to work seamlessly with each other. Any workflow used in an enterprise is a candidate for a Now Platform-based application. Our native mobile applications greatly assist in the roll-out of automated workflows to our customer’s employees. Third-party developers can also build applications on the Now Platform App Engine and can make them available for download at our ServiceNow Store.




We primarily deliver our software via the Internet as a service through a simple and easy-to-use interface so that we can rapidly deploy our packaged offerings, and customers can easily build their custom applications. In a minority of cases, customers choose to host our software by themselves or through a third-party service provider.

We market and sell our products and services to enterprises across industries, including government, financial services, healthcare, telecommunications, manufacturing, IT services, technology, oil and gas, education and consumer products. We sell our products through subscription services and primarily through direct sales. We also offer professional services, both directly and through partners, to help our customers deploy and utilize our products and platform.

We were incorporated as Glidesoft, Inc. in California in June 2004 and changed our name to Service-now.com in February 2006. In May 2012, we reincorporated in Delaware as ServiceNow, Inc.

Our Products

Our portfolio includes the Now Platform, and pre-packaged applications specifically designed for automating IT, Employee and Customer workflows. The Now Platform supports custom workflow creation and application development (the Now Platform App Engine) and a third-party application marketplace (the ServiceNow Store). Each of our products and services helps in critical aspects of our customers' digital transformation process, and some of these products and services, as captured in the graphic and described below, are used in multiple workflows.

 IT Workflows	 Employee Workflows	 Customer Workflows
<p>Transform the IT experience</p> <ul style="list-style-type: none">• Now IT Service Management• Now IT Business Management• Now DevOps <p>Deliver high-performance business services with visibility and AIOps¹</p> <ul style="list-style-type: none">• Now IT Operations Management• Now IT Asset Management <p>Respond faster to security incidents, vulnerabilities, and enterprise risk</p> <ul style="list-style-type: none">• Now Security Operations• Now Integrated Risk Management	<p>Deliver a next generation employee experience and unlock enterprise-wide productivity</p> <ul style="list-style-type: none">• Now IT Service Management• Now HR Service Delivery• Now Finance Operations Management	<p>Delight customers with proactive service from issue to resolution</p> <ul style="list-style-type: none">• Now Customer Service Management• Now IT Operations Management• Now Field Service Management
<p>Build enterprise workflow apps fast. Now Platform App Engine ServiceNow® Store</p>		

¹ ServiceNow AIOps provides artificial intelligence capabilities for IT operations, helping customers quickly identify, isolate and remediate problems in order to keep their services up and running and meet the performance expectations of their users.
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The Now Platform and Now Platform App Engine

The Now Platform allows our customers to manage workflows across all of their systems using a common user interface. This allows us to deliver specific enterprise applications and services (e.g., employee on-boarding as described above), which spans multiple departments, back-end systems and processes across an organization. Among the many services that our platform supports are workflow automation, electronic service catalogs and portals, configuration management systems, data benchmarking, performance analytics, encryption and collaboration and development tools. All of our products are built on the Now Platform, which allows our customers to create a common user experience to manage workflows across all of their systems.

The Now Platform also powers three native mobile experiences for everyday work across the enterprise: Virtual Agent, Now Mobile and Mobile Onboarding. Enterprises can take advantage of consumer-like, mobile experiences, such as getting help from human resources or ordering a computer, from our platform. Our goal is to make our customers' work lives as simple, easy and mobile-friendly as their personal lives.

Our platform also features the Now Platform App Engine, which enables customers and third-party developers to create, test and deploy their own applications. They can do so within an integrated development environment while leveraging the single data model and common services of the Now Platform. Examples of applications our customers have developed include: an application developed by a company with a large network of seasonal retail stores and offices to track progress and identify issues in opening and closing their seasonal retail stores and offices, which enabled significant cost savings; an application developed by the IT office of a university that allocated and billed costs associated with IT maintenance, allowing the university to retire multiple legacy software systems; and an application developed by a mortgage company to ensure that loan files were complete and accurate prior to packaging and selling the loans to investors. These types of applications which extend the automation of our customers' workflows have been developed and deployed by our customers and third-party developers using the Now Platform App Engine, and many are available through our marketplace (ServiceNow Store).

The ServiceNow Store has hundreds of certified, ready to use applications from a growing independent software vendor ecosystem. The ServiceNow Store enables departments across an enterprise to do more with the Now Platform with certified applications that complement and extend the Now Platform into new use cases.

IT Workflows

Our company's roots are in IT workflows. Our founder initially saw a need for an integrated system in IT that identified issues, assigned those issues to the right people for resolution and remediated any systemic problems that created the issues. Our IT products have become increasingly sophisticated in assisting IT departments to serve their customers, manage their networks, identify and remediate threats and develop and build their products. With our IT workflows, we help customers bridge the gap between traditional IT practices and the needs of modern businesses. The following is an overview of the IT workflow products we offer; many of these products are also used in our Employee and Customer workflows.

Now IT Service Management

As our flagship product suite, IT Service Management (ITSM) defines, structures, consolidates, manages and automates the IT services an enterprise offers its employees, customers and partners. Among the ITSM product suite's capabilities are recording incidents, remediating problems and automating routine tasks and requests. With ITSM, our customers can elevate their IT service experience by improving IT productivity, achieving new insights and consolidating IT services. For example, we enable our customers to provide service portals where their employees can request IT services, order software and hardware and submit IT incidents all in one place.

Now IT Business Management

Our IT Business Management (ITBM) product suite enables customers to manage their IT priorities, including the scope and cost of IT projects, the development of software related to those projects and the overall management of the customer's IT project portfolio. With ITBM, we help our customers gain visibility, track progress, and continuously plan and optimize resources as priorities shift.

Now DevOps

Our enterprise DevOps product provides visibility across a product development toolchain. It integrates with the leading DevOps toolchains to provide automated change management, information gathering and collecting and a single dashboard across planning, development, testing, deployment and operations. With DevOps, our customers can streamline their software development and deployment processes.

Now IT Operations Management

Our IT Operations Management (ITOM) product suite connects a customer's physical and cloud-based IT infrastructure with our applications and platform. It identifies a customer's IT infrastructure components (e.g., servers) and associated business services (e.g., email) which are dependent upon that infrastructure. It also maintains a single data record for all IT configurable items, which allows our customers to exercise control over their on-premises or cloud-based infrastructures and orchestrate key processes and tasks. With ITOM, our customers can enhance visibility of IT resources, manage service health and optimize cloud delivery and spend.

Now IT Asset Management

Our IT Asset Management (ITAM) product automates customers' IT asset lifecycles with workflows to track the financial, contractual and inventory details of IT and non-IT assets throughout their lifecycles. With ITAM, our customers gain visibility into the full IT asset lifecycle to help optimize costs and automate workflows.

Now Security Operations

Our security operations product connects with internal and third-party security alerts from a customer's infrastructure to prioritize and respond to incidents and vulnerabilities according to their potential impact on a customer's business. Our security operations product includes security incident management, threat enrichment intelligence, vulnerability response management and security incident intelligence sharing. With our security operations product, we help simplify our customers' incident response by allowing them to replace manual tasks with automated security orchestration and to prioritize and remediate vulnerabilities and security incidents.

Now Integrated Risk Management

Our integrated risk management product creates a common set of policies and controls to help our customers meet the requirements of an ever-expanding regulatory environment. It also allows our customers to be more resilient and monitor risk and compliance events in real time to take action to remediate and mitigate risks. With our integrated risk management product, customers can assess risk and make strategic decisions with confidence by being able to continuously monitor and prioritize risks.

Employee Workflows

Our Employee workflow products provide service at every stage of an employee's engagement with an employer. With our Employee Workflows, our customers can simplify how their employees get the services they need, to help improve employee satisfaction and boost productivity. We enable Employee workflows through our Now HR Service Delivery and Now Finance Operations Management products, in addition to ITSM.

Now HR Service Delivery

Our HR service delivery product defines, structures, consolidates, manages and automates HR services related to employee requests. HR service delivery capabilities include HR case management, employee self-service, knowledge management and management of employee lifecycle events across multiple departments, such as onboarding, transfers and off-boarding. For example, tasks that start in HR but require action from other departments, such as new hire equipment selection and fulfillment, can be easily automated and orchestrated. With HR service delivery, we make it easy for our customers' employees to get the services they need, allowing our customers to use fewer resources to serve more employees, streamline employee lifecycle events, and increase visibility, staffing efficiency and delivery of services.

Now Finance Operations Management

Our finance operations management product and its first application, Finance Close Automation (FCA), are built for the office of the CFO. FCA is designed to complement enterprise resource planning (ERP) systems and digitize workflows to accelerate the financial statement close process and reduce financial close risks. With FCA, our customers can connect their finance teams, tasks and systems in a centralized workspace and manage their financial systems more effectively.

Customer Workflows

Our Customer workflow products help enterprises create a seamless experience for their customers - from identifying a customer issue to resolving that issue and its underlying cause. With our Customer workflows, we help our customers increase customer loyalty and, in some cases, fix issues before they are known to their customers. We enable Customer workflows through Now Customer Service Management and Now Field Service Management products, in addition to ITOM.

Now Customer Service Management

Our customer service management product defines, structures, consolidates, manages and automates customer service cases and requests. It allows common customer requests, such as password resets, to be automated with out-of-the-box self-service, and for other cases it routes work from the customer service agent to field service, engineering, operations, finance or legal personnel to resolve the underlying issues. With customer service management, we help our customers elevate their customer service by boosting resolution efficiency and improving service quality through service automation and management.

Now Field Service Management

Our field service management product allows field service agents to be effectively assigned, deployed and managed on the same underlying customer service management platform that created and managed the customer incident. With field service management, we help our customers efficiently manage location-based work tasks, including dynamic scheduling and visual dispatch.

Professional Services

Our professional services include expert services and customer success programs, offered by ServiceNow alone and in a co-delivery model with our network of partners, to help customers become proficient in the use of our platform and to maximize the value of their ServiceNow investment. Expert services include process design (including identifying inefficiencies in existing workflows), implementation, configuration, architecture and optimization services. Our focus is on supporting customers as they embark on enterprise digital transformations to reimagine their service management strategy and roadmap. Customer success programs include training and certification programs for all of our products, expertise from support professionals and our Customer Success Center, an online resource.

Customer Support

As part of their subscription, customers receive support 24 hours a day, seven days a week around the globe, from technical resources located in the United States and internationally. We also offer self-service technical support through our support portal, which provides access to documentation, knowledge base articles, online training, online support forums and online incident filing.

Our Technology and Operations

We operate a multi-instance architecture that provides each customer with its own dedicated application logic and database. This architecture is designed to deliver high-availability, scalability, performance, security and ease of upgrading. We have a standardized, Java-based development environment, with the majority of our software written in industry-standard software programming languages. Our cloud infrastructure primarily consists of industry-standard servers, networks and storage components. Our operating system is Linux and databases are MySQL and MariaDB. We host our full software-as-a-service experience on our own private cloud and intend to host it using public cloud service providers for certain highly regulated customers.

Our data centers operate in paired configurations to enable replication for high-availability and redundancy. We currently operate data centers in Australia, Brazil, Canada, Germany, Hong Kong, Japan, the Netherlands, Singapore, Switzerland, the United Kingdom and the United States, and we continuously evaluate our data center operations and capacity in existing and new geographies.

We offer customers the option to deploy our services on dedicated hardware in our data centers. Our architecture also gives us the added flexibility to allow customers the option of deploying our services internally or under contract with a third party to host the software in order to support unique regulatory or security requirements, and, while there are some limitations on agility and flexibility as compared to our cloud offering, a minority of our customers have elected this alternative. The customer support we provide for self-hosted customers is similar to the support we provide to customers deployed in our managed data centers.

Sales and Marketing

We sell our product offerings and services primarily through our global direct sales organization. We also sell services through managed services providers and resale partners.

Our marketing efforts and lead generation activities consist primarily of customer referrals, digital advertising (including via our website), trade shows, industry events, brand campaigns and press releases. We also host our annual Knowledge user conference, webinars and other user forums, including regional forums which we call Now@Work, where customers and partners both participate in and present on a variety of programs designed to educate them on industry best practices and help accelerate their success with our services.

We continue to expand our sales capabilities in new geographies, including through investments in direct and indirect sales channels, professional services capabilities, customer support resources, post-sales customer support resources and strategic alliance and implementation partners. We also plan to increase our investment in our existing locations in order to achieve scale efficiencies in our sales and marketing efforts.

Customers

We primarily sell our services to large enterprise customers, and we host and support large, enterprise-wide deployments for our customers. As of December 31, 2019, we had approximately 6,200 enterprise customers. Our customers operate in a wide variety of industries, including government, financial services, healthcare, manufacturing, IT services, technology, oil and gas, telco, education and consumer products. No single customer accounted for more than 10% of our revenues for any of the periods presented.

Remaining Performance Obligations

Our remaining performance obligations (RPO) were \$6.6 billion and \$4.9 billion as of December 31, 2019 and 2018, respectively. RPO represents contracted revenue that has not yet been recognized, which includes deferred revenue and non-cancelable amounts that will be invoiced and recognized as revenue in future periods. We believe RPO, which excludes customer deposits and time and materials contracts, is an indicator of customer backlog orders believed to be firm that is aligned with the current revenue recognition standard. Refer to Note 9 in the notes to our consolidated financial statements included elsewhere in this Annual Report on Form 10-K for additional information on remaining performance obligations.

Research and Development

Our research and development organization is responsible for the design, development, testing and validation of our solutions. We focus on innovating and developing new services and core technologies and further enhancing the functionality, reliability and performance of our existing solutions. Using emerging technologies, we can anticipate customer demands and then bring new services and new versions of existing services to market quickly in order to remain competitive in the marketplace. We have made, and will continue to make, significant investments in research and development to strengthen our existing applications, expand the number of applications on our platform, enhance our user experience and develop additional mobile, automation and machine intelligence technologies.

Acquisitions and Investments

In addition to continuing to invest in our own research and development efforts, we have made acquisitions and investments in the past and will continue to assess opportunities for strategic acquisitions and investments to complement our technology and skill sets and expand our product reach. Our focus is on building out our platform and products through both acquisitions and investments to support customer needs.

Competition

We compete in markets that are rapidly evolving and highly competitive, with relatively low barriers to entry. As these markets continue to mature and new technologies and competitors enter such markets, we expect competition to intensify. Our current competitors include:

- large, well-established, enterprise application software vendors and large integrated systems vendors;
- new entrants to the market developing technologies to solve similar problems in different ways;
- solutions developed in-house by our potential customers or using integrations with other tools;
- vendors of infrastructure-as-a-service, platform-as-a-service providers and development operations; and
- established and emerging cloud vendors.

Many prospective customers have invested substantial personnel and financial resources to implement and integrate their current enterprise software into their businesses and therefore may be reluctant or unwilling to migrate away from their current solution to ours. Accordingly, we compete with both cloud-based and traditional, enterprise-application, software vendors. Our competitors vary in size and in the breadth and scope of the products and services they offer. As we continue to expand the breadth of our services to include offerings in new markets, we expect increasing competition from platform and application development vendors focused on these markets.

Various factors influence purchase decisions in our industry, including total cost of ownership, level of customer satisfaction, breadth and depth of product functionality, security, adherence to industry standards, brand awareness, flexibility and performance. We believe that we compete favorably with our competitors on each of these factors. However, many of our competitors have substantially greater financial, technical and other resources. They may be able to respond more quickly and effectively than we can to new or changing opportunities, technologies, standards, customer requirements and buying practices. An existing competitor or potential competitor could introduce new technology, or more effectively utilize existing technology, that reduces demand for our services. Acquisitions, integrations and consolidation by and among other companies in our industry may allow potential competitors to offer integrated or bundled products, enhanced functionality, or other advantages, which may impact our competitive position. In addition, some of our competitors offer their products or services at a lower price, which has resulted in pricing pressures. Larger competitors may also have the operating flexibility to bundle competing products and services with other offerings, which may enable them to offer their products and services at a lower price. As competition intensifies, we expect pricing competition to continue or increase.

Intellectual Property

We rely upon a combination of U.S. and international copyright, trade secret, patent and trademark laws and confidentiality procedures and contractual restrictions, such as confidentiality and license agreements, to establish, protect and grow our intellectual property (IP) rights. In addition, we enter into confidentiality and proprietary rights agreements with our employees, partners, vendors, consultants and other third parties and control access to our IP and other proprietary information. We also purchase or license technology that we incorporate into our products or services. In certain of our partnership arrangements, our partners may develop technology on the Now Platform that may be subject to copyright or other intellectual property rights that we may agree to with the partner.

We continue to grow our global patent portfolio and IP rights that relate to our platform, applications, services, research and development and other activities. Our success depends in part upon our ability to protect our core technology and IP. We have over 700 U.S. and foreign patents, including patents acquired from third parties, and over 780 pending patent applications. We do not believe that our proprietary technology is dependent on any single patent or other IP right or group of related patents or IP rights. We file patent applications to protect our IP and have and may continue to acquire additional patents, patent portfolios, or patent applications. However, we cannot be certain that any of our patent applications will result in the issuance of a patent or whether the examination process will result in patents of value or applicability. In addition, any patents that have been or may be issued or acquired may be contested, circumvented, found unenforceable or invalidated, and we may not be able to prevent third parties from infringing upon them.

Despite our efforts to protect our proprietary rights, unauthorized parties may attempt to copy or obtain and use our technology to develop products and services that provide features and functionality similar to ours. Policing unauthorized use of our technology is difficult. The laws of the countries in which we operate may offer little or no effective protection of our proprietary technology. Our competitors could also independently develop services equivalent to ours, and our IP rights may not be broad enough for us to prevent competitors from utilizing their developments to compete with us. Reverse engineering, unauthorized copying or other misappropriation of our proprietary technology could enable third parties to benefit from our technology without paying us for it, which would significantly harm our business.

Our industry is characterized by frequent claims and related litigation regarding patent and other IP rights. From time to time, third parties may assert patent, copyright, trademark and other IP rights against us, our channel partners or our customers. In addition, based on our greater visibility, expanding solutions footprint, and market exposure as a public company, we face a higher risk of being the subject of IP infringement claims. For example, in 2016 we settled two patent-related litigation matters and recorded a one-time charge of \$270.0 million related to aggregate legal settlements. See “Risk Factors—Lawsuits against us by third parties that allege we infringe their intellectual property rights could harm our business and operating results” for additional information.

Employees

As of December 31, 2019, we had 10,371 full-time employees worldwide. None of our U.S. employees are represented by a labor union. Employees in certain European countries are represented by workers’ councils and have the benefits of collective bargaining arrangements at the national level. We have not experienced interruptions of operations or work stoppages due to labor disagreements.

Available Information

You can obtain copies of our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and other filings with the SEC, and all amendments to these filings, free of charge from our website at www.servicenow.com/company/investor-relations/sec-filings.html as soon as reasonably practicable following our filing of any of these reports with the SEC. The SEC maintains an Internet site that contains reports, proxy and information statements and other information regarding issuers that file electronically with the SEC at www.sec.gov. The contents of these websites are not incorporated into this filing and our references to the URLs for these websites are intended to be inactive textual references only.

ITEM 1A. RISK FACTORS

Investing in our securities involves a high degree of risk. You should consider carefully the risks and uncertainties described below, together with all of the other information in this Annual Report on Form 10-K, including our consolidated financial statements and related notes, before making an investment decision. We have identified the following risks and uncertainties that may have a material adverse effect on our business, financial condition, results of operations and future prospects. Our business could be harmed by any of these risks. Our stock price could decline due to any of these risks, and you may lose all or part of your investment.

Risks Related to Our Ability to Grow Our Business

We participate in intensely competitive markets, and if we do not compete effectively, our business and operating results will be harmed.

The markets for our enterprise cloud solutions are rapidly evolving and highly competitive, with relatively low barriers to entry. As the market for digital workflow products matures and new technologies and competitors enter the market, we expect competition to intensify. Our current competitors include:

- large, well-established, enterprise application software vendors and large integrated systems vendors;
- new entrants to the market developing technologies to solve similar problems in different ways;
- solutions developed in-house by our potential customers or using integrations with other tools;
- vendors of infrastructure-as-a-service, platform-as-a-service and development operations; and
- established and emerging cloud vendors.

Many prospective customers have invested substantial personnel and financial resources to implement and integrate their current enterprise software into their businesses and therefore may be reluctant or unwilling to migrate away from their current solution to ours. Many of our competitors and potential competitors are larger and have greater name recognition, longer operating histories, more established customer relationships (including at the executive level of large enterprises where decision-making authority is held), larger marketing budgets and greater resources than we do. While we believe that our platform and products can largely be complementary to large and established systems that traditionally operate as “systems of record,” competitors may try to enter our space. They may be able to respond more quickly and effectively than we can to new or changing opportunities, technologies, standards, customer requirements and buying practices. They may utilize acquisitions, integrations or consolidations to offer integrated or bundled products, enhanced functionality or other advantages. They may reduce the price of products or subscriptions that compete with ours or may bundle them with other products and subscriptions, causing our products to appear relatively more expensive. They may also invest in industry-specific solutions that purport to provide a unique solution for that industry. Other potential competitors not currently offering competitive products may expand their services to compete with our services, or we may shift our products and services to compete with current and future competitors in adjacent markets. We have in the past expanded, and we expect to continue to expand the breadth of our services to include offerings in new markets and the use of our platform by developers of custom applications. As a result, we expect increasing competition from platform vendors and application development vendors focused on these other markets. Smaller competitors and new entrants may accelerate pricing pressures, including in the ITSM market, which is our more mature offering and from which we derive a large portion of our revenues. For all of these reasons, we may not be able to compete successfully, and competition could result in reduced sales, reduced margins, losses or the failure of our products to achieve or maintain market acceptance, any of which could harm our business.

Privacy laws and concerns, evolving regulation of cloud computing, cross-border data transfer restrictions, other foreign and domestic regulations and standards related to data and the Internet may adversely affect our business.

National and local governments or agencies have in the past adopted, and may in the future adopt, laws and regulations affecting data privacy, the use of the Internet as a commercial medium, the use of data in contexts referred to as artificial intelligence and machine learning, and data sovereignty requirements concerning the location of data centers that store and process data. As a cloud based service provider, we optimize performance of our products and services by utilizing data centers that may be located in different political jurisdictions. In addition, we utilize data concerning the use of our products and services to continually improve our offering. Changing laws, regulations and standards applying to the collection, transfer, processing, storage or use of data, including personal data, could affect our ability to develop our products and services to maximize their utility, as well as our customers’ ability to use and share data, potentially restricting our ability to store, process and share data with our customers in connection with providing our services. In some cases, this could impact our ability to offer our services in certain locations or our customers’ ability to deploy our services globally. Examples of recent changes include:

- In 2016, the European Union (the EU) adopted the General Data Protection Regulation (the GDPR), which took effect in May 2018 and established new requirements applicable to the handling of personal data. The particular obligations imposed by GDPR are subject to interpretation, and different regulators may interpret requirements inconsistently. Further, laws such as the EU's proposed e-Privacy Regulation are increasingly aimed at the use of personal information, the tracking of individuals' online activities and the "right to be forgotten," requiring a company to delete certain information about individuals upon their request in certain circumstances.
- In January 2020, Britain exited the EU (Brexit). Although we do not believe Brexit will require us to alter our operations in any material way to comply with privacy regulations in the EU and the United Kingdom (the UK), Brexit has and may continue to cause uncertainty for our customers.
- In early 2020, the European Court of Justice is expected to give its ruling on a case regarding the validity of the Privacy Shield framework and the Standard Contractual Clauses (the SCCs), which are lawful transfer mechanisms for transferring personal data from the EU to the US (under the Privacy Shield framework) and other third countries deemed to have inadequate protection by the European Commission (under the SCCs). While we do not believe there will be any material impact to our business if the Privacy Shield is invalidated, there may be an impact to our ability to process personal data in certain jurisdictions where we operate if the SCCs are invalidated by the European Court of Justice.
- In January 2020, the California Consumer Privacy Act (the CCPA) in the US took effect and broadly defines personal information and provides California consumers increased privacy rights and protections. The CCPA, among other things, affords California consumers new abilities to opt out of certain sales of personal information. Legislators have amended the CCPA since it passed in 2018 and implementing regulations are yet to be finalized by the California Attorney General. In addition, other nations and U.S. states and the federal government have discussed, are passing or may pass, future legislation similar to the GDPR and/or the CCPA, or with other data localization or sovereignty requirements.
- Both US and non-US governments are considering the use of artificial intelligence and machine learning in both consumer and business contexts and whether there is any need for regulation in these areas.

The costs of compliance with, and other obligations imposed by, the GDPR, the e-Privacy Regulation, the CCPA and other privacy, data residency and data transfer laws, regulations and standards may cause us to incur substantial operational costs or require us to modify our data handling practices and/or policies, may limit the development, use and adoption of our services and reduce overall demand for our services. In addition, non-compliance could result in proceedings or investigations against us by regulatory authorities or others, lead to significant fines or reputational harm and may otherwise adversely impact our business, financial condition and operating results. For example, the GDPR imposes significant new obligations and compliance with these obligations depends in part on how particular regulators interpret and apply them. If we fail to comply with the GDPR or if regulators assert that we have failed to comply with the GDPR, we may be subject to fines of up to 4% of our worldwide annual revenue. Changes in our developed or acquired products and how such products utilize data could alter or increase our compliance requirements. As a result, the cost of compliance with and other obligations imposed by privacy regulations could increase and our innovation and business drivers in developing or acquiring new and emerging technologies and the demand for our products could be impacted.

In addition to government activity, privacy advocacy groups and other technology and industry groups have established or may establish various new or different self-regulatory standards that may place additional obligations on us. Our customers may expect us to meet voluntary certifications or adhere to other standards established by third parties. If we are unable to maintain these certifications or meet these standards, it could reduce demand for our products and adversely affect our business.

If we do not accurately predict, prepare for, and respond promptly to rapidly evolving technological, market and customer developments, our competitive position and business prospects may be harmed.

We compete in markets that continue to evolve rapidly. The pace of innovation will continue to accelerate as customers increasingly base their purchases on digital technologies and capabilities, including public and private cloud solutions and infrastructure, massively scalable databases, mobile, consumer product-like user experiences, social, collaboration, machine learning, artificial intelligence, Internet-connected devices, high-velocity robotic automation, security, cryptography, internal software development operations, and application and service awareness. Our customers and prospective customers must choose among competing imperatives to adopt digital technologies, or have been built on fully-digital, modern, dynamic IT technologies. Accordingly, to compete effectively, we must: identify and innovate in the right emerging technologies, knowing that we cannot make substantial investments in all of them; accurately predict our customers' changing business needs, priorities and adoption practices, including their technology infrastructures and buying and budgetary practices; invest in and continually optimize our own technology platform so that it continues to meet the very high performance expectations of our customers; successfully deliver new, scalable platform and database technologies and products to meet these needs and priorities; efficiently integrate with other technologies within our customers' digital environments; expand our offerings into industries and to buyers who are not familiar with our offerings; profitably market and sell products to companies and buyers in markets where our sales and marketing teams have less experience, including to companies built on fully-digital, modern, dynamic IT technologies that have not been strong buyers of ITSM and ITOM products; and effectively deliver, either directly or through our partner ecosystem, the business process planning, IT systems architecture planning, and product implementation services that our customers require to be successful. If we fail to meet any of these requirements, our competitive position, strategic relevance and business prospects may be harmed.

Delays in the release of, or actual or perceived defects in, new or updated products may slow the adoption of our most recent technologies, reduce our ability to efficiently provide our services, decrease customer satisfaction, and adversely impact sales of additional products to our customers.

We must successfully continue to release new products and updates to existing products. The success of any release depends on a number of factors, including our ability to manage the risks associated with quality or other defects or deficiencies, delays in the timing of releases or the adoption of releases by customers, and other complications that may arise during the early stages of introduction. If releases are delayed or if customers perceive that our releases contain bugs or other defects or are difficult to implement, customer adoption of our new products or updates may be adversely impacted, customer satisfaction may decrease, our ability to efficiently provide our services may be reduced, and our growth prospects may be harmed.

We do business with federal, state and local governments and agencies, and heavily-regulated U.S. and foreign organizations; as a result, we face risks related to the procurement process, budget decisions driven by statutory and regulatory determinations, termination of contracts, and compliance with government contracting requirements.

We provide products and services to the U.S. government, state and local governments and heavily-regulated organizations directly and through our partners. We have made, and may continue to make, significant investments to support future sales opportunities in the federal, state and local government sectors. This includes obtaining additional cloud security certification requirements for the ServiceNow GovCommunityCloud, such as the U.S. Federal Risk and Authorization Management Program (FedRAMP) High Impact Provisional Authority to Operate (P-ATO) from the Joint Authorization Board, and the U.S. Department of Defense Impact Level 4 P-ATO in the Security Requirements Guide for cloud computing by the Defense Information Systems Agency. However, government certification requirements may change, or we may be unable to achieve or sustain one or more government certifications, including those mentioned above. As a result, our ability to sell into the government sector could be restricted until we obtain such certifications.

A substantial majority of our sales to date to government entities have been made indirectly through our distribution and reseller partners. Doing business with government entities presents a variety of risks. The procurement process for governments and their agencies is highly competitive, time-consuming and may, in certain circumstances, be subject to political influence. We incur significant up-front time and expense, such as through engaging lobbyists, which subjects us to additional compliance risks and costs, without any assurance that we (or a third-party distributor or reseller) will win a contract. Beyond this, demand for our products and services may be adversely impacted by public sector budgetary cycles and funding availability that in any given fiscal cycle may be reduced or delayed, including in connection with an extended federal government shutdown. Further, if we are or our partner is successful in receiving a bid award, that award could be challenged by one or more competitive bidders. Bid protests may result in an increase in expenses related to obtaining contract awards or an unfavorable modification or loss of an award. In the event a bid protest is unsuccessful, the resulting delay in the startup and funding of the work under these contracts may cause our actual results to differ materially and adversely from those anticipated.

In addition, public sector customers may have contractual, statutory or regulatory rights to terminate current contracts with us or our third-party distributors or resellers for convenience or due to a default, though such risk may be assumed by such third-party distributor or reseller. If a contract is terminated for convenience, we may only be able to collect fees for products or services delivered prior to termination and settlement expenses. If a contract is terminated due to a default, we may be liable for excess costs incurred by the customer for procuring alternative products or services or be precluded from doing further business with government entities. Further, entities providing services to governments are required to comply with a variety of complex laws, regulations, and contractual provisions relating to the formation, administration, or performance of government contracts that give public sector customers substantial rights and remedies, many of which are not typically found in commercial contracts. These may include rights with respect to price protection, the accuracy of information provided to the government, contractor compliance with supplier diversity policies, and other terms that are particular to government contracts, such as termination rights. These rules may apply to us and/or third-party resellers or distributors whose practices we may not control. Such parties' non-compliance could impose repercussions with respect to contractual and customer satisfaction issues.

In addition, federal, state, and local governments routinely investigate and audit contractors for compliance with these requirements. If, as a result of an audit, it is determined that we have failed to comply with these requirements, we may be subject to civil and criminal penalties and administrative sanctions, including termination of contracts, forfeiture of profits, cost associated with the triggering of price reduction clauses, fines, and suspensions or debarment from future government business, and we may suffer reputational harm.

Further, we are increasingly doing business in heavily regulated industries, such as the financial services and health care industries. Current and prospective customers, such as those in these industries, may be required to comply with more stringent regulations in connection with subscribing to and implementing our services or particular regulations regarding third-party vendors that may be interpreted differently by different customers. In addition, regulatory agencies may impose requirements toward third-party vendors generally, or our company in particular, that we may not be able to, or may not choose to, meet. In addition, customers in these heavily-regulated areas often have a right to conduct audits of our systems, products and practices. In the event that one or more customers determines that some aspect of our business does not meet regulatory requirements, we may be limited in our ability to continue or expand our business.

Our customers also include a number of non-U.S. governments, to which similar procurement, budgetary, contract, and audit risks of U.S. government contracting also apply, particularly in certain emerging markets where our customer base is less established. In addition, compliance with complex regulations and contracting provisions in a variety of jurisdictions can be expensive and consume significant management resources. In certain jurisdictions, our ability to win business may be constrained by political and other factors unrelated to our competitive position in the market. Each of these difficulties could materially adversely affect our business and results of operations.

We rely on our network of partners for an increasing portion of our revenues, and if these partners fail to perform, our ability to sell and distribute our products may be limited, and our operating results and growth rate may be harmed.

An increasing portion of our revenues is generated by sales through our network of partners, including managed service providers and resellers. In addition, we increasingly rely on our partners to provide professional services, including customer implementations. While we provide our partners with training and programs, including accreditations and certifications, these programs may not be effective or utilized consistently. In addition, new partners may require extensive training and may require significant time and resources to achieve productivity. Our partners may subject us to lawsuits, potential liability, and reputational harm if, for example, any of our partners misrepresent the functionality of our platform or products to customers, fail to perform services to our customers' expectations, or violate laws or our corporate policies. In addition, our partners may utilize our platform to develop products and services that could potentially compete with products and services that we offer currently or in the future. Concerns over competitive matters or intellectual property ownership could constrain these partnerships. If we fail to effectively manage and grow our network of partners, or properly monitor the quality and efficacy of their service delivery, our ability to sell our products and efficiently provide our services may be impacted, and our operating results and growth rate may be harmed.

If we are unsuccessful in increasing our penetration of international markets or managing the risks associated with foreign markets, our business and operating results will be adversely affected.

Sales outside of North America represented approximately 34% of our total revenues for each of the years ended December 31, 2019 and 2018. Our business and future prospects depend on increasing our international sales as a percentage of our total revenues. The failure to grow internationally will harm our business. Additionally, operating in international markets requires significant investment and management attention and subjects us to different regulatory, political and economic risks from those in the United States (the US). We have made, and will continue to make, substantial investments in data centers, cloud computing infrastructure, sales, marketing, personnel and facilities as we enter and expand in new geographic markets. When we make these investments, it is typically unclear whether, and when, sales in the new market will justify our investments. We may significantly underestimate the level of investment and time required to be successful, or whether we will be successful. Our rate of acquisition of new large enterprise customers, a factor affecting our growth, has generally been lower in Africa, Asia, Eastern Europe, South America and other markets in which we are less established and where there may be increased or changing regulations and operational and intellectual property risks, as compared to North America, Australia and Western Europe. An increasing proportion of the large enterprises that are not yet our customers are located in emerging markets where we are less established. We have experienced, and may continue to experience, difficulties in some of our investments in geographic expansion, including hiring qualified sales management personnel, penetrating the target market, anticipating and ensuring compliance with regulatory developments, and managing foreign operations in such locales.

Risks inherent with making our products and services available in international markets include without limitation:

- compliance with multiple, conflicting and changing governmental laws and regulations, including employment, tax, competition, requirements to have local partner(s), local entity ownership limitations, technology transfer or sharing requirements, data residency and transfer laws and regulations, privacy and data protection laws and regulations, including the GDPR;
- compliance by us and our business partners with international bribery and anti-corruption laws, including the UK Bribery Act and the U.S. Foreign Corrupt Practices Act of 1977, as amended (the FCPA);
- the risk that illegal or unethical activities of our local employees or business partners will be attributed to or result in liability to us or damage to our reputation;
- longer and potentially more complex sales and accounts receivable payment cycles and other collection difficulties;
- tax treatment of revenues from international sources and changes to tax codes, including being subject to foreign tax laws and being liable for paying withholding, income or other taxes in foreign jurisdictions;
- different pricing and distribution environments;
- foreign currency fluctuations, which may cause transactional and translational remeasurement losses;
- potential changes in international trade policies, tariffs, agreements and practices, including the adoption and expansion of formal or informal trade restrictions or regulatory frameworks favoring local competitors;
- potential threatening state-sponsored actions, including cybersecurity threats directed at local data centers, customers or end-users;
- local business practices and cultural norms that may favor local competitors; and
- localization of our services, including translation into foreign languages and associated expenses.

If we are unable to manage these risks, if our required investments in these international markets are greater than anticipated, or if we are unsuccessful in increasing sales in emerging markets, our revenue growth rate, business and operating results will be adversely affected.

As we acquire or invest in companies and technologies, we may not realize the expected business or financial benefits and the acquisitions and investments may divert our management's attention and result in additional dilution to our stockholders.

We have acquired or invested in companies and technologies in the past as part of our business strategy and may continue to evaluate and execute potential strategic transactions, including acquisitions of or investments in businesses, technologies, services, products and other assets in the future. We also may enter into relationships with other businesses to expand our service offerings, functionality or our ability to provide services in international locations, which could involve preferred or exclusive licenses, additional channels of distribution, discount pricing or investments in other companies. Although we conduct reasonably extensive due diligence with each of the entities we engage for a strategic transaction, our due diligence efforts may not reveal every material concern that may exist either with respect to the target entity or our assumptions surrounding the resulting combination. These strategic transactions involve numerous risks, including:

- assimilating or integrating the businesses, technologies, products, personnel or operations of the acquired companies;
- failing to achieve the expected benefits of the acquisition or investment;
- potential loss of key employees of the acquired company;
- inability to maintain relationships with customers and partners of the acquired business;
- potential adverse tax consequences;
- disruption to our business and diversion of management attention and other resources;
- potential financial and credit risks associated with acquired customers;
- dependence on acquired technologies or licenses for which alternatives may not be available to us without significant cost or complexity;
- in the case of foreign acquisitions, the challenges associated with integrating operations across different cultures and languages and any currency and regulatory risks associated with specific countries;
- increased data privacy or security compliance requirements resulting from integrating the acquired technology or company with ours; and
- potential unknown liabilities associated with the acquired businesses.

In addition, we may have to pay cash, incur debt, or issue equity or equity-linked securities to pay for any future acquisitions, each of which could adversely affect our financial condition or our stock price. Furthermore, if we finance acquisitions by issuing equity, convertible or other debt securities or loans, our existing stockholders may be diluted, or we could face constraints related to the terms of and repayment obligation related to the incurrence of indebtedness that could affect our stock price. The occurrence of any of these risks could harm our business, operating results and financial condition.

Risks Related to the Operation of Our Business

If we or our third-party service providers suffer a cyber-security event, we may lose customers and incur significant liabilities, any of which would harm our business and operating results.

Our operations involve the storage, transmission and processing of our customers' confidential, proprietary and sensitive data, including personally identifiable information, protected health information, financial information and, in some cases, government information. While we have security measures in place designed to protect customer information and prevent data loss, these measures may be breached because of employee error or third-party actions, including unintentional events or deliberate attacks by cyber criminals, and result in someone obtaining unauthorized access to our customers' data or our data, including our intellectual property and other confidential business information. In addition, third parties have attempted and may continue to attempt to fraudulently induce employees, contractors, or users to disclose information to gain access to our data or our customers' data, and we may be the target of email scams that attempt to acquire personal information or company assets. Additionally, because we do not control our third-party service providers or their processing of data, we cannot ensure the integrity or security of measures they take to protect customer information and prevent data loss. Computer malware, viruses, hacking, phishing and denial of service attacks by third parties have become more prevalent in our industry, and they have occurred on our and our third-party service providers' systems in the past and may occur again on these systems in the future. Because techniques used to sabotage or obtain unauthorized access to systems change frequently and generally are not detected until successfully launched against a target, we have been and may continue to be unable to anticipate these techniques or to implement adequate preventative measures. We devote significant financial and personnel resources to implement and maintain security measures; however, as cyber-security threats develop and grow more complex over time, it may be necessary to make significant further investments to protect data and infrastructure. A security breach suffered by us or our third-party service providers, an attack against our service availability or unauthorized access or loss of data could result in a disruption to our service, litigation, the triggering of service availability, indemnification and other contractual obligations, regulatory investigations, government fines and penalties, reputational damage, loss of sales and customers, mitigation and remediation expenses and other significant costs and liabilities. In addition, we may incur significant costs and operational consequences of investigating, remediating, eliminating, complying with notice obligations and implementing additional measures designed to prevent actual or perceived security incidents. We also cannot be certain that our existing insurance coverage will continue to be available on acceptable terms or will be available in sufficient amounts to cover the potentially significant losses that may result from a security incident or breach or that the insurer will not deny coverage as to any future claim.

Further, in most instances, our customers administer access to the data held in their particular instance for their employees and service providers. We offer tools and support for what we believe are best practices to maintain security utilizing our services, but customers are not required to utilize those tools or follow our suggested practices. As a result, or for other reasons, a customer may suffer a cyber-security event on its own systems, unrelated to our own, and allow a malicious actor to obtain access to the customer's information held on our platform. Even if such a breach is unrelated to our security programs or practices, such breach could result in our incurring significant economic and operational costs in investigating, remediating, eliminating and implementing additional measures to further protect our customers from their own vulnerabilities, and could result in reputational harm to us.

If we lose key employees or are unable to attract and retain the employees we need, our business and operating results will be adversely affected.

Our success depends largely upon the continued services of our management team, including our Chief Executive Officer and Chief Financial Officer, and many key individual contributors. From time to time in the ordinary course of business, there may be changes in our management team resulting from the hiring or departure of executives. For example, our current President and Chief Executive Officer was appointed in November 2019 and our current Chief Financial Officer was appointed in January 2020. While we seek to manage these transitions carefully, including by establishing strong processes and procedures and succession planning, such changes may result in a loss of institutional knowledge and cause disruptions to our business.

In the technology industry, there is substantial and continuous competition for engineers with high levels of experience in designing, developing and managing software and Internet-related solutions, sales executives and operations personnel. We may not be successful in attracting and retaining qualified personnel, and we may experience increased compensation and training costs that may not be offset by either improved productivity or higher sales. We have from time to time experienced, and we may continue to experience, difficulty in hiring and retaining highly-skilled employees with appropriate qualifications, and may not be able to fill positions in desired geographic areas or at all. In particular, competition for experienced software and cloud computing infrastructure engineers in the San Francisco Bay area, San Diego, Seattle, London, Amsterdam and Hyderabad, our primary operating locations, is intense. Many of our employees, including all of our executive officers, are employed "at-will" and may terminate their employment with us at any time. If we fail to attract new personnel or fail to retain and motivate our current personnel, our business and future growth prospects could be adversely affected.

In addition, we believe our corporate culture of fostering innovation, teamwork and employee satisfaction has been a key contributor to our success to date. As we continue to grow and expand globally, we may find it difficult to maintain important aspects of our corporate culture, which could negatively affect our ability to retain and recruit personnel who are essential to our future success.

Natural disasters and other events beyond our control could harm our business.

Natural disasters or other catastrophic events may cause damage or disruption to our operations, international commerce and the global economy, and thus could have a negative effect on us. Our business operations are subject to interruption by natural disasters, flooding, fire, power shortages, pandemics such as the recent spread of the coronavirus, terrorism, political unrest, telecommunications failure, vandalism, cyber-attacks, geopolitical instability, war, the effects of climate change (such as drought, wildfires, increased storm severity and sea level rise) and other events beyond our control. Although we maintain crisis management and disaster response plans, such events could make it difficult or impossible for us to deliver our services to our customers, could decrease demand for our services, and could cause us to incur substantial expense. Our insurance may not be sufficient to cover losses or additional expense that we may sustain. The majority of our research and development activities, corporate offices, information technology systems, and other critical business operations are located near major seismic faults in California and Washington. Customer data could be lost, significant recovery time could be required to resume operations and our financial condition and operating results could be adversely affected in the event of a major natural disaster or catastrophic event.

Various factors, including our customers' business, integration, migration and security requirements, or errors by us, our partners, or our customers, may cause implementations of our products to be delayed, inefficient or otherwise unsuccessful.

Our business depends upon the successful implementation of our products by our customers. Increasingly, we and our customers rely on our network of partners to deliver implementation services, and there may not be enough qualified implementation partners available to meet customer demand. Further, our customers' business, integration, migration and security requirements, or errors by us, our partners, or our customers, or other factors may cause implementations to be delayed, inefficient or otherwise unsuccessful. For example, changes in the functional requirements of our customers, delays in timeline, or deviations from recommended best practices may occur during the course of an implementation project. As a result of these and other risks, we or our customers may incur significant implementation costs in connection with the purchase, implementation and enablement of our products. Some customer implementations may take longer than planned or fail to meet our customers' expectations, which may delay our ability to sell additional products or result in customers canceling or failing to renew their subscriptions before our products have been fully implemented. Some customers may lack the employee talent or organizational capacity to manage a digital transformation such as our offering and, as a consequence, may be unable to see the benefits of our products. Unsuccessful, lengthy, or costly customer implementation and integration projects could result in claims from customers, reputational harm, and opportunities for competitors to displace our products, each of which could have an adverse effect on our business and operating results.

Disruptions or defects in our services could damage our customers' businesses, subject us to substantial liability and harm our reputation and financial results.

From time to time, we experience defects in our services, and new defects may be detected in the future. For example, we provide regular updates to our services, which frequently contain undetected defects when first released. Defects may also be introduced by our use of third-party software, including open source software. Disruptions may result from errors we make in developing, delivering, configuring or hosting our services, or designing, installing, expanding or maintaining our cloud infrastructure. Disruptions in service can also result from incidents that are outside of our control, including denial of service attacks. We currently serve our customers primarily using equipment managed by us and co-located in third-party data centers operated by several different providers located around the world, and we plan to serve certain of our customers using data center facilities operated by public cloud service providers. These data centers are vulnerable to damage or interruption from earthquakes, hurricanes, floods, fires, power loss and similar events. They may also be subject to break-ins, sabotage, intentional acts of vandalism and similar misconduct, equipment failure and adverse events caused by operator error or negligence. Despite precautions taken at these centers, problems at these centers could result in lengthy interruptions in our services and the loss of customer data. In addition, our customers may use our services in ways that cause disruptions in service for other customers. Our customers use our services to manage important aspects of their businesses, and our reputation and business will be adversely affected if our customers and potential customers believe our services are unreliable. Disruptions or defects in our services may reduce our revenues, cause us to issue credits or pay penalties, subject us to claims and litigation, cause our customers to delay payment or fail to renew their subscriptions, and adversely affect our ability to attract new customers. Similarly, customers may have unique requirements for system resiliency that we may not be able to, or may not choose to, meet. The occurrence of payment delays, service credit, warranty or termination for material breach or other claims against us could result in an increase in our bad debt expense, an increase in collection cycles for accounts receivable, an increase to our service level credit accruals, other increased expenses or risks of litigation. We may not have insurance sufficient to compensate us for the potentially significant losses that may result from claims arising from disruptions in our services.

Risks Related to the Financial Performance or Financial Position of Our Business***Our operating results may vary significantly from period to period, and if we fail to meet the financial performance expectations of investors or securities analysts, the price of our common stock could decline substantially.***

Our operating results may vary significantly from period to period as a result of various factors, some of which are beyond our control. For any quarterly or annual period, there is a risk that our financial performance will not meet the financial guidance we have previously given for that period, or that we may otherwise fail to meet the financial performance expectations of the securities analysts who issue reports on our company and our common stock price, or of investors in our common stock. There is also a risk that we may issue forward-looking financial guidance for a quarterly or annual period that fails to meet the expectations of such securities analysts or investors. If any of the foregoing occurs, for any reason, either within or outside of our control, the price of our common stock could decline substantially and investors in our common stock could incur substantial losses. Some of the important factors that may cause our financial performance to vary widely, or cause our forward-looking financial guidance to fall below the expectations of such securities analysts or investors, include:

- our ability to attract new customers, retain and increase sales to existing customers, and satisfy our customers' requirements;
- changes in our mix of products and services, including changes in our mix of cloud and self-hosted offerings, market penetration of our products, or use of our products by our customers;
- our ability to increase sales of certain emerging products;
- volatility in foreign currency exchange rates and our ability to effectively hedge our foreign currency exposure;
- the rate of expansion, retention and productivity of our sales force;
- the number of new employees added;
- the cost, timing and management effort for our development of new products and services;
- general economic conditions that may adversely affect our customers' or a prospective customers' purchasing decisions;
- the amount and timing of operating costs and capital expenditures related to the operation and expansion of our business;
- seasonality in terms of when we enter into customer agreements;
- the length and complexity of the sales cycle and certification process for our services, especially for sales to larger enterprises, government and regulated organizations;
- changes in the size and complexity of our customer relationships;
- changes to our management, sales and account management teams as we scale and as a result of evolving business priorities;
- changes in our or our competitors' pricing policies;

- significant security breaches, technical difficulties or interruptions of our services;
- new solutions or products introduced by our competitors;
- changes in effective tax rates;
- changes in the average contract term of our customer agreements, timing of renewals, renewal rates, expansion within our existing customers and billings duration;
- the timing of customer payments and payment defaults by customers;
- extraordinary expenses such as litigation costs or damages, including settlement payments;
- the costs associated with acquiring new businesses and technologies and the follow-on costs of integration, including the tax effects of acquisitions;
- changes in laws or regulations impacting the delivery of our services;
- our ability to comply with privacy laws and regulations, including the GDPR and the CCPA;
- significant litigation or regulatory actions relating to claims of intellectual property infringement, violation of privacy laws, employment matters or any other significant matter;
- the amount and timing of equity awards and the related financial statement expenses;
- the impact of new accounting pronouncements; and
- our ability to accurately estimate the total addressable market for our products and services.

Lawsuits against us by third parties that allege we infringe their intellectual property rights could harm our business and operating results.

There is considerable patent and other intellectual property development activity in our industry. Many companies in our industry, including our competitors, other third parties and non-practicing entities, own large numbers of patents, copyrights, trademarks and trade secrets, which they may use to assert claims of patent infringement, misappropriation or other violations of intellectual property rights against us.

Moreover, the patent portfolios of many of our competitors are larger than ours. This disparity may increase the risk that our competitors may sue us for patent infringement and may limit our ability to counterclaim for patent infringement or settle through patent cross-licenses. From time to time, our competitors or other third parties, including patent holding companies seeking to monetize patents they have purchased or otherwise obtained, may claim that we are infringing upon their intellectual property rights. For example, we recorded charges for aggregate legal settlements of \$270.0 million in our consolidated statement of comprehensive loss during the year ended December 31, 2016. The charges covered the fulfillment by us of all financial obligations under settlement agreements with BMC and HPE, with no remaining financial obligations to BMC or HPE under either settlement.

In any intellectual property litigation, regardless of the scope or merits of the claims at issue, we may incur substantial attorney's fees and other litigation expenses and, if the claims are successfully asserted against us and we are found to be infringing upon the intellectual property rights of others, we could be required to: pay substantial damages and/or make substantial ongoing royalty payments; cease offering our products and services; modify our products and services; comply with other unfavorable terms, including settlement terms; and indemnify our customers and business partners and obtain costly licenses on their behalf and refund fees or other payments previously paid to us. Further, upon expiration of the term of any third-party agreements that allow us to use their intellectual property, we may be unable to renew such agreements on favorable terms, if at all, in which case we may face intellectual property litigation. The mere existence of any lawsuit, or any interim or final outcomes, and the course of its conduct and the public statements related to it (or absence of such statements) by the courts, press, analysts and litigants could be unsettling to our customers and prospective customers. This could cause an adverse impact to our customer satisfaction and related renewal rates, cause us to lose potential sales, and could also be unsettling to investors or prospective investors and cause a substantial decline in our stock price. Any claim or litigation against us could be costly, time-consuming and divert the attention of our management and key personnel from our business operations and harm our financial condition and operating results.

If we fail to comply with anti-corruption laws, including the FCPA and similar laws of other countries, and general trade regulations, including but not limited to economic sanctions and embargoes, we could be subject to penalties and civil and/or criminal sanctions and our business could be materially adversely affected.

We are subject to the FCPA, the U.S. domestic bribery statute contained in 18 U.S.C. §201, the UK Bribery Act, and possibly other anti-bribery laws in countries in which we conduct activities. We face significant risks if we fail to comply with the FCPA and other anti-corruption laws that prohibit companies and their employees and third-party intermediaries from promising, authorizing, offering, or providing, directly or indirectly, improper payments or benefits to foreign government officials, political parties, and private-sector recipients for the purpose of obtaining or retaining business, directing business to any person, or securing any advantage. In addition, we use various third parties to sell our products and services and conduct our business both in the US and abroad. We or our third-party intermediaries may have direct or indirect interactions with officials and employees of government agencies or state-owned or affiliated entities and we can be held liable for the corrupt or other illegal activities of these third-party intermediaries, our employees, representatives, contractors, partners, and agents, even if we do not explicitly authorize such activities. We have implemented and continue to update an anti-corruption compliance program but there is a risk that our employees and agents, as well as those companies to which we outsource certain of our business operations, could take actions in violation of our policies and applicable law, for which we may be ultimately held responsible.

As we continue to expand our business internationally, we will inevitably do more business with large enterprises and the public sector in countries that are perceived to have heightened levels of public sector corruption. Increased business in countries perceived to have heightened levels of corruption could subject us and our officers and directors to increased scrutiny and increased liability from our business operations. In addition, we are subject to compliance with general trade regulations relating to doing business outside the US, including certain restrictions on conducting trade in certain restricted countries or with certain entities or individuals.

Any violation of the FCPA, other anti-corruption laws or general trade regulations by our employees or our third-party intermediaries could result in regulatory investigations, whistleblower complaints, adverse media coverage and/or severe criminal or civil sanctions, which could have a materially adverse effect on our reputation, business, operating results, and prospects. In addition, responding to any enforcement action may result in a significant diversion of management's attention and resources and significant defense costs.

Our intellectual property protections may not provide us with a competitive advantage, and defending our intellectual property may result in substantial expenses that harm our operating results.

Our success depends to a significant degree on our ability to protect our proprietary technology and our brand under patent and other intellectual property protections of the US and other jurisdictions. Though we seek patent protection for our technology, we may not be successful in obtaining patent protection, and any patents acquired in the future may not provide us with competitive advantages, or may be successfully challenged by third parties. Furthermore, legal standards relating to the validity, enforceability and scope of protection of intellectual property rights are uncertain. Any of our intellectual property rights may be challenged by others or invalidated through administrative processes or litigation. Effective patent, trademark, copyright and trade secret protection may not be available in every country in which we offer services. The laws of some foreign countries may not be as protective of intellectual property rights as those in the US, and mechanisms for enforcement of intellectual property rights or available remedies may be inadequate. We may be required to spend significant resources to monitor and protect our intellectual property rights. We have initiated and, in the future, may initiate claims or litigation against third parties for infringement of our proprietary rights or to establish the validity of our proprietary rights. Any litigation, whether or not resolved in our favor, could result in significant expense to us, divert the efforts of our technical and management personnel and may result in counter-claims with respect to infringement of intellectual property rights by us. If we are unable to prevent third parties from infringing upon or misappropriating our intellectual property, or are required to incur substantial expenses defending our intellectual property rights, our business and operating results may be adversely affected.

Our use of open source software could harm our ability to sell our products and services and subject us to possible litigation.

Our products incorporate software licensed to us by third-party authors under open source licenses, and we expect to continue to incorporate open source software into other products and services in the future. We attempt to monitor our use of open source software in an effort to avoid subjecting our products and services to adverse licensing conditions. However, there can be no assurance that our efforts have been or will be successful. There is little or no legal precedent governing the interpretation of the terms of open source licenses, and therefore the potential impact of these terms on our business is uncertain and enforcement of these terms may result in unanticipated obligations regarding our products and services. For example, depending on which open source license governs open source software included within our products and services, we may be subjected to conditions requiring us to offer our products and services to users at no cost; make available the source code for modifications and derivative works based upon, incorporating or using the open source software; and license such modifications or derivative works under the terms of the particular open source license. Moreover, if an author or other third party that distributes such open source software were to allege that we had not complied with the conditions of one or more of these licenses, we could be required to incur significant legal costs defending ourselves against such allegations, be subject to significant damages or be enjoined from distributing our products and services.

Because we generally recognize revenues from our subscription service over the subscription term, a decrease in new subscriptions or renewals during a reporting period may not be immediately reflected in our operating results for that period.

We generally recognize revenues from customers ratably over the terms of their subscriptions. Net new annual contract value from new subscriptions and expansion contracts entered into during a period can generally be expected to generate revenues for the duration of the subscription term. As a result, most of the revenues we report in each period are derived from the recognition of deferred revenues relating to subscriptions entered into during previous periods. Consequently, a decrease in new or renewed subscriptions in any single reporting period will have a limited impact on our revenues for that period. In addition, our ability to adjust our cost structure in the event of a decrease in new or renewed subscriptions may be limited.

Further, a decline in new subscriptions, expansion contracts or renewals in a given period may not be fully reflected in our revenues for that period, but they will negatively affect our revenues in future periods. Accordingly, the effect of significant downturns in sales and market acceptance of our services, and changes in our rate of renewals, may not be fully reflected in our results of operations until future periods. Our subscription model also makes it difficult for us to rapidly increase our revenues through additional sales in any period, as revenues from new customers are generally recognized over the applicable subscription term. Additionally, due to the complexity of certain of our customer contracts, the actual revenue recognition treatment required under Accounting Standards Update 2014-09, "Revenue from Contracts with Customers (Topic 606)" depends on contract-specific terms and may result in greater variability in revenues from period to period.

In addition, a decrease in new subscriptions, expansion contracts or renewals in a reporting period may not have an immediate impact on billings for that period due to factors that may offset the decrease, such as an increase in billings duration, the dollar value of contracts with future start dates, or the dollar value of collections in the current period related to contracts with future start dates.

As our business grows, we expect our revenue growth rate to continue to decline.

We have experienced significant revenue growth in prior periods; however, our longer-term revenue growth rate is declining, and we expect that it will continue to decline into the foreseeable future. We also expect our costs to increase in future periods as we continue to invest in our strategic priorities, which may not result in increased revenues or growth in our business. You should not rely on our revenue for any prior periods as any indication of our future revenue growth. If we are unable to maintain consistent revenue or revenue growth, our stock price could be volatile.

Changes in our effective tax rate or rejection of our tax position in jurisdictions outside the US could have a material impact on our financial position and results.

We are subject to income taxes in the US and various foreign jurisdictions. We believe that our provision for income taxes is reasonable, but the ultimate tax outcome may differ from the amounts recorded in our consolidated financial statements and may materially affect our financial results in the period or periods in which such outcome is determined. Our effective tax rate could be adversely affected by changes in the mix of earnings and losses in countries with differing statutory tax rates, certain non-deductible expenses, the valuation of deferred tax assets and liabilities and the effects of acquisitions. Increases in our effective tax rate would reduce our profitability or in some cases increase our losses.

Additionally, our future effective tax rate could be impacted by changes in accounting principles or changes in federal, state or international tax laws or tax rulings. The U.S. Department of Treasury has broad authority to issue regulations and interpretative guidance that may significantly impact how we will apply the law, which could affect our results of operations in the period issued. Many countries and organizations such as the Organization for Economic Cooperation and Development are actively considering changes to existing tax laws or have proposed or enacted new laws that could increase our tax obligations in countries where we do business or cause us to change the way we operate our business. Recent global tax developments applicable to multinational businesses and increased scrutiny under tax examinations could have a material impact on our business and negatively affect our financial results. Any changes in federal, state or international tax laws or tax rulings may increase our worldwide effective tax rate and harm our financial position and results of operations.

In addition, we may be subject to income tax audits by tax jurisdictions throughout the world, many of which have not established clear guidance on the tax treatment of cloud computing companies. Although we believe our income tax liabilities are reasonably estimated and accounted for in accordance with applicable laws and principles, an adverse resolution of one or more uncertain tax positions in any period could have a material impact on our results of operations for that period. Further, many of our most important intangible assets are held outside the US and are subject to inter-company agreements regarding the development and distribution of those assets to other jurisdictions. While we believe that our position is appropriate and well founded, in the event that our position was to be successfully challenged by taxing authorities in other jurisdictions, we may become subject to significant tax liabilities, which could harm our financial position and financial results.

We may incur losses in accordance with U.S. Generally Accepted Accounting Principles (GAAP) during future periods.

Although we have reported results that were profitable on a GAAP basis for full-year 2019 and certain prior quarters, we have incurred net losses in all prior fiscal years since our inception. Even if our revenues continue to increase, we may incur losses in accordance with GAAP during future periods due to increased costs such as non-cash charges associated with equity awards, business combinations and other expenses. We may also encounter unforeseen operating expenses, difficulties, complications, delays and other unpredictable factors that may result in increased costs. Furthermore, it is difficult to predict the size and growth rate of our market, customer demand for our products, customer adoption and renewal rates, and the entry of competitive products or the success of existing competitive products. As a result of these and other factors, we may not maintain profitability in the future, and our gross margins and ability to generate cash flow from operations may be negatively impacted. If we fail to increase our revenues sufficiently to keep pace with our growing investments and other expenses, our business, operating results and growth prospects will be adversely affected.

If we are unable to maintain effective internal control over financial reporting, the accuracy and timeliness of our financial reporting may be adversely affected.

The Sarbanes-Oxley Act requires us, among other things, to assess and report on the effectiveness of our internal control over financial reporting annually and the reasonable assurance level of our disclosure controls and procedures quarterly. In addition, our independent registered public accounting firm is required to audit the effectiveness of our internal control over financial reporting pursuant to Section 404(b) of the Sarbanes-Oxley Act annually. Our independent registered public accounting firm may issue a report that is adverse in the event it is not satisfied with the level at which our controls are documented, designed or operating. Moreover, our testing, or the subsequent testing by our independent registered public accounting firm, may reveal material weaknesses or significant deficiencies. If material weaknesses are identified or we are not able to comply with the requirements of Section 404 in a timely manner, our reported financial results could be materially misstated or could subsequently require restatement, we could receive an adverse opinion regarding our internal control over financial reporting from our independent registered public accounting firm, we could be subject to investigations or sanctions by regulatory authorities and we could incur substantial expenses. We may not be able to effectively implement system and process changes required for new standards on a timely basis. Any delays or failure to update our systems and processes could also lead to a material weakness or significant deficiency.

Risks Related to General Economic Conditions

Global economic conditions may harm our industry, business and results of operations.

We operate globally and as a result our business and revenues are impacted by global macroeconomic conditions. Global financial developments seemingly unrelated to us or the software industry may harm us. From time to time, the US and other key international economies have been impacted by geopolitical and economic instability, high levels of credit defaults, international trade disputes, falling demand for various goods and services, high levels of persistent unemployment, wage and income stagnation, restricted credit, poor liquidity, reduced corporate profitability, volatility in credit, equity and foreign exchange markets, bankruptcies, international trade agreements, trade restrictions and overall economic uncertainty. These conditions can arise suddenly and affect the rate of information technology spending and could adversely affect our customers' or prospective customers' ability or willingness to purchase our services, delay purchasing decisions, reduce the value or duration of their subscriptions, or affect renewal rates, all of which could harm our operating results.

In 2020, for example, the growth rate in the EU, China, or the US, tariffs or trade relations between the US and China or other countries, political uncertainty in the Middle East and other geopolitical events could directly or indirectly affect our business. Additionally, in connection with Brexit, the impact of the UK's exit from the EU is still to be fully seen, with the applicable trade agreement to be negotiated before December 2020, or a type of "no-deal" exit would occur. This could be harmful to both the U.K. and E.U. economies and businesses operating there

In addition, the effects, if any, of global financial conditions on our business can be difficult to distinguish from the effects on our business from product, pricing, and other developments in the markets specific to our products and our relative competitive strength. If we make incorrect judgments about our business for this reason, our business and results of operations could be adversely affected.

Foreign currency exchange rate fluctuations could harm our financial results.

We conduct significant transactions, including revenue transactions and intercompany transactions, in currencies other than the U.S. Dollar or the functional operating currency of the transactional entities. In addition, our international subsidiaries maintain significant net assets that are denominated in currencies other than the functional operating currencies of these entities. Accordingly, changes in the value of currencies relative to the U.S. Dollar may impact our consolidated revenues and operating results due to transactional and translational remeasurement that is reflected in our earnings. It is particularly difficult to forecast any impact from exchange rate movements, so there is risk that unanticipated currency fluctuations could adversely affect our financial results or cause our results to differ from investor expectations or our own guidance in any future periods. In addition, the announcement of Brexit and the continued uncertainty around the full impact of it and the exact trade arrangements upon exit has adversely impacted global markets, including currencies, and resulted in a decline and volatility in the value of the British pound and the Euro, as compared to the U.S. Dollar and other currencies. Volatility in exchange rates and global financial markets is expected to continue due to a number of factors, including uncertainty surrounding Brexit trade arrangements and the recent political and economic uncertainty globally.

In 2018, we began using derivative instruments, such as foreign currency forwards, to hedge certain exposures to fluctuations in foreign currency exchange rates. These hedging contracts may reduce, but cannot entirely eliminate, the impact of adverse currency exchange rate movements. Further, unanticipated changes in currency exchange rates may result in poorer overall financial performance than if we had not engaged in any such hedging transactions. Moreover, for a number of reasons, including our limited experience with these hedging contracts, we may not seek or be able to establish a perfect correlation between such hedging instruments and the exposures being hedged. Any such imperfect correlation may prevent us from achieving the intended hedge, and could expose us to a greater overall risk of loss than if we had not hedged.

Risks Related to Our Convertible Senior Notes

We may not have the ability to raise the funds necessary to settle conversions of our convertible senior notes due 2022 (the 2022 Notes) in cash or to repurchase the 2022 Notes upon a fundamental change, and our future debt may contain limitations on our ability to pay cash upon conversion or repurchase of the 2022 Notes.

Holders of the 2022 Notes have the right to require us to repurchase all or a portion of their 2022 Notes upon the occurrence of a fundamental change (as defined in the indenture for the 2022 Notes (the Indenture)) at a repurchase price equal to 100% of the principal amount of the 2022 Notes to be repurchased, plus accrued and unpaid special interest, if any. In addition, if a make-whole fundamental change (as defined in the Indenture) occurs prior to the maturity date of the 2022 Notes, we will in some cases be required to increase the conversion rate for a holder that elects to convert its 2022 Notes in connection with such make-whole fundamental change. Upon conversion of the 2022 Notes, unless we elect to deliver solely shares of our common stock to settle such conversion (other than paying cash in lieu of delivering any fractional shares), we will be required to make cash payments in respect of the 2022 Notes being converted. However, we may not have enough available cash or be able to obtain financing at the time we are required to make repurchases of the 2022 Notes surrendered therefor or pay cash with respect to the 2022 Notes being converted.

We and our subsidiaries may incur substantial additional debt in the future, subject to the restrictions contained in our future debt instruments, some of which may be secured debt. We are not restricted under the terms of the Indenture from incurring additional debt, securing existing or future debt, recapitalizing our debt or taking a number of other actions that could have the effect of diminishing our ability to make payments on the 2022 Notes when due. Furthermore, the Indenture prohibits us from being acquired unless, among other things, the surviving entity assumes our obligations under the 2022 Notes and the Indenture. These and other provisions in the Indenture could deter or prevent a third party from acquiring us even when the acquisition may be favorable to holders of the 2022 Notes.

In addition, our ability to repurchase or to pay cash upon conversion of the 2022 Notes may be limited by law, regulatory authority or agreements governing our future indebtedness. Our failure to repurchase the 2022 Notes at a time when the repurchase is required by the Indenture or to pay cash upon conversion of the 2022 Notes as required by the Indenture would constitute a default. A default under the Indenture or a fundamental change itself could also lead to a default under agreements governing our future indebtedness. Moreover, the occurrence of a fundamental change could constitute an event of default under any such agreements. If the payment of the related indebtedness were accelerated after any applicable notice or grace periods, we may not have sufficient funds to repay the indebtedness and repurchase the 2022 Notes, or to pay cash upon conversion of the 2022 Notes.

The conditional conversion feature of the 2022 Notes may adversely affect our financial condition and operating results.

Prior to the business day immediately preceding February 1, 2022, the holders of the 2022 Notes may elect to convert their notes during any calendar quarter (and only during such calendar quarter) if the last reported sale price of our common stock for at least 20 trading days during the period of 30 consecutive trading days ending on the last trading day of the immediately preceding calendar quarter is greater than or equal to \$175.18 (the Conversion Condition). The Conversion Condition for the 2022 Notes was met for all quarters ended June 30, 2018 through December 31, 2019, except for the quarter ended December 31, 2018. Therefore, our 2022 Notes became convertible at the holders' option beginning on July 1, 2018 and continue to be convertible through March 31, 2020, except for the quarter ended March 31, 2019 because the Conversion Condition for the 2022 Notes was not met for the quarter ended December 31, 2018. During the year ended December 31, 2019, we paid cash to settle an immaterial principal amount of the 2022 Notes. Based on additional conversion requests we have received through the filing date, we expect to settle in cash an aggregate of approximately \$2.5 million and \$5.2 million in principal amount of the 2022 Notes during the first and second quarters of 2020, respectively. We may receive additional conversion requests that require settlement in the second quarter of 2020. If more holders elect to convert their 2022 Notes in future periods, unless we elect to satisfy our conversion obligation by delivering solely shares of our common stock (other than paying cash in lieu of delivering any fractional share), we may settle all or a portion of our conversion obligation in cash, which could adversely affect our liquidity and result in a material adverse effect on our financial position, results of operations and cash flows. In addition, to the extent we receive conversion requests, we may also record a loss on early conversions of the 2022 Notes converted by note holders based on the difference between the fair market value allocated to the liability component on the settlement date and the net carrying amount of the liability component and unamortized debt issuance on the settlement date.

The convertible note hedge and warrant transactions may affect the value of the 2022 Notes and our common stock.

In connection with the sale of the 2022 Notes, we entered into convertible note hedge (the 2022 Note Hedge) transactions with certain financial institutions (option counterparties). We also entered into warrant transactions with the option counterparties pursuant to which we sold warrants for the purchase of our common stock (the 2022 Warrants). The 2022 Note Hedge is expected generally to reduce the potential dilution upon any conversion of the 2022 Notes and/or offset any cash payments we are required to make in excess of the principal amount of converted 2022 Notes, as applicable. The 2022 Warrant transactions could have a dilutive effect to the extent that our stock price exceeds the exercise price of the 2022 Warrants, which is \$203.40. As the 2022 Warrants will be net share settled, the total number of shares of our common stock we will issue depends on the daily volume-weighted average stock prices over a 60-trading day period beginning on the first expiration date of the 2022 Warrants, which will be September 1, 2022. We expect to issue additional shares of our common stock in the second half of 2022 upon the automatic exercise of the 2022 Warrants. Based on the volume-weighted average stock price on December 31, 2019, the total number of shares of our common stock to be issued upon the automatic exercise of the 2022 Warrants would be approximately 1.6 million. The actual number of shares of our common stock issuable upon the automatic exercise of the 2022 Warrants, if any, is unknown at this time. Refer to Note 11 in the notes to our consolidated financial statements included elsewhere in this Annual Report on Form 10-K for additional information.

The option counterparties and/or their respective affiliates may modify their hedge positions by entering into or unwinding various derivatives with respect to our common stock and/or purchasing or selling our common stock in secondary market transactions prior to the maturity of the 2022 Notes (and are likely to do so during any observation period related to a conversion of the 2022 Notes, or following any repurchase of the 2022 Notes by us on any fundamental change repurchase date (as defined in the Indenture) or otherwise). This activity could also cause or avoid an increase or a decrease in our stock price or the 2022 Notes price, which could affect note holders' ability to convert the 2022 Notes and, to the extent the activity occurs during any observation period related to a conversion of the 2022 Notes, it could affect the amount and value of the consideration that note holders will receive upon conversion of the 2022 Notes.

The potential effect, if any, of these transactions and activities on our stock price or the 2022 Notes price will depend in part on market conditions and cannot be ascertained at this time. Any of these activities could adversely affect the value of our common stock and the value of the 2022 Notes (and the resulting amount of cash and/or number of shares, if any, that note holders would receive upon the conversion) and, under certain circumstances, the ability of the note holders to convert the 2022 Notes.

We do not make any representation or prediction as to the direction or magnitude of any potential effect that the transactions described above may have on the price of the 2022 Notes or our common stock. In addition, we do not make any representation that the option counterparties will engage in these transactions or that these transactions, once commenced, will not be discontinued without notice.

We are subject to counterparty risk with respect to the 2022 Note Hedge.

The option counterparties are financial institutions, and we will be subject to the risk that any or all of them may default under the 2022 Note Hedge. Our exposure to the credit risk of the option counterparties will not be secured by any collateral. Recent global economic conditions have resulted in the actual or perceived failure or financial difficulties of many financial institutions. If an option counterparty becomes subject to insolvency proceedings, we will become an unsecured creditor in those proceedings, with a claim equal to our exposure at that time under our transactions with that option counterparty. Our exposure will depend on many factors but, generally, an increase in our exposure will be correlated to an increase in the stock price and in the volatility of our common stock. In addition, upon a default by an option counterparty, we may suffer adverse tax consequences and more dilution than we currently anticipate with respect to our common stock. We can provide no assurances as to the financial stability or viability of the option counterparties.

Risks Related to Ownership of Our Common Stock

Our stock price has historically been and is likely to continue to be volatile and could subject us to litigation.

Our stock price has been, and is likely to continue to be, volatile and could be subject to wide fluctuations in response to various factors, some of which are beyond our control. In addition, technology companies in general have highly volatile stock prices, and the volatility in stock price and trading volume of securities is often unrelated or disproportionate to the financial performance of the companies issuing the securities. Factors affecting our stock price, some of which are beyond our control, include:

- changes in the estimates of our operating results or changes in recommendations by securities analysts that elect to cover our common stock;
- announcements of new products, services or technologies, new applications or enhancements to services, strategic alliances, acquisitions, or other significant events by us or by our competitors;
- fluctuations in the valuation of companies, such as high-growth or cloud companies, investors perceive to be comparable to us;
- changes to our management team;
- trading activity by directors, executive officers and significant stockholders, or the market's perception that large stockholders intend to sell their shares;
- the inclusion, exclusion, or deletion of our stock from any trading indices, such as the S&P 500 Index;
- the size of our market float;
- the volume of trading in our common stock, including sales upon exercise of outstanding options or vesting of equity awards or sales and purchases of any common stock issued upon conversion of the 2022 Notes or in connection with the 2022 Note Hedge and 2022 Warrant transactions;
- the economy as a whole, market conditions in our industry, and the industries of our customers; and
- overall performance of the equity markets.

Following periods of volatility in the market price of a company's securities, securities class action litigation has often been brought against that company. Securities litigation could result in substantial costs and divert our management's attention and resources from our business. This could have a material adverse effect on our business, operating results, and financial condition.

We do not intend to pay dividends on our common stock, so any returns will be limited to changes in our stock price.

We have never declared or paid any cash dividends on our common stock. We anticipate that we will retain future earnings for the development, operation and expansion of our business and do not anticipate declaring or paying any cash dividends for the foreseeable future. In addition, our ability to pay cash dividends on our common stock may be prohibited or limited by the terms of any future debt financing arrangements. Any return to stockholders will therefore be limited to the increase, if any, of our stock price.

Provisions in our charter documents, Delaware law, or our 2022 Notes might discourage, delay or prevent a change of control of our company or changes in our management and, therefore, depress our stock price.

Our restated certificate of incorporation and restated bylaws contain provisions that could depress our stock price by acting to discourage, delay or prevent a change in control of our company or changes in our management that the stockholders of our company may deem advantageous. These provisions among other things:

- establish a classified board so that not all members of our board are elected at one time;
- permit the board to establish the number of directors;
- provide that directors may only be removed “for cause” and only with the approval of 66 2/3% of our shareholders;
- require super-majority voting to amend some provisions in our certificate of incorporation and bylaws;
- authorize the issuance of “blank check” preferred stock that our board could use to implement a shareholder rights plan;
- do not permit our shareholders to call special meetings of shareholders;
- prohibit shareholder action by written consent, which requires all shareholder actions to be taken at a meeting;
- provide that the board is expressly authorized to make, alter or repeal our bylaws; and
- establish advance notice requirements for nominations for election to our board or proposing matters that can be acted upon by shareholders at annual shareholder meetings (though our bylaws have shareholder proxy access).

In addition, Section 203 of the Delaware General Corporation Law may discourage, delay or prevent a change in control of our company. Section 203 imposes certain restrictions on merger, business combinations and other transactions between us and holders of 15% or more of our common stock.

Further, the fundamental change provisions of our 2022 Notes may delay or prevent a change in control of our company, because those provisions allow note holders to require us to repurchase such notes upon the occurrence of a fundamental change.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

Our principal office is located in Santa Clara, California, where we lease approximately 608,000 square feet of space under three lease agreements for our business operations and product development. We also have approximately 510,000 square feet of expansion space that is currently under development by the landlord under two additional lease agreements. We also maintain offices in various North American, South American, European and Asian countries and in Australia. All of our properties are currently leased. We believe our existing facilities are adequate to meet our current requirements. See Note 18 in the notes to our consolidated financial statements included elsewhere in this Annual Report on Form 10-K for more information about our lease commitments. We expect to expand our facilities capacity as our employee base grows. We believe we will be able to obtain such space on acceptable and commercially reasonable terms.

ITEM 3. LEGAL PROCEEDINGS

From time to time, we are party to litigation and other legal proceedings in the ordinary course of business. While the results of any litigation or other legal proceedings are uncertain, we are not presently a party to any legal proceedings that, if determined adversely to us, would individually or taken together have a material adverse effect on our business, 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

Market Information for Common Stock

Our common stock is listed on the New York Stock Exchange under the symbol "NOW."

Dividends

Our board of directors currently intends to retain any future earnings to support operations and to finance the growth and development of our business, and therefore does not intend to pay cash dividends on our common stock for the foreseeable future.

Stockholders

As of December 31, 2019, there were 7 registered stockholders of record (not including an indeterminate number of beneficial holders of stock held in street name through brokers and other intermediaries) of our common stock.

Securities Authorized for Issuance under Equity Compensation Plans

The information required by this item will be included in an amendment to this Annual Report on Form 10-K or incorporated by reference from our definitive proxy statement to be filed with the SEC pursuant to Regulation 14A.

Stock Performance Graph

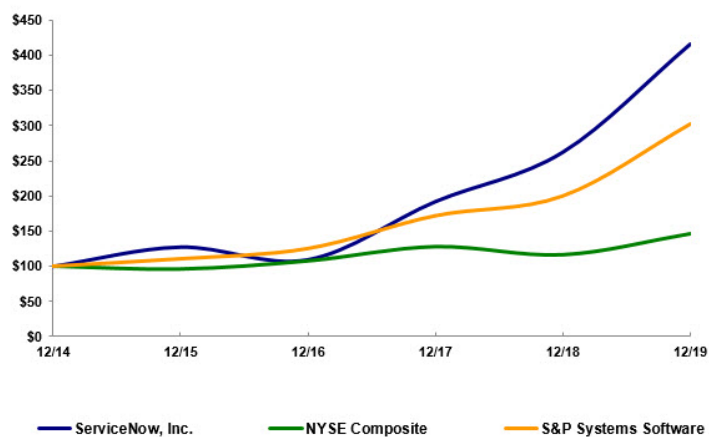
The following shall not be deemed incorporated by reference into any of our other filings under the Securities Exchange Act of 1934, as amended (the Exchange Act) or the Securities Act except to the extent we specifically incorporate it by reference into such filing.

The graph below compares the cumulative total stockholder return on our common stock with the cumulative total return on the NYSE Composite Index and the Standard & Poor Systems Software Index for each of the last five fiscal years ended December 31, 2015 through December 31, 2019, assuming an initial investment of \$100. Data for the NYSE Composite Index and the Standard & Poor Systems Software Index assume reinvestment of dividends.

The comparisons in the graph below are based upon historical data and are not indicative of, nor intended to forecast, future performance of our common stock.

COMPARISON OF 5 YEAR CUMULATIVE TOTAL RETURN*

Among ServiceNow, Inc., the NYSE Composite Index and the S&P Systems Software Index



*\$100 invested on 12/31/14 in stock or index, including reinvestment of dividends. Fiscal year ending December 31.

	Base Period					
	Dec 31, 2014	Dec 31, 2015	Dec 31, 2016	Dec 31, 2017	Dec 31, 2018	Dec 31, 2019
ServiceNow, Inc.	\$ 100.00	\$ 127.58	\$ 109.57	\$ 192.17	\$ 262.42	\$ 416.09
NYSE Composite	100.00	95.91	107.36	127.46	116.06	145.66
S&P Systems Software	100.00	110.47	125.09	171.85	200.00	302.76

Unregistered Sales of Equity Securities

None.

Issuer Purchases of Equity Securities

None.

ITEM 6. SELECTED CONSOLIDATED FINANCIAL DATA

The following selected consolidated financial data should be read together with our consolidated financial statements and accompanying notes and “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” which are included elsewhere in this Annual Report on Form 10-K.

The selected consolidated statements of comprehensive income (loss) data for each of the years ended December 31, 2019, 2018 and 2017 and the selected consolidated balance sheet data as of December 31, 2019 and 2018 set forth in the tables below are derived from our audited consolidated financial statements included elsewhere in this Annual Report on Form 10-K. The selected consolidated statements of comprehensive income (loss) data for the each of the years ended December 31, 2016 and 2015 and the selected consolidated balance sheet data as of December 31, 2017, 2016 and 2015 set forth in the tables below are derived from audited consolidated financial statements which are not included in this Annual Report on Form 10-K. The selected consolidated financial data in this section are not intended to replace our consolidated financial statements and the related notes. Our historical results are not necessarily indicative of our future results.

	Year Ended December 31,				
	2019	2018	2017	2016	2015
	(in thousands, except per share data)				
Consolidated Statements of Comprehensive Income (Loss) Data:					
Total revenues ⁽¹⁾	\$ 3,460,437	\$ 2,608,816	\$ 1,918,494	\$ 1,390,985	\$ 1,005,480
Net income (loss) ⁽¹⁾⁽²⁾⁽³⁾	\$ 626,698	\$ (26,704)	\$ (116,846)	\$ (414,249)	\$ (198,426)
Net income (loss) per share - basic ⁽¹⁾⁽²⁾⁽³⁾	\$ 3.36	\$ (0.15)	\$ (0.68)	\$ (2.52)	\$ (1.27)
Net income (loss) per share - diluted ⁽¹⁾⁽²⁾⁽³⁾	\$ 3.18	\$ (0.15)	\$ (0.68)	\$ (2.52)	\$ (1.27)
Weighted-average shares used to compute net income (loss) per share - basic	186,466	177,846	171,176	164,534	155,707
Weighted-average shares used to compute net income (loss) per share - diluted	197,223	177,846	171,176	164,534	155,707

(1) The amounts for the years ended December 31, 2019, 2018, 2017 and 2016 reflect the impact of the full retrospective adoption of Topic 606. The amounts for the year ended December 31, 2015 do not reflect the adoption of Topic 606.

(2) The amount for the year ended December 31, 2016 includes legal settlements expenses of \$270.0 million.

(3) The amounts for the year ended December 31, 2019 reflect the impact of an income tax benefit of \$574.2 million from the release of the valuation allowance on the Irish deferred tax assets. Refer to Note 17 in the notes to our consolidated financial statements included elsewhere in this Annual Report on Form 10-K for further details.

	As of December 31,				
	2019	2018	2017	2016	2015
	(in thousands)				
Consolidated Balance Sheet Data:					
Total assets ⁽¹⁾⁽²⁾	\$ 6,022,430	\$ 3,879,140	\$ 3,550,245	\$ 2,033,767	\$ 1,807,052
Deferred revenue, current and non-current portion ⁽¹⁾	\$ 2,225,792	\$ 1,690,191	\$ 1,246,815	\$ 895,101	\$ 603,754
Convertible senior notes, net, non-current portion	\$ 694,981	\$ 661,707	\$ 630,018	\$ 507,812	\$ 474,534

(1) The amounts as of December 31, 2019, 2018 and 2017 reflect the impact of the full retrospective adoption of Topic 606. The amounts as of December 31, 2016 and 2015 do not reflect the adoption of Topic 606.

(2) The amount as of December 31, 2019 reflects the impact of the adoption of Topic 842. The amounts as of December 31, 2018, 2017, 2016 and 2015 do not reflect the adoption of Topic 842. Refer to Note 2 in the notes to our consolidated financial statements included elsewhere in this Annual Report on Form 10-K for further details.

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

You should read the following discussion and analysis of our financial condition and results of operations together with our consolidated financial statements and the related notes appearing under "Consolidated Financial Statements and Supplementary Data" in Item 8 of this filing. Some of the information contained in this discussion and analysis or set forth elsewhere in this filing, including information with respect to our plans and strategy for our business, includes forward-looking statements that involve risks and uncertainties. You should carefully read the "Risk Factors" section of this filing for a discussion of important factors that could cause actual results and the timing of certain events to differ materially from future results expressed or implied by the forward-looking statements contained in the following discussion and analysis.

Our free cash flow and billings measures included in the sections entitled "—Key Business Metrics—Free Cash Flow" and "—Key Business Metrics—Billings" are not in accordance with U.S. Generally Accepted Accounting Principles (GAAP). These non-GAAP financial measures are not intended to be considered in isolation or as a substitute for, or superior to, financial information prepared and presented in accordance with GAAP. These measures may be different from non-GAAP financial measures used by other companies, limiting their usefulness for comparison purposes. We encourage investors to carefully consider our results under GAAP, as well as our supplemental non-GAAP results, to more fully understand our business.

This section of our Annual Report on Form 10-K discusses our financial condition and results of operations for the fiscal years ended December 31, 2019 and 2018, and year-to-year comparisons between fiscal 2019 and fiscal 2018. A discussion of our financial condition and results of operations for the fiscal year ended December 31, 2017 and year-to-year comparisons between fiscal 2018 and fiscal 2017, which have been accounted for and presented to reflect our adoption of Topic 606, that is not included in this Annual Report on Form 10-K can be found in "Management's Discussion and Analysis of Financial Condition and Results of Operations" in Part II, Item 7 of our Annual Report on Form 10-K for the fiscal year ended December 31, 2018, filed on February 28, 2019.

Overview

ServiceNow's purpose is to make the world of work, work better for people. We believe that people should work the way they want to, so we build applications that help automate existing processes and create efficient, digitized workflows. Our products and services enable the steps of a job to flow naturally across disparate departments, systems and processes of a business. When work flows naturally, great experiences follow. We primarily deliver our software via the Internet as a service through a simple and easy-to-use interface so that we can rapidly deploy our packaged offerings, and customers can easily build their custom applications. In a minority of cases, customers choose to host our software by themselves or through a third-party service provider.

We generally offer our services on an annual subscription fee basis, which includes access to the ordered subscription service and related support, including updates to the subscription service during the subscription term. Pricing for our subscription services is based on a number of factors, including duration of subscription term, volume, mix of products purchased, and discounts. We sell our products as subscription services and primarily through direct sales. We also offer professional services, both directly and through partners, to help our customers understand and utilize our products and platform more effectively. We also generate revenues from certain professional services and for training of customer and partner personnel. Our professional services organization provides strategic advisory and consulting services to help customers maximize the value of their ServiceNow investment. We generally bill our customers annually in advance for subscription services and monthly in arrears for our professional services as the work is performed.

A majority of our revenues come from large global enterprise customers. We continue to invest in the development of our services, infrastructure and sales and marketing to drive long-term growth.

Key Business Metrics

Number of customers with ACV greater than \$1 million. We count the total number of customers with annualized contract value (ACV) greater than \$1 million as of the end of the period. We had 892, 677, and 505 customers with ACV greater than \$1 million as of December 31, 2019, 2018 and 2017, respectively. For purposes of customer count, a customer is defined as an entity that has a unique Dunn & Bradstreet Global Ultimate (GULT) Data Universal Numbering System (DUNS) number and an active subscription contract as of the measurement date. The DUNS number is a global standard for business identification and tracking. We make exceptions for holding companies, government entities and other organizations for which the GULT, in our judgment, does not accurately represent the ServiceNow customer. For example, while all U.S. government agencies roll up to "Government of the United States" under the GULT, we count each government agency that we contract with as a separate customer. Our customer count is subject to adjustments for acquisitions, spin-offs and other market activity; accordingly, we restate previously disclosed number of customers with ACV greater than \$1 million calculations to allow for comparability. ACV is calculated based on the foreign exchange rate in effect at the time the contract was signed. Foreign exchange rate fluctuations could cause some variability in the number of customers with ACV greater than \$1 million.

Remaining performance obligations. Transaction price allocated to remaining performance obligations (RPO) represents contracted revenue that has not yet been recognized, which includes deferred revenue and non-cancelable amounts that will be invoiced and recognized as revenue in future periods. RPO excludes contracts that are billed in arrears, such as certain time and materials contracts, as we apply the "right to invoice" practical expedient under relevant accounting guidance.

As of December 31, 2019, our RPO was approximately \$6.6 billion and we expect to recognize revenues on approximately 50% of these RPO over the following 12 months, with the balance to be recognized thereafter. Factors that may cause our RPO to vary from period to period include the following:

- *Foreign currency exchange rates.* While a majority of our contracts have historically been in U.S. Dollars, an increasing percentage of our contracts in recent periods has been in foreign currencies, particularly the Euro and British Pound Sterling. Fluctuations in foreign currency exchange rates as of the balance sheet date will cause variability in our RPO.
- *Mix of offerings.* In a minority of cases, we allow our customers to host our software by themselves or through a third-party service provider. In self-hosted offerings, we recognize a portion of the revenue upfront upon the delivery of the software and as a result, such revenue is excluded from RPO.
- *Subscription start date.* From time to time, we enter into contracts with a subscription start date in the future and these amounts are included in RPO if such contracts are signed by the balance sheet date.
- *Timing of contract renewals.* While customers typically renew their contracts at the end of the contract term, from time to time, customers may do so either before or after the scheduled expiration date. For example, in cases where we are

successful in selling additional products or services to an existing customer, a customer may decide to renew its existing contract early to ensure that all its contracts expire on the same date. In other cases, prolonged negotiations or other factors may result in a contract not being renewed until after it has expired.

- *Contract duration.* While we typically enter into multi-year subscription services, the duration of our contracts varies. We sometimes also enter into contracts with durations that have a 12-month or shorter term to enable the contracts to co-terminate with the existing contract. The contract duration will cause variability in our RPO.

Free cash flow. We define free cash flow, a non-GAAP financial measure, as GAAP net cash provided by operating activities reduced by purchases of property and equipment. Purchases of property and equipment are otherwise included in cash used in investing activities under GAAP. We believe information regarding free cash flow provides useful information to investors because it is an indicator of the strength and performance of our business operations. However, our calculation of free cash flow may not be comparable to similar measures used by other companies. The calculation of free cash flow is provided below:

	Year Ended December 31,		
	2019	2018	2017
	(in thousands)		
Free cash flow:			
Net cash provided by operating activities	\$ 1,235,972	\$ 811,089	\$ 642,940
Purchases of property and equipment	(264,892)	(224,462)	(150,510)
Free cash flow ⁽¹⁾	<u>\$ 971,080</u>	<u>\$ 586,627</u>	<u>\$ 492,430</u>

- (1) Free cash flow for the year ended December 31, 2018 includes the effect of \$145.3 million relating to the repayments of convertible senior notes attributable to debt discount. Refer to Note 11 in the notes to our consolidated financial statements included elsewhere in this Annual Report on Form 10-K for further details.

Billings. We define billings, a non-GAAP financial measure, as GAAP revenues recognized plus the change in total GAAP unbilled receivables, deferred revenue and customer deposits as presented on the consolidated statements of cash flows. The calculation of billings is provided below:

	Year Ended December 31,		
	2019	2018	2017
	(dollars in thousands)		
Billings:			
Total revenues	\$ 3,460,437	\$ 2,608,816	\$ 1,918,494
Change in deferred revenue, unbilled receivables and customer deposits ⁽¹⁾	541,776	480,019	381,160
Total billings	<u>\$ 4,002,213</u>	<u>\$ 3,088,835</u>	<u>\$ 2,299,654</u>
Year-over-year percentage change in total billings	30%	34%	37%

- (1) As presented on or derived from our consolidated statements of cash flows.

Billings consists of amounts invoiced for subscription contracts with existing customers, renewal contracts, expansion contracts, contracts with new customers, and contracts for professional services and training. Factors that may cause our billings results to vary from period to period include the following:

- *Billings duration.* While we typically bill customers annually for our subscription services, customers sometimes request, and we accommodate, billings with durations less than or greater than the typical 12-month term.
- *Contract start date.* From time to time, we enter into contracts with a contract start date in the future, and we exclude these amounts from billings as these amounts are not included in our consolidated balance sheets, unless such amounts have been paid as of the balance sheet date.
- *Foreign currency exchange rates.* While a majority of our billings have historically been in U.S. Dollars, an increasing percentage of our billings in recent periods has been in foreign currencies, particularly the Euro and British Pound Sterling.

- *Timing of contract renewals.* While customers typically renew their contracts at the end of the contract term, from time to time customers may do so either before or after the scheduled expiration date. For example, in cases where we are successful in selling additional products or services to an existing customer, a customer may decide to renew its existing contract early to ensure that all its contracts expire on the same date. In other cases, prolonged negotiations or other factors may result in a contract not being renewed until after it has expired.

While we believe billings is a useful leading indicator regarding the performance of our business, due to the factors described above, an increase or decrease in new or renewed subscriptions in a reporting period may not have an immediate impact on billings for that reporting period.

To facilitate greater year-over-year comparability in our billings results, we disclose the impact that foreign currency rate fluctuations and fluctuations in billings duration had on our billings. The impact of foreign currency rate fluctuations is calculated by translating the current period results for entities reporting in currencies other than U.S. Dollars into U.S. Dollars at the exchange rates in effect during the prior period presented, rather than the actual exchange rates in effect during the current period. The impact of fluctuations in billings duration is calculated by replacing the portion of multi-year billings in excess of 12 months during the current period with the portion of multi-year billings in excess of 12 months during the prior period presented. Notwithstanding the adjustments described above, the comparability of billings results from period to period remains subject to the impact of variations in the dollar value of contracts with future start dates and the timing of contract renewals, for which no adjustments have been presented.

Foreign currency rate fluctuations had an unfavorable impact of \$67.7 million and a favorable impact of \$31.0 million on billings for the years ended December 31, 2019 and 2018, respectively. Changes in billings duration had a favorable impact of \$1.2 million and \$7.4 million for the years ended December 31, 2019 and 2018, respectively.

Renewal rate. We calculate our renewal rate by subtracting our attrition rate from 100%. Our attrition rate for a period is equal to the ACV from customers lost during the period, divided by the sum of (i) the total ACV from all customers that renewed during the period, excluding changes in price or users, and (ii) the total ACV from all customers lost during the period. Accordingly, our renewal rate is calculated based on ACV and is not based on the number of customers that have renewed. Further, our renewal rate does not reflect increased or decreased purchases from our customers to the extent such customers are not lost customers. A lost customer is a customer that did not renew an expiring contract and that, in our judgment, will not be renewed. Typically, a customer that reduces its subscription upon renewal is not considered a lost customer. However, in instances where the subscription decrease represents the majority of the customer's ACV, we may deem the renewal as a lost customer or lapsed renewal. For our renewal rate calculation, we define a customer as an entity with a separate production instance of our service and an active subscription contract as of the measurement date, instead of an entity with a unique GULT or DUNS number. We adjust our renewal rate for acquisitions, consolidations and other customer events that cause the merging of two or more accounts occurring at the time of renewal. Previously disclosed renewal rates may be restated to reflect such adjustments to allow for comparability. Our renewal rate was 98% for each of the years ended December 31, 2019 and 2018, and 97% for the year ended December 31, 2017. As our renewal rate is impacted by the timing of renewals, which could occur in advance of, or subsequent to the original contract end date, period-to-period comparison of renewal rates may not be meaningful.

Components of Results of Operations

Revenues

Subscription revenues. Subscription revenues are primarily comprised of fees that give customers access to the ordered subscription service for both self-hosted offerings and cloud-based subscription offerings, and related support and updates, if any, to the subscription service during the subscription term. For our cloud-based offerings, we recognize revenue ratably over the subscription term. For self-hosted offerings, a substantial portion of the sales price is recognized upon delivery of the software, which may cause greater variability in our subscription revenues and subscription gross margin. Pricing includes multiple instances, hosting and support services, data backup and disaster recovery services, as well as future updates, when and if available, offered during the subscription term. We typically invoice our customers for subscription fees in annual increments upon execution of the initial contract or subsequent renewal. Our contracts are generally non-cancelable during the subscription term, though a customer can terminate for breach if we materially fail to perform.

Professional services and other revenues. Our arrangements for professional services are primarily on a time-and-materials basis, and we generally invoice our customers monthly in arrears for these professional services based on actual hours and expenses incurred. Some of our professional services arrangements are on a fixed fee or subscription basis. Professional services revenues are recognized as services are delivered. Other revenues primarily consist of fees from customer training delivered on-site or through publicly available classes. Typical payment terms require our customers to pay us within 30 days of invoice.

We sell our subscription services primarily through our direct sales organization. We also sell services through managed services providers and resale partners. We also generate revenues from certain professional services and for training of customers and partner personnel, through both our direct team and indirect channel sales. Revenues from our direct sales organization represented 82%, 84% and 88% for the years ended December 31, 2019, 2018 and 2017, respectively. For purposes of calculating revenues from our direct sales organization, revenues from systems integrators and managed services providers are included as part of the direct sales organization.

Allocation of Overhead Costs

Overhead costs associated with office facilities, IT and certain depreciation related to infrastructure that is not dedicated for customer use or research and development use are allocated to cost of revenues and operating expenses based on headcount.

Cost of Revenues

Cost of subscription revenues. Cost of subscription revenues consists primarily of expenses related to hosting our services and providing support to our customers. These expenses are comprised of data center capacity costs, which include colocation costs associated with our data centers as well as interconnectivity between data centers, depreciation related to our infrastructure hardware equipment dedicated for customer use, amortization of intangible assets, expenses associated with software, IT services and support dedicated for customer use, personnel-related costs directly associated with data center operations and customer support, including salaries, benefits, bonuses and stock-based compensation and allocated overhead.

Cost of professional services and other revenues. Cost of professional services and other revenues consists primarily of personnel-related costs directly associated with our professional services and training departments, including salaries, benefits, bonuses and stock-based compensation, the costs of contracted third-party partners, travel expenses and allocated overhead.

Professional services are performed directly by our services team, as well as by contracted third-party partners. Fees paid by us to third-party partners are primarily recognized as cost of revenues as the professional services are delivered. Cost of revenues associated with our professional services engagements contracted with third-party partners as a percentage of professional services and other revenues was 15%, 18% and 22% for the years ended December 31, 2019, 2018 and 2017, respectively.

Sales and Marketing

Sales and marketing expenses consist primarily of personnel-related expenses directly associated with our sales and marketing staff, including salaries, benefits, bonuses and stock-based compensation. Sales and marketing expenses also include the amortization of commissions paid to our sales employees, including related payroll taxes and fringe benefits. From time to time, third parties provide us referrals for which we pay a referral fee. We include revenues associated with these referrals as part of revenues from our direct sales organization. Referral fees paid to these third parties are generally 10% of the customer's net new ACV. We defer referral fees paid as they are considered incremental selling costs associated with acquiring customer contracts, and include the amortization of these referral fees in sales and marketing expense. In addition, sales and marketing expenses include branding expenses, expenses offset by proceeds related to our annual Knowledge user conference (Knowledge), other marketing program expenses, which include events other than Knowledge, and costs associated with purchasing advertising and marketing data, software and subscription services dedicated for sales and marketing use and allocated overhead.

Research and Development

Research and development expenses consist primarily of personnel-related expenses directly associated with our research and development staff, including salaries, benefits, bonuses and stock-based compensation and allocated overhead. Research and development expenses also include data center capacity costs, costs associated with outside services contracted for research and development purposes and depreciation of infrastructure hardware equipment that is used solely for research and development purposes.

General and Administrative

General and administrative expenses consist primarily of personnel-related expenses for our executive, finance, legal, human resources, facilities and administrative personnel, including salaries, benefits, bonuses and stock-based compensation, external legal, accounting and other professional services fees, other corporate expenses, amortization of intangible assets and allocated overhead.

Provision for Income Taxes

Provision for income taxes consists of federal, state and foreign income taxes. Due to cumulative losses, we maintain a valuation allowance against our U.S. deferred tax assets as of December 31, 2019 and 2018. We consider all available evidence, both positive and negative, including but not limited to earnings history, projected future outcomes, industry and market trends and the nature of each of the deferred tax assets in assessing the extent to which a valuation allowance should be applied against our U.S. and foreign deferred tax assets.

Comparison of the years ended December 31, 2019 and 2018**Revenues**

	Year Ended December 31,		% Change
	2019	2018	
	(dollars in thousands)		
Revenues:			
Subscription	\$ 3,255,079	\$ 2,421,313	34%
Professional services and other	205,358	187,503	10%
Total revenues	<u>\$ 3,460,437</u>	<u>\$ 2,608,816</u>	33%
Percentage of revenues:			
Subscription	94%	93%	
Professional services and other	6%	7%	
Total	<u>100%</u>	<u>100%</u>	

Subscription revenues increased \$833.8 million during the year ended December 31, 2019, compared to the prior year, driven by increased purchases by existing customers and an increase in customer count. Included in subscription revenues is \$164.1 million and \$118.5 million of revenues recognized upfront from the delivery of software associated with self-hosted offerings during the year ended December 31, 2019 and 2018, respectively. We expect subscription revenues for the year ending December 31, 2020 to increase in absolute dollars as we continue to add new customers and existing customers increase their usage of our products, and increase slightly as a percentage of total revenues compared to the year ended December 31, 2019. Our expectations for revenues, cost of revenues and operating expenses for the year ending December 31, 2020 are based on foreign exchange rates as of December 31, 2019.

Subscription revenues consist of the following:

	Year Ended December 31,		% Change
	2019	2018	
(dollars in thousands)			
Digital workflow products ⁽¹⁾	\$ 2,810,887	\$ 2,111,702	33%
ITOM products ⁽¹⁾	444,192	309,611	43%
Total subscription revenues	\$ 3,255,079	\$ 2,421,313	34%

(1) As we have expanded the scope of IntegrationHub (formerly included within our ITOM offering) beyond ITOM to align more closely with our broader platform offering, revenues associated with IntegrationHub have been reclassified from ITOM products to platform, which is part of our digital workflow products. Revenues reclassified from ITOM product revenues to digital workflow products revenues were \$60.9 million and \$44.4 million for the years ended December 31, 2018 and 2017, respectively. These reclassifications did not result in a restatement of prior period financial statements.

Our digital workflow products include the Now Platform, Now IT Service Management, Now IT Business Management, Now DevOps, Now IT Asset Management, Now Security Operations, Now Integrated Risk Management, Now HR Service Delivery, Now Finance Operations Management, Now Customer Service Management, and Now Field Service Management, and are generally priced on a per user basis. Our ITOM products are generally priced on a per node (physical or virtual server) basis. In previously issued consolidated financial statements, we referred to digital workflow products as “service management products.”

Professional services and other revenues increased \$17.9 million during the year ended December 31, 2019, compared to the prior year, due to an increase in the services provided to new and existing customers. We expect professional services and other revenues for the year ending December 31, 2020 to increase in absolute dollars, but decrease slightly as a percentage of total revenues compared to the year ended December 31, 2019 as we are increasingly focused on deploying our internal professional services organization as a strategic resource and relying on our partner ecosystem to contract directly with customers for service delivery.

Cost of Revenues and Gross Profit Percentage

	Year Ended December 31,		% Change
	2019	2018	
(dollars in thousands)			
Cost of revenues:			
Subscription	\$ 549,642	\$ 417,421	32%
Professional services and other	247,003	205,237	20%
Total cost of revenues	\$ 796,645	\$ 622,658	28%
Gross profit percentage:			
Subscription	83%	83%	
Professional services and other	(20%)	(9%)	
Total gross profit percentage	77%	76%	
Gross profit:	\$ 2,663,792	\$ 1,986,158	34%

Cost of subscription revenues increased \$132.2 million during the year ended December 31, 2019, compared to the prior year, primarily due to increased headcount resulting in an increase of \$30.1 million in personnel-related costs excluding stock-based compensation, an increase of \$24.0 million in stock-based compensation and an increase of \$10.8 million in other overhead expenses. The remaining increase of \$61.7 million was primarily due to increases in data center hardware, software and maintenance costs to support the expansion of our data center capacity. Amortization of intangibles increased \$5.1 million as a result of current year acquisitions.

Our subscription gross profit percentage was 83% for each of the years ended December 31, 2019 and 2018. The increase in revenues recognized upfront from the delivery of software associated with self-hosted offerings contributed to approximately one percentage point improvement in our subscription gross profit percentage for each of the years ended December 31, 2019 and 2018. We expect our cost of subscription revenues to increase in absolute dollars as we provide subscription services to more customers and increase usage within our customer instances, and our subscription gross profit percentage to remain relatively flat for the year ending December 31, 2020 compared to the year ended December 31, 2019. To the extent future acquisitions are consummated, our cost of subscription revenues may increase due to additional non-cash charges associated with the amortization of intangible assets acquired.

Cost of professional services and other revenues increased \$41.8 million during the year ended December 31, 2019 compared to the prior year, primarily due to increased headcount resulting in an increase of \$24.9 million in personnel-related costs excluding stock-based compensation, an increase of \$10.3 million in stock-based compensation and an increase of \$5.4 million in overhead expenses.

Our professional services and other gross loss percentage increased to 20% during the year ended December 31, 2019, compared to 9% in the prior year, primarily due to stock-based compensation and other personnel-related costs increasing at a higher rate than professional services and other revenues as we continue to invest in specialized resources to support our expanding product portfolio and new on-demand training, increasing the training content available online.

Sales and Marketing

	Year Ended December 31		% Change
	2019	2018	
	(dollars in thousands)		
Sales and marketing	\$ 1,534,284	\$ 1,203,056	28%
Percentage of revenues	44%	46%	

Sales and marketing expenses increased \$331.2 million during the year ended December 31, 2019, compared to the prior year, primarily due to increased headcount resulting in an increase of \$154.8 million in personnel-related costs excluding stock-based compensation and commissions, an increase of \$40.4 million in stock-based compensation and an increase of \$37.1 million in overhead expenses. Expenses associated with commissions and third-party referral fees increased \$26.2 million for the year ended December 31, 2019 compared to the prior year, due to an increase in contracts with new customers, expansion and renewal contracts. Outside services costs increased \$12.3 million during the year ended December 31, 2019 compared to the prior year, primarily due to an increase in contractors and professional fees to support our sales and marketing functions. Branding and marketing program expenses, and costs associated with purchasing advertising and market data, increased \$56.9 million for the year ended December 31, 2019 compared to the prior year.

We expect sales and marketing expenses for the year ending December 31, 2020 to increase in absolute dollars as we continue to expand our direct sales organization, increase our marketing activities, grow our international operations and build brand awareness, but decrease slightly as a percentage of total revenues compared to the year ended December 31, 2019.

Research and Development

	Year Ended December 31		% Change
	2019	2018	
	(dollars in thousands)		
Research and development	\$ 748,369	\$ 529,501	41%
Percentage of revenues	22%	20%	

Research and development expenses increased \$218.9 million during the year ended December 31, 2019, compared to the prior year, primarily due to increased headcount, which resulted in an increase of \$114.0 million in personnel-related costs excluding stock-based compensation, an increase of \$59.6 million in stock-based compensation and an increase of \$33.9 million in overhead expenses. The remaining increase of \$4.3 million was primarily due to increases in data center capacity and depreciation costs.

We expect research and development expenses for the year ending December 31, 2020 to increase in absolute dollars as we continue to improve the existing functionality of our services, develop new applications to fill market needs and enhance our core platform, and increase slightly as a percentage of total revenues compared to the year ended December 31, 2019.

General and Administrative

	Year Ended December 31		% Change
	2019	2018	
	(dollars in thousands)		
General and administrative	\$ 339,016	\$ 296,027	15%
Percentage of revenues	10%	12%	

General and administrative expenses increased \$43.0 million during the year ended December 31, 2019, compared to the prior year, primarily due to increased headcount, which resulted in an increase of \$36.3 million in personnel-related costs excluding stock-based compensation, an increase of \$7.4 million in overhead and other expenses. Amortization of intangibles increased \$4.1 million during the year ended December 31, 2019 compared to the prior year, as a result of acquisitions. Outside services costs increased \$10.7 million during the year ended December 31, 2019 compared to the prior year, primarily due to an increase in contractors and professional fees to support our administrative function. These increases were partially offset by a decrease in stock-based compensation of \$16.0 million, primarily attributable to the forfeiture of certain awards by our former Chief Executive Officer and former Chief Financial Officer.

We expect general and administrative expenses to increase in absolute dollars for the year ending December 31, 2020 as we continue to hire new employees, but remain relatively flat as a percentage of total revenues compared to December 31, 2019.

Stock-based Compensation

	Year Ended December 31		% Change
	2019	2018	
(dollars in thousands)			
Cost of revenues:			
Subscription	\$ 72,728	\$ 48,738	49%
Professional services and other	43,123	32,816	31%
Sales and marketing	268,408	228,045	18%
Research and development	194,821	135,203	44%
General and administrative	83,115	99,151	(16%)
Total stock-based compensation	\$ 662,195	\$ 543,953	22%
Percentage of revenues	19%	21%	

Stock-based compensation expense increased \$118.2 million during the year ended December 31, 2019, compared to the prior year, primarily due to additional grants to current and new employees and increased weighted-average grant date fair value of stock awards.

Stock-based compensation expense is inherently difficult to forecast due to fluctuations in our stock price. Based upon our stock price as of December 31, 2019, we expect stock-based compensation expense to continue to increase in absolute dollars for the year ending December 31, 2020 as we continue to issue stock-based awards to our employees, but remain relatively flat as a percentage of total revenues compared to the year ended December 31, 2019.

Foreign Currency Exchange

Our international operations have provided and will continue to provide a significant portion of our total revenues. Revenues outside North America represented 34% of total revenues for each of the years ended December 31, 2019 and 2018. Because we primarily transact in foreign currencies for sales outside of the United States, the general strengthening of the U.S. Dollar relative to other major foreign currencies (primarily the Euro and British Pound Sterling) from the year ended December 31, 2018 to the year ended December 31, 2019 had an unfavorable impact on our revenues. For entities reporting in currencies other than the U.S. Dollar, if we had translated our results for the year ended December 31, 2019 at the average exchange rates in effect for the year ended December 31, 2018 rather than the actual exchange rates in effect during the period, our reported subscription revenues would have been \$57.6 million higher and our reported professional services and other revenues would have been \$4.8 million higher.

In addition, because we primarily transact in foreign currencies for cost of sales and operating expenses outside of the United States, the general strengthening of the U.S. Dollar relative to other major foreign currencies from the year ended December 31, 2018 to the year ended December 31, 2019 had a favorable impact on our cost of sales and operating expenses. For entities reporting in currencies other than the U.S. Dollar, if we had translated our results for the year ended December 31, 2019 at the average exchange rates in effect for the year ended December 31, 2018 rather than the actual exchange rates in effect during the period, our reported cost of subscription revenues, cost of professional services and other revenues, sales and marketing expenses and research and development expenses would have been \$8.0 million, \$4.0 million, \$19.1 million and \$2.3 million higher, respectively. The impact from the foreign currency movements from the year ended December 31, 2018 to the year ended December 31, 2019 is not material to general and administrative expenses.

Interest Expense

	Year Ended December 31		% Change
	2019	2018	
	(dollars in thousands)		
Interest expense	\$ (33,283)	\$ (52,733)	(37%)
Percentage of revenues	(1%)	(2%)	

Interest expense decreased \$19.5 million during the year ended December 31, 2019, compared to the prior year, due to the repayments of the 2018 Notes that occurred in 2018. For the year ending December 31, 2020, we expect to incur approximately \$35.0 million in amortization expense of debt discount and issuance costs related to the 2022 Notes.

Interest Income and Other Income (Expense), net

	Year Ended December 31		% Change
	2019	2018	
	(dollars in thousands)		
Interest income	\$ 55,409	\$ 34,624	60 %
Foreign currency exchange gain (loss), net of derivative contracts	(594)	6,632	NM
Realized gain on marketable equity securities	—	19,257	(100%)
Loss on early note conversions	—	(4,063)	100%
Other	3,530	(314)	NM
Interest income and other income (expense), net	<u>\$ 58,345</u>	<u>\$ 56,135</u>	4 %

NM - Not meaningful.

Interest income and other income (expense), net increased \$2.2 million during the year ended December 31, 2019, compared to the prior year, primarily due to an increase of \$20.8 million in interest income resulting from higher cash and investment balances and higher yields on our invested balances during the year ended December 31, 2019, an increase of \$2.1 million in other due to an unrealized gain on non-marketable securities relating to observable price changes and the absence of a \$4.1 million loss recorded on early note conversions in the prior year.

These increases were partially offset by a decrease of \$19.3 million in realized gains relating to changes in the market value of our marketable equity securities held and sold in the prior year, and a decrease of \$7.2 million due to fluctuations in foreign currency exchange rates, net of the effect of our foreign currency derivative contracts.

To mitigate our risks associated with fluctuations in foreign currency exchange rates, we enter into foreign currency derivative contracts with maturities of 12 months or less to hedge a portion of our net outstanding monetary assets and liabilities. These hedging contracts may reduce, but cannot entirely eliminate, the impact of adverse currency exchange rate movements.

Benefit from Income Taxes

	Year Ended December 31		% Change
	2019	2018	
	(dollars in thousands)		
Income (loss) before income taxes	\$ 67,185	\$ (39,024)	NM
Benefit from income taxes	(559,513)	(12,320)	NM
Effective tax rate	(833%)	32%	

NM - Not meaningful.

Our effective tax rate was (833%) for the year ended December 31, 2019 compared to 32% for the prior year ended December 31, 2018, primarily due to the release of the valuation allowance on the Irish deferred tax assets of \$574.2 million. See Note 17 in the notes to our consolidated financial statements included elsewhere in this Annual Report on Form 10-K for our reconciliation of income taxes at the statutory federal rate to the provision for income taxes.

We maintained a full valuation allowance on our U.S. federal and state deferred tax assets as of December 31, 2019 and 2018, respectively. In addition, we maintained a valuation allowance against certain foreign deferred tax assets as of December 31, 2018. The significant components of the tax expense recorded are current cash taxes payable in various jurisdictions. The cash tax expenses are impacted by each jurisdiction's individual tax rates, laws on timing of recognition of income and deductions, and availability of net operating losses and tax credits. Given the full valuation allowance on our U.S. federal and state deferred tax assets, sensitivity of current cash taxes to local rules and our foreign structuring, we expect that our effective tax rate could fluctuate significantly on a quarterly basis and could be adversely affected to the extent earnings are lower than anticipated in countries that have lower statutory rates and higher than anticipated in countries that have higher statutory rates. To the extent sufficient positive evidence becomes available, we may release all or a portion of our valuation allowance in one or more future periods. A release of the valuation allowance, if any, would result in the recognition of certain deferred tax assets and a material income tax benefit for the period in which such release is recorded.

Quarterly Results of Operations

The following table sets forth our selected unaudited quarterly consolidated statements of comprehensive income (loss). We have prepared the quarterly data on a consistent basis with the audited consolidated financial statements included elsewhere in this Annual Report on Form 10-K. In the opinion of management, the financial information reflects all necessary adjustments, consisting only of normal recurring adjustments, necessary for a fair statement of this data. This information should be read in conjunction with the audited consolidated financial statements and related notes thereto included elsewhere in this Annual Report on Form 10-K. The results of historical periods are not necessarily indicative of the results of operations for a full year or any future period.

	For the Three Months Ended							
	December 31, 2019	September 30, 2019	June 30, 2019	March 31, 2019	December 31, 2018	September 30, 2018	June 30, 2018	March 31, 2018
	(in thousands, except per share data)							
Total revenues	\$ 951,774	\$ 885,833	\$ 833,904	\$ 788,926	\$ 715,441	\$ 673,097	\$ 631,056	\$ 589,222
Gross profit	\$ 740,321	\$ 685,040	\$ 635,757	\$ 602,674	\$ 547,279	\$ 515,239	\$ 477,891	\$ 445,749
Net income (loss) ⁽¹⁾	\$ 598,724	\$ 40,598	\$ (11,079)	\$ (1,545)	\$ 7,015	\$ 8,405	\$ (52,746)	\$ 10,622
Net income (loss) per share - basic ⁽¹⁾	\$ 3.17	\$ 0.22	\$ (0.06)	\$ (0.01)	\$ 0.04	\$ 0.05	\$ (0.30)	\$ 0.06
Net income (loss) per share - diluted ⁽¹⁾	\$ 3.03	\$ 0.21	\$ (0.06)	\$ (0.01)	\$ 0.04	\$ 0.04	\$ (0.30)	\$ 0.06
Weighted-average shares used to compute net income (loss) per share - basic	189,042	188,074	186,678	182,062	179,764	178,720	177,343	175,483
Weighted-average shares used to compute net income (loss) per share - diluted	197,843	197,878	186,678	182,062	190,662	192,191	177,343	190,250

(1) The amounts for the three months ended December 31, 2019 reflect the impact of an income tax benefit of \$574.2 million from the release of the valuation allowance on the Irish deferred tax assets. Refer to Note 17 in the notes to our consolidated financial statements included elsewhere in this Annual Report on Form 10-K for further details.

Seasonality, Cyclical and Quarterly Trends

We have historically experienced seasonality in terms of when we enter into customer agreements for our services. We sign a significantly higher percentage of agreements with new customers, as well as renewal agreements with existing customers, in the quarter ended December 31. The increase in customer agreements for the quarter ended December 31 is primarily a result of both the terms of our commission plans which incentivize our direct sales organization to meet their annual quotas by December 31 and the large enterprise account buying patterns typical in the software industry, which are driven primarily by the expiration of annual authorized budgeted expenditures. As a result, our billings and sequential growth in RPO has been historically highest in the quarter ended December 31. While we continue to see an increase in the number of agreements entered into with the U.S. Federal government throughout the year as it modernizes its IT infrastructure and accelerates its use of modern technology to digitally transform how it operates, the number of agreements entered into with the U.S. federal government has historically been higher in the quarter ended September 30, driven primarily by timing of annual budget expenditures. Furthermore, we usually sign a significant portion of our customer agreements during the last month, and often the last two weeks, of each quarter. This seasonality in the timing of entering into customer contracts is sometimes not immediately apparent in our billings, due to the fact that we typically exclude cloud-offering contracts with a future start date from our billings, unless such amounts have been paid as of the balance sheet date. Similarly, this seasonality is reflected to a much lesser extent, and sometimes is not immediately apparent in our revenues, due to the fact that we recognize subscription revenues from our cloud offering contracts over the term of the subscription agreement, which is generally 12 to 36 months. Although these seasonal factors are common in the technology industry, historical patterns should not be considered a reliable indicator of our future sales activity or performance.

Our revenues have increased over the periods presented due to increased sales to new and existing customers. Our operating expenses have increased over the periods presented due to increases in headcount, data center operations and other related expenses to support our growth. We have historically seen an increase in marketing expenses in the quarter ended June 30, and a corresponding decrease in marketing expenses in the quarter ended September 30 due to the expenses incurred for our annual Knowledge user conference, partially offset by related proceeds. Marketing expenses in the quarter ended December 31 are also historically higher due to user forums we conduct in that quarter. We anticipate operating expenses will continue to increase in future periods as we continue to focus on investing in the long-term growth of our business.

Our free cash flow is impacted by the timing of collections and disbursements, including the timing of capital expenditures. We have historically seen higher collections in the quarter ended March 31 due to seasonality in timing of entering into customer contracts as described above. We have historically seen higher disbursements in the quarters ended March 31 and September 30, due to payouts under our annual commission plans in the quarter ended March 31, purchases under our employee stock purchase plan in both quarters ended March 31 and September 30, and payouts under our bonus plans in both quarters ended March 31 and September 30.

Liquidity and Capital Resources

Our principal sources of liquidity are our cash and cash equivalents, investments, and cash generated from operations. As of December 31, 2019, we had \$1.7 billion in cash and cash equivalents and short-term investments, of which \$202.8 million represented cash held by foreign subsidiaries and \$192.2 million is denominated in currencies other than the U.S. Dollar. In addition, we had \$1.0 billion in long-term investments that provide additional capital resources. We do not anticipate that we will need funds generated from foreign operations to fund our domestic operations.

Prior to the enactment of the Tax Cuts and Jobs Act of 2017 (the Tax Act), we considered earnings from foreign operations to be indefinitely reinvested outside of the United States. Subsequent to the enactment of the Tax Act, we determined that the unremitted earnings of our foreign subsidiaries will no longer be considered indefinitely reinvested, except in certain designated jurisdictions in which the resident entity is a service provider which is not expected to generate substantial amounts of cash in excess of what may be reinvested by the local entity.

In May and June 2017, we issued the 2022 Notes with an aggregate principal amount of \$782.5 million. In connection with the issuance of the 2022 Notes, we entered into the 2022 Note Hedge transactions and 2022 Warrant transactions with certain financial institutions. The price of our common stock was greater than or equal to 130% of the conversion price of the 2022 Notes for at least 20 trading days during the 30 consecutive trading days ending on the last trading day of the quarters ended June 30, 2018 through December 31, 2019, except for the quarter ended December 31, 2018. Therefore, our 2022 Notes became convertible at the holders' option beginning on July 1, 2018 and continue to be convertible through March 31, 2020, except for the quarter ended March 31, 2019 because the Conversion Condition for the 2022 Notes was not met for the quarter ended December 31, 2018. The impact of the 2022 Notes on our liquidity will depend on the settlement method we elect. We currently intend to settle the principal amount of any converted 2022 Notes in cash. During the year ended December 31, 2019, we paid cash to settle an immaterial principal amount of the 2022 Notes. Based on additional conversion requests we have received through the filing date, we expect to settle in cash an aggregate of approximately \$2.5 million and \$5.2 million in principal amount of the 2022 Notes during the first and second quarters of 2020, respectively. We may receive additional conversion requests that require settlement in the second quarter of 2020.

During the year ended December 31, 2019, we issued approximately 4.3 million shares of our common stock upon the automatic exercise of the 2018 Warrants. The 2018 Warrants were no longer outstanding as of the second quarter of 2019. We expect to issue additional shares of our common stock in the second half of 2022 upon the automatic exercise of the 2022 Warrants. As the 2022 Warrants will be net share settled, there will be no impact on our liquidity. The total number of shares of our common stock we will issue depends on the daily volume-weighted average stock prices over a 60 trading day period beginning on the first expiration date of the 2022 Warrants, which will be September 1, 2022. Refer to Note 11 in the notes to our consolidated financial statements included elsewhere in this Annual Report on Form 10-K for additional information.

We anticipate our current cash and cash equivalents balance and cash generated from operations will be sufficient to meet our liquidity needs, including the repayment of our 2022 Notes, expansion of data centers, lease obligations, expenditures related to the growth of our headcount and the acquisition of property and equipment, intangibles, and investments in office facilities, to accommodate our growth for at least the next 12 months. Whether these resources are adequate to meet our liquidity needs beyond that period will depend on our growth, operating results, cash utilized for acquisitions and/or debt retirements if any are consummated, and the capital expenditures required to meet possible increased demand for our services. If we require additional capital resources to grow our business at any time in the future, we may seek to finance our operations from the current funds available or seek additional equity or debt financing.

	Year Ended December 31,	
	2019	2018
	(in thousands)	
Net cash provided by operating activities	\$ 1,235,972	\$ 811,089
Net cash used in investing activities	(724,477)	(347,422)
Net cash used in financing activities	(301,856)	(607,428)
Net increase (decrease) in cash, cash equivalents and restricted cash	209,453	(159,291)

Operating Activities

Cash provided by operating activities mainly consists of our net income (loss) adjusted for repayments of convertible senior notes attributable to debt discount, certain non-cash items, including depreciation and amortization, amortization of deferred commissions, amortization of issuance cost and debt discount, stock-based compensation, deferred income taxes, and changes in operating assets and liabilities during the year.

Net cash provided by operating activities was \$1.2 billion for the year ended December 31, 2019 compared to \$811.1 million for the prior year. The increase in operating cash flow was primarily due to the repayments of convertible senior notes attributable to debt discount that were made during the year ended December 31, 2018 and the favorable impact on operating cash flow from the change in net income (loss) adjusted for non-cash items to reconcile net income (loss) to net cash provided by operations, offset by the unfavorable impact on operating cash flow from changes in operating assets and liabilities.

Investing Activities

Net cash used in investing activities for the year ended December 31, 2019 was \$724.5 million compared to \$347.4 million for the prior year. The increase in cash used in investing activities was mainly due to a \$341.8 million increase in net purchases of investments, a \$48.3 million increase in purchases of other intangibles, and a \$40.4 million increase in capital expenditures related to the purchases of infrastructure hardware equipment as well as investments in leasehold improvements, furniture and equipment to support our headcount growth. The increase in cash used in investing activities was partially offset by a \$30.0 million decrease in cash outflow for business combinations, net of cash and restricted cash acquired and a \$23.4 million increase in net realized gains on derivatives not designated as hedging instruments.

Financing Activities

Net cash used in financing activities for the year ended December 31, 2019 was \$301.9 million compared to \$607.4 million for the prior year due to repayments of convertible senior notes attributable to principal of \$429.6 million during the year ended December 31, 2018, a \$3.7 million increase in proceeds from employee equity plans, and partially offset by a \$128.7 million increase in taxes paid related to net share settlement of equity awards.

Contractual Obligations and Commitments

The following table represents our future non-cancelable contractual obligations as of December 31, 2019, aggregated by type:

	Payments Due by Period				
	Total	Less Than 1 Year	1 – 3 Years	3 – 5 Years	More Than 5 Years
	(in thousands)				
Operating leases, including imputed interest ⁽¹⁾	\$ 530,699	\$ 67,629	\$ 128,688	\$ 103,777	\$ 230,605
Purchase obligations ⁽²⁾	180,239	70,819	95,022	11,768	2,630
Principal amount payable on our convertible senior notes ⁽³⁾	782,491	—	782,491	—	—
Total contractual obligations	\$ 1,493,429	\$ 138,448	\$ 1,006,201	\$ 115,545	\$ 233,235

(1) Consists of future non-cancelable minimum rental payments under operating leases for some of our offices and data centers.

(2) Consists of future minimum payments under non-cancelable purchase commitments related to our daily business operations. Not included in the table above are certain purchase commitments related to our future annual Knowledge user conferences and other customer or sales conferences to be held in 2021 and future years. If we were to cancel these contractual commitments as of December 31, 2019, we would have been obligated to pay cancellation penalties of approximately \$16.3 million in aggregate.

(3) For additional information regarding our convertible senior notes, refer to Note 11 in the notes to our consolidated financial statements included elsewhere in this Annual Report on Form 10-K.

In addition to the obligations in the table above, \$6.1 million of unrecognized tax benefits have been recorded as liabilities as of December 31, 2019. It is uncertain if or when such amounts may be settled.

Off-Balance Sheet Arrangements

During all periods presented, we did not have any relationships with unconsolidated entities or financial partnerships, such as entities often referred to as structured finance or special purpose entities, which would have been established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes. As such, we are not exposed to any financing, liquidity, market or credit risk that could arise if we had engaged in those types of relationships.

Critical Accounting Policies and Significant Judgments and Estimates

Our management's discussion and analysis of financial condition and results of operations is based on our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States. The preparation of these consolidated financial statements requires us 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 consolidated financial statements, as well as the reported revenues and expenses during the reporting periods. These items are monitored and analyzed by us for changes in facts and circumstances, and material changes in these estimates could occur in the future. We base our estimates on historical experience and on various other factors that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. Changes in estimates are reflected in reported results for the period in which they become known. Actual results may differ from these estimates under different assumptions or conditions and such differences could be material.

While our significant accounting policies are more fully described in Note 2 in the notes to our consolidated financial statements included elsewhere in this Annual Report on Form 10-K, we believe that the following accounting policies are critical to the process of making significant judgments and estimates in the preparation of our audited consolidated financial statements.

Revenue Recognition

We report our revenues in two categories: (i) subscriptions and (ii) professional services and other.

Revenues are 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 determine revenue recognition through the following steps:

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

Subscription revenues

Subscription revenues are primarily comprised of subscription fees that give customers access to the ordered subscription service, related support and updates, if any, to the subscribed service during the subscription term. For our cloud services, we recognize subscription revenues ratably over the contract term beginning on the commencement date of each contract, the date we make our services available to our customers. Our contracts with customers typically include a fixed amount of consideration and are generally non-cancelable and without any refund-type provisions. We typically invoice our customers annually in advance for our subscription services upon execution of the initial contract or subsequent renewal, and our invoices are typically due within 30 days from the invoice date.

Subscription revenues also include revenues from self-hosted offerings in which customers deploy, or we grant customers the option to deploy without significant penalty, our subscription service internally or contract with a third party to host the software. For these contracts, we account for the software element and the related support and updates separately as they are distinct performance obligations (refer to the discussion below related to contracts with multiple performance obligations for further details). The transaction price is allocated to separate performance obligations on a relative standalone selling price (SSP) basis. The transaction price allocated to the software element is recognized when transfer of control of the software to the customer is complete. The transaction price allocated to the related support and updates are recognized ratably over the contract term.

Professional services and other revenues

Our professional services arrangements are primarily on a time-and-materials basis, and we generally invoice our customers monthly in arrears for these professional services based on actual hours and expenses incurred. Some of our professional services arrangements are on a fixed fee or subscription basis. Professional services revenues are recognized as services are delivered. Other revenues consist of fees from customer training delivered on-site or through publicly available classes. Typical payment terms require our customers to pay us within 30 days of invoice.

Contracts with multiple performance obligations

We enter into contracts that can include various combinations of products and services, which are generally capable of being distinct and accounted for as separate performance obligations. For these contracts, the transaction price is allocated to the separate performance obligations on a relative SSP basis. Evaluating the terms and conditions included within our customer contracts for appropriate revenue recognition and determining whether products and services are considered distinct performance obligations that should be accounted for separately versus together may require significant judgment.

Deferred Commissions

Deferred commissions are the incremental selling costs that are associated with acquiring customer contracts and consist primarily of sales commissions paid to our sales force and referral fees paid to independent third parties. Capitalized sales commissions also include the associated payroll taxes and fringe benefit costs associated with payments to our sales employees to the extent they are incremental. Commissions and referral fees earned upon the execution of initial and expansion contracts are primarily deferred and amortized over a period of benefit that we have determined to be five years. Commissions earned upon the renewal of customer contracts are deferred and amortized over the average renewal term. Additionally, for self-hosted offerings, consistent with the recognition of subscription revenues for self-hosted offerings, a portion of the commission cost is expensed upfront when the self-hosted offering is made available. The determination of the period of benefit requires significant judgment by taking into consideration our customer contracts, our technology life cycle and other factors. We include amortization of deferred commissions in sales and marketing expense in our consolidated statements of comprehensive income (loss).

Business combinations

We apply a screen test to evaluate if substantially all of the fair value of the gross assets acquired is concentrated in a single identifiable asset or group of similar identifiable assets to determine whether a transaction is accounted for as an asset acquisition or business combination. If the screen test is not met, the integrated set of activities and assets is considered a business based on whether there are inputs and substantive processes in place. The allocation of the purchase price requires us to make significant estimates in determining the fair value of acquired assets and assumed liabilities, especially with respect to intangible assets. The excess of the purchase price in a business combination over the fair value of these tangible and intangible assets acquired and liabilities assumed is recorded as goodwill. These estimates are based upon a number of factors, including historical experience, market conditions and information obtained from the management of the acquired company. Critical estimates in valuing certain intangible assets included, but are not limited to, cash flows that an asset is expected to generate in the future, discount rates, the time and expense that would be necessary to recreate the assets and the profit margin a market participant would receive. These estimates are inherently uncertain and unpredictable and, as a result, actual results may differ from estimates.

Stock-based Compensation

We recognize compensation expense related to stock options and restricted stock units (RSUs) with only service conditions on a straight-line basis over the requisite service period, which is generally the four-year vesting term. For stock options and RSUs granted with both service conditions and performance or market conditions, the expenses are recognized on a graded vesting basis over the requisite service period and, for awards with performance conditions, when it is probable that the performance conditions will be achieved. This has the impact of greater stock-based compensation expense during the initial years of the vesting period as stock-based compensation cost is recognized over the requisite service period for each separately vesting tranche of the award as though the award were, in substance, multiple awards. We recognize compensation expense related to shares issued pursuant to the employee stock purchase plan (ESPP) on a straight-line basis over the six-month offering period. We estimate the fair value of stock option grants with only service conditions and shares issued pursuant to the ESPP using the Black-Scholes options pricing model and fair value of RSU awards (including performance-based RSUs) using the fair value of our common stock on the date of grant. We recognize compensation expense net of estimated forfeiture activity, which is based on historical forfeiture rates. We evaluate the forfeiture rates at least annually or when events or circumstances indicate a change may be needed. This may cause a fluctuation in our stock-based compensation in the period of change.

Income Taxes

We use the asset and liability method of accounting for income taxes, in which deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the consolidated financial statement carrying amounts of existing assets and liabilities and their respective tax bases. We measure deferred tax assets and liabilities using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be reversed. We recognize the effect on deferred tax assets and liabilities of a change in tax rates as income and expense in the period that includes the enactment date. A valuation allowance is established if it is more likely than not that all or a portion of the deferred tax asset will not be realized. In determining the need for a valuation allowance, we consider future growth, forecasted earnings, future taxable income, the mix of earnings in the jurisdictions in which we operate, historical earnings, taxable income in prior years, if carryback is permitted under the law, carryforward periods and prudent and feasible tax planning strategies. To the extent sufficient positive evidence becomes available, we may release all or a portion of our valuation allowance in one or more future periods. A release of the valuation allowance, if any, would result in the recognition of certain deferred tax assets and a material income tax benefit for the period in which such release is recorded.

Due to cumulative losses over recent years and based on all available positive and negative evidence, we have determined that it is more likely than not that our U.S. deferred tax assets will not be realizable as of December 31, 2019. We recognized an income tax benefit of \$574.2 million due to the release of the valuation allowance on the Irish deferred tax assets for the year ended December 31, 2019. These Irish deferred tax assets were created primarily as a result of the difference between the tax basis in our Irish subsidiary and the cost reported in our consolidated financial statements resulting from the transfer of intangible assets to the Irish subsidiary as part of our foreign restructuring in 2018. Management applied significant judgment in assessing the positive and negative evidence available in the determination of the amount of deferred tax assets that were more likely than not to be realized in the future. In determining the need, or continued need, for a valuation allowance, we considered the weighting of the positive and negative evidence, which includes, among other things, emergence from a cumulative loss position over the previous three years during the fourth quarter of 2019, historical earnings, future growth, forecasted earnings, and future taxable income.

Our tax positions are subject to income tax audits by multiple tax jurisdictions throughout the world. We recognize the tax benefit of an uncertain tax position only if it is more likely than not the position is sustainable upon examination by the taxing authority based on the technical merits. We measure the tax benefit recognized as the largest amount of benefit which is more likely than not to be realized upon settlement with the taxing authority. We recognize interest accrued and penalties related to unrecognized tax benefits in our tax provision. Significant judgment is required to evaluate uncertain tax positions. Our evaluations are based upon a number of factors, including changes in facts or circumstances, changes in tax law or guidance, correspondence with tax authorities during the course of audits and effective settlement of audit issues. Changes in the recognition or measurement of uncertain tax positions could result in material increases or decreases in our income tax expense in the period in which we make the change, which could have a material impact on our effective tax rate and operating results.

We calculate the current and deferred income tax provision based on estimates and assumptions that could differ from the actual results reflected in income tax returns filed in subsequent years and record adjustments based on filed income tax returns when identified. The amount of income taxes paid is subject to examination by U.S. federal, state and foreign tax authorities. The estimate of the potential outcome of any uncertain tax issue is subject to management's assessment of relevant risks, facts and circumstances existing at that time. To the extent the assessment of such tax position changes, we record the change in estimate in the period in which we make the determination.

New Accounting Pronouncements Pending Adoption

The impact of recently issued accounting standards is set forth in Note 2, Summary of Significant Accounting Policies, of the notes to our consolidated financial statements included elsewhere in this Annual Report on Form 10-K.

ITEM 7A. QUALITATIVE AND QUANTITATIVE DISCLOSURES ABOUT MARKET RISK

Foreign Currency Exchange Risk

We have foreign currency risks related to our revenue and operating expenses denominated in currencies other than the U.S. Dollar, primarily the Euro and British Pound Sterling. We are a net receiver of Euro and British Pound Sterling, and therefore benefit from a weakening of the U.S. Dollar relative to these currencies and, conversely, are adversely affected by a strengthening of the U.S. Dollar relative to these currencies. Revenues denominated in U.S. Dollar as a percentage of total revenues was 71% during each of the years ended December 31, 2019 and 2018, and 73% during the year ended December 31, 2017.

To mitigate our risks associated with fluctuations in foreign currency exchange rates, we initiated a limited hedging program during the year ended December 31, 2018 by entering into foreign currency derivative contracts to hedge a portion of our net outstanding monetary assets and liabilities. These derivative contracts are intended to offset gains or losses related to remeasuring monetary assets and liabilities that are denominated in currencies other than the functional currency of the entities in which they are recorded.

A hypothetical 10% increase in the U.S. Dollar against other currencies would have resulted in a decrease in operating income of approximately \$30.6 million for the year ended December 31, 2019 and an increase in operating loss of approximately \$23.4 million and \$15.3 million for the years ended December 31, 2018 and 2017, respectively. This analysis disregards the possibilities that rates can move in opposite directions and that losses from one geographic area may be offset by gains from another geographic area.

These derivative contracts expose us to credit risk to the extent that the counterparties may be unable to meet the terms of the arrangement. We mitigate this credit risk by transacting with major financial institutions with high credit ratings and entering into master netting arrangements, which permit net settlement of transactions with the same counterparty. While the contract or notional amount is often used to express the volume of foreign currency derivative contracts, the amounts potentially subject to credit risk are generally limited to the amounts, if any, by which the counterparties' obligations under the agreements exceed our obligations to the counterparties. We are not required to pledge, and are not entitled to receive, cash collateral related to these derivative instruments. We do not enter into derivative contracts for trading or speculative purposes. Refer to Note 8 in the notes to our consolidated financial statements included elsewhere in this Annual Report on Form 10-K for additional information.

Interest Rate Sensitivity

We had an aggregate of \$2.7 billion in cash, cash equivalents, short-term investments and long-term investments as of December 31, 2019. This amount was invested primarily in money market funds, certificates of deposit, corporate notes and bonds, government and agency securities and other debt securities with a minimum rating of BBB by Standard & Poor's, Baa2 by Moody's, or BBB by Fitch. The primary objectives of our investment activities are the preservation of capital and support of our liquidity requirements. Our investments are exposed to market risk due to fluctuations in interest rates, which may affect our interest income and the fair market value of our investments.

A hypothetical 100 basis point increase in interest rates would have resulted in an approximate \$14.3 million decline of the fair value of our available-for-sale securities. This estimate is based on a sensitivity model that measures market value changes when changes in interest rates occur.

As of December 31, 2018, we had an aggregate of \$2.1 billion in cash, cash equivalents, short-term investments and long-term investments, and a hypothetical 100 basis point increase in interest rates would have resulted in an approximate \$9.2 million decline of the fair value of our available-for-sale securities.

Market Risk

In May and June 2017, we issued the 2022 Notes with an aggregate principal amount of \$782.5 million. We carry these instruments at face value less unamortized discount on our consolidated balance sheet. Because these instruments do not bear interest, we have no economic interest rate exposure on our 2022 Notes associated with changes in interest rates. However, the fair value of our 2022 Notes is exposed to interest rate risks. Generally, the fair market value of our 2022 Notes will increase as interest rates fall and decrease as interest rates rise. In addition, the fair value of the Notes is affected by our stock price due to the conversion feature, and will generally increase as the stock price increases.

We hold cash balances with multiple financial institutions in various countries and these balances routinely exceed deposit insurance limits.

As of December 31, 2019 and 2018, we had \$22.4 million and \$14.6 million, respectively, of equity investment in privately-held companies that are in the development stage. The fair value of these strategic investments may fluctuate depending on the financial condition and near-term prospects of these companies, and we may be required to record an impairment charge if the carrying value of these investments exceed their fair value. In addition, upon adoption of ASU 2016-01 as of January 1, 2018, we are required to measure equity securities at fair value with changes in fair value recognized through our consolidated statements of comprehensive income (loss). As a result, we anticipate additional volatility to our consolidated statements of comprehensive income (loss) in future periods, due to the valuation and timing of observable price changes of our investments in privately held securities. These changes could be material based on market conditions and events.

ITEM 8. CONSOLIDATED FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

SERVICENOW, INC.

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The supplementary financial information required by this Item 8 is included in Part II, Item 7 under the caption "Quarterly Results of Operations", which is incorporated herein by reference.

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of ServiceNow, Inc.

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of ServiceNow, Inc. and its subsidiaries (the “Company”) as of December 31, 2019 and 2018, and the related consolidated statements of comprehensive income (loss), of stockholders’ equity and of cash flows for each of the three years in the period ended December 31, 2019, including the related notes (collectively referred to as the “consolidated financial statements”). We also have audited the Company’s internal control over financial reporting as of December 31, 2019, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2019 and 2018, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2019 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2019, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the COSO.

Change in Accounting Principle

As discussed in Note 2 to the consolidated financial statements, the Company changed the manner in which it accounts for leases in 2019.

Basis for Opinions

The Company’s management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in Management’s Report on Internal Control Over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on the Company’s consolidated financial statements and on the Company’s internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

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

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

Definition and Limitations of Internal Control over Financial Reporting

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

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

Critical Audit Matters

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

Subscription Revenue Recognition - Contracts with Multiple Performance Obligations

As described in Note 2 to the consolidated financial statements, the Company enters into contracts that can include various combinations of products and services, which are generally capable of being distinct and accounted for as separate performance obligations. Subscription revenues include self-hosted offerings in which customers deploy, or the Company grants customers the option to deploy without significant penalty, the Company's subscription services internally or contract with a third party to host the software. For these contracts, management accounts for the software element and the related support and updates separately as they are distinct performance obligations. The transaction price allocated to the software element is recognized when transfer of control of the software to the customer is complete. The transaction price allocated to the related support and updates are recognized ratably over the contract term. As disclosed by management, evaluating the terms and conditions included within the Company's customer contracts for appropriate revenue recognition and determining whether products and services are considered distinct performance obligations that should be accounted for separately versus together may require significant judgment. The Company recognized subscription revenues of \$3.3 billion for the year ended December 31, 2019.

The principal considerations for our determination that performing procedures relating to subscription revenue recognition - contracts with multiple performance obligations is a critical audit matter are that there was significant judgment by management in identifying distinct performance obligations and evaluating the terms and conditions that may impact revenue recognition. This in turn resulted in significant effort and subjectivity in performing our audit procedures and in evaluating audit evidence.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to the revenue recognition process, including controls over the identification of performance obligations and evaluation of terms and conditions that may impact revenue recognition. These procedures also included, among others, testing management's process for identifying distinct performance obligations and evaluating the revenue recognition impact of contractual terms and conditions by examining contracts on a test basis.

Realizability of Irish Deferred Tax Assets

As described in Note 17 to the consolidated financial statements, the Company recognized an income tax benefit of \$574.2 million due to the release of the valuation allowance on the Irish deferred tax assets for the year ended December 31, 2019. These Irish deferred tax assets were created primarily as a result of the difference between the tax basis in the Company's Irish subsidiary and the cost reported in the consolidated financial statements resulting from the transfer of intangible assets to the Irish subsidiary as part of the Company's foreign restructuring in 2018. Management applied significant judgment in assessing the positive and negative evidence available in the determination of the amount of deferred tax assets that were more-likely-than-not to be realized in the future. As disclosed by management, in determining the need, or continued need, for a valuation allowance, management considers the weighting of the positive and negative evidence, which includes, among other things, emergence from a cumulative loss position over the previous three years during the fourth quarter of 2019, historical earnings, future growth, forecasted earnings, and future taxable income.

The principal considerations for our determination that performing procedures relating to the realizability of the Irish deferred tax assets is a critical audit matter are (i) there was significant judgment by management in determining the amount of deferred tax assets that were more-likely-than-not to be realized in the future, which in turn led to a high degree of auditor judgment and subjectivity in applying procedures relating to assessing the positive and negative evidence used in management's determination, and (ii) significant audit effort was necessary in evaluating the audit evidence available to support the weighting of the positive and negative evidence.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to income taxes, including controls over the assessment of realizability of deferred tax assets, including assessing the positive and negative evidence. These procedures also included, among others, testing management's process for assessing the realizability of deferred tax assets, and evaluating management's weighting of positive and negative evidence.

/s/ PricewaterhouseCoopers LLP
San Jose, California
February 20, 2020

We have served as the Company's auditor since 2011.

SERVICENOW, INC.
CONSOLIDATED BALANCE SHEETS
(in thousands, except per share data)

	December 31,	
	2019	2018
Assets		
Current assets:		
Cash and cash equivalents	\$ 775,778	\$ 566,204
Short-term investments	915,317	931,718
Accounts receivable, net	835,279	574,810
Current portion of deferred commissions	175,039	139,890
Prepaid expenses and other current assets	125,488	132,071
Total current assets	2,826,901	2,344,693
Deferred commissions, less current portion	333,448	282,490
Long-term investments	1,013,332	581,856
Property and equipment, net ⁽¹⁾	468,085	347,216
Operating lease right-of-use assets ⁽¹⁾	402,428	—
Intangible assets, net	143,850	100,582
Goodwill	156,756	148,845
Deferred tax assets	599,633	20,642
Other assets	77,997	52,816
Total assets	\$ 6,022,430	\$ 3,879,140
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	\$ 52,960	\$ 30,733
Accrued expenses and other current liabilities ⁽¹⁾	461,403	330,246
Current portion of deferred revenue	2,185,754	1,651,594
Current portion of operating lease liabilities ⁽¹⁾	52,668	—
Total current liabilities	2,752,785	2,012,573
Deferred revenue, less current portion	40,038	38,597
Operating lease liabilities, less current portion ⁽¹⁾	383,221	—
Convertible senior notes, net	694,981	661,707
Other long-term liabilities ⁽¹⁾	23,464	55,064
Total liabilities	3,894,489	2,767,941
Commitments and contingencies		
Stockholders' equity:		
Preferred stock, \$0.001 par value; 10,000 shares authorized; no shares issued or outstanding	—	—
Common stock \$0.001 par value; 600,000 shares authorized; 189,461 and 180,175 shares issued and outstanding at December 31, 2019 and 2018, respectively	189	180
Additional paid-in capital	2,454,741	2,093,834
Accumulated other comprehensive income (loss)	25,255	(4,035)
Accumulated deficit ⁽¹⁾	(352,244)	(978,780)
Total stockholders' equity	2,127,941	1,111,199
Total liabilities and stockholders' equity	\$ 6,022,430	\$ 3,879,140

(1) We adopted Topic 842 using the modified retrospective method as of January 1, 2019 and elected the transition option that allows us not to restate the comparative periods in our consolidated financial statements in the year of adoption. Refer to Note 2 for further details.

See accompanying notes to consolidated financial statements

SERVICENOW, INC.
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)
(in thousands, except per share data)

	Year Ended December 31,		
	2019	2018	2017
Revenues:			
Subscription	\$ 3,255,079	\$ 2,421,313	\$ 1,739,500
Professional services and other	205,358	187,503	178,994
Total revenues	3,460,437	2,608,816	1,918,494
Cost of revenues ⁽¹⁾:			
Subscription	549,642	417,421	315,570
Professional services and other	247,003	205,237	184,292
Total cost of revenues	796,645	622,658	499,862
Gross profit	2,663,792	1,986,158	1,418,632
Operating expenses ⁽¹⁾:			
Sales and marketing	1,534,284	1,203,056	894,977
Research and development	748,369	529,501	377,518
General and administrative	339,016	296,027	210,533
Total operating expenses	2,621,669	2,028,584	1,483,028
Income (loss) from operations	42,123	(42,426)	(64,396)
Interest expense	(33,283)	(52,733)	(53,394)
Interest income and other income (expense), net	58,345	56,135	4,384
Income (loss) before income taxes	67,185	(39,024)	(113,406)
(Benefit from) provision for income taxes	(559,513)	(12,320)	3,440
Net income (loss)	\$ 626,698	\$ (26,704)	\$ (116,846)
Net income (loss) per share - basic	\$ 3.36	\$ (0.15)	\$ (0.68)
Net income (loss) per share - diluted	\$ 3.18	\$ (0.15)	\$ (0.68)
Weighted-average shares used to compute net income (loss) per share - basic	186,466	177,846	171,176
Weighted-average shares used to compute net income (loss) per share - diluted	197,223	177,846	171,176
Other comprehensive income (loss):			
Foreign currency translation adjustments	\$ 20,539	\$ (1,903)	\$ 23,064
Unrealized gains (losses) on investments, net of tax	8,751	(665)	5,376
Other comprehensive income (loss)	29,290	(2,568)	28,440
Comprehensive income (loss)	\$ 655,988	\$ (29,272)	\$ (88,406)

(1) Includes stock-based compensation as follows:

	Year Ended December 31,		
	2019	2018	2017
Cost of revenues:			
Subscription	\$ 72,728	\$ 48,738	\$ 35,334
Professional services and other	43,123	32,816	27,401
Sales and marketing	268,408	228,045	170,527
Research and development	194,821	135,203	92,025
General and administrative	83,115	99,151	68,717

See accompanying notes to consolidated financial statements

SERVICENOW, INC.
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(in thousands)

	Common Stock		Additional Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive Income (Loss)	Total Stockholders' Equity
	Shares	Amount				
Balance at December 31, 2016	167,431	\$ 167	\$ 1,405,317	\$ (841,718)	\$ (22,673)	\$ 541,093
Common stock issued under employee stock plans	7,386	7	82,552	—	—	82,559
Repurchases and retirement of common stock	(541)	—	(55,000)	—	—	(55,000)
Taxes paid related to net share settlement of equity awards	—	—	(182,127)	—	—	(182,127)
Stock-based compensation	—	—	394,680	—	—	394,680
Equity component of the convertible notes, net	—	—	159,891	—	—	159,891
Purchase of convertible note hedge	—	—	(128,017)	—	—	(128,017)
Issuance of warrants	—	—	54,071	—	—	54,071
Other comprehensive income, net of tax	—	—	—	—	28,440	28,440
Net loss	—	—	—	(116,846)	—	(116,846)
Balance at December 31, 2017	174,276	\$ 174	\$ 1,731,367	\$ (958,564)	\$ 5,767	\$ 778,744
Cumulative effect adjustment for ASU 2016-01 adoption	—	—	—	7,234	(7,234)	—
Cumulative effect adjustment for ASU 2016-16 adoption	—	—	—	(746)	—	(746)
Common stock issued under employee stock plans	5,899	6	104,167	—	—	104,173
Taxes paid related to net share settlement of equity awards	—	—	(281,061)	—	—	(281,061)
Stock-based compensation	—	—	545,805	—	—	545,805
Settlement of 2018 Notes conversion feature	1,314	1	(773,302)	—	—	(773,301)
Benefit from exercise of 2018 Note Hedges	(1,314)	(1)	766,858	—	—	766,857
Other comprehensive loss, net of tax	—	—	—	—	(2,568)	(2,568)
Net loss	—	—	—	(26,704)	—	(26,704)
Balance at December 31, 2018	180,175	\$ 180	\$ 2,093,834	\$ (978,780)	\$ (4,035)	\$ 1,111,199
Cumulative effect adjustment for Topic 842 adoption	—	—	—	(162)	—	(162)
Common stock issued under employee stock plans	5,003	4	107,905	—	—	107,909
Taxes paid related to net share settlement of equity awards	—	—	(409,703)	—	—	(409,703)
Stock-based compensation	—	—	662,710	—	—	662,710
Settlement of 2018 Warrants	4,283	5	(5)	—	—	—
Other comprehensive income, net of tax	—	—	—	—	29,290	29,290
Net income	—	—	—	626,698	—	626,698
Balance at December 31, 2019	189,461	\$ 189	\$ 2,454,741	\$ (352,244)	\$ 25,255	\$ 2,127,941

See accompanying notes to consolidated financial statements

SERVICENOW, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)

	Year Ended December 31,		
	2019	2018	2017
Cash flows from operating activities:			
Net income (loss)	\$ 626,698	\$ (26,704)	\$ (116,846)
Adjustments to reconcile net income (loss) to net cash provided by operating activities:			
Depreciation and amortization	252,114	149,604	113,875
Amortization of deferred commissions	168,014	143,358	99,105
Amortization of debt discount and issuance costs	33,283	52,733	53,394
Stock-based compensation	662,195	543,953	394,004
Deferred income taxes	(575,765)	(34,180)	(5,724)
Realized gain on marketable equity securities	—	(19,257)	—
Repayments of convertible senior notes attributable to debt discount	—	(145,349)	—
Other	(8,921)	6,177	(905)
Changes in operating assets and liabilities, net of effect of business combinations:			
Accounts receivable	(259,835)	(146,148)	(99,693)
Deferred commissions	(255,605)	(239,382)	(190,246)
Prepaid expenses and other assets	(29,907)	(19,886)	(34,288)
Accounts payable	21,355	(4,757)	(5,504)
Deferred revenue	537,249	468,856	369,242
Accrued expenses and other liabilities	65,097	82,071	66,526
Net cash provided by operating activities	1,235,972	811,089	642,940
Cash flows from investing activities:			
Purchases of property and equipment	(264,892)	(224,462)	(150,510)
Business combinations, net of cash and restricted cash acquired	(7,414)	(37,440)	(58,203)
Purchases of other intangibles	(72,689)	(24,400)	(6,670)
Purchases of investments	(1,595,667)	(1,295,782)	(1,194,261)
Sales of investments	33,503	39,975	85,106
Maturities of investments	1,159,247	1,194,687	440,590
Realized gains on derivatives not designated as hedging instruments, net	23,435	—	—
Net cash used in investing activities	(724,477)	(347,422)	(883,948)
Cash flows from financing activities:			
Net proceeds from borrowings on convertible senior notes	—	—	772,127
Repayments of convertible senior notes attributable to principal	(9)	(429,645)	(4)
Proceeds from issuance of warrants	—	—	54,071
Purchases of convertible note hedges	—	—	(128,017)
Repurchases and retirement of common stock	—	—	(55,000)
Proceeds from employee stock plans	107,868	104,160	82,567
Taxes paid related to net share settlement of equity awards	(409,715)	(281,010)	(181,938)
Payments on financing obligations	—	(933)	(4,914)
Net cash (used in) provided by financing activities	(301,856)	(607,428)	538,892
Foreign currency effect on cash, cash equivalents and restricted cash	(186)	(15,530)	28,013
Net increase (decrease) in cash, cash equivalents and restricted cash	209,453	(159,291)	325,897
Cash, cash equivalents and restricted cash at beginning of period	568,538	727,829	401,932
Cash, cash equivalents and restricted cash at end of period	\$ 777,991	\$ 568,538	\$ 727,829
Cash, cash equivalents and restricted cash at end of period:			
Cash and cash equivalents	\$ 775,778	\$ 566,204	\$ 726,495
Current portion of restricted cash included in prepaid expenses and other current assets	2,213	2,334	1,301
Non-current portion of restricted cash included in other assets	—	—	33
Total cash, cash equivalents and restricted cash shown in the consolidated statement of cash flows	\$ 777,991	\$ 568,538	\$ 727,829
Supplemental disclosures of other cash flow information:			
Income taxes paid, net of refunds	\$ 20,471	\$ 17,507	\$ 7,899
Non-cash investing and financing activities:			
Settlement of 2018 Notes conversion feature	\$ —	\$ 773,302	\$ —
Benefit from exercise of 2018 Note Hedge	\$ —	\$ 766,858	\$ —
Property and equipment included in accounts payable and accrued expenses	\$ 56,966	\$ 25,767	\$ 15,007
Purchases of intangible assets included in accrued expenses and other liabilities	\$ —	\$ 8,500	\$ 6,750

See accompanying notes to consolidated financial statements

SERVICENOW, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Unless the context requires otherwise, references in this report to “ServiceNow,” the “Company,” “we,” “us,” and “our” refer to ServiceNow, Inc. and its consolidated subsidiaries.

(1) Description of the Business

ServiceNow’s purpose is to make the world of work, work better for people. We believe that people should work the way they want to, so we build applications that help automate existing processes and create efficient, digitized workflows. Our products and services enable the steps of a job to flow naturally across disparate departments, systems and processes of a business. When work flows naturally, great experiences follow. We make work flow utilizing our leading enterprise cloud computing services that manage and deliver digital workflows, simplifying the complexity of work across systems, functions and departments on a single enterprise cloud platform, called the Now Platform. Our product portfolio is currently focused on delivering better Information Technology (IT), Employee and Customer workflows in pre-packaged product offerings. We also enable our customers to use the Now Platform App Engine to design and build any workflow application which are purpose built for their own business.

(2) Summary of Significant Accounting Policies

Principles of Consolidation

The consolidated financial statements have been prepared in conformity with accounting principles generally accepted in the United States (GAAP), and include our accounts and the accounts of our wholly-owned subsidiaries. All intercompany transactions and balances have been eliminated upon consolidation.

Prior Period Reclassifications

Certain reclassifications of prior period amounts pertaining to the reclassification of revenues from IT Operations Management (ITOM) products to digital workflow products have been made in Note 19 to conform to the current period presentation. These reclassifications did not result in a restatement of prior period financial statements.

Use of Estimates

The preparation of consolidated financial statements in conformity with GAAP requires management to make certain estimates and assumptions. These estimates and assumptions affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the consolidated financial statements, as well as reported amounts of revenues and expenses during the reporting period. Such management estimates and assumptions include, but are not limited to, evaluating the terms and conditions included within our customer contracts as well as determining the standalone selling price (SSP) for each distinct performance obligation included in customer contracts with multiple performance obligations, the period of benefit for deferred commissions, purchase price allocation for business combinations, stock-based compensation expenses, the useful life of our property and equipment, goodwill and identifiable intangible assets, whether an arrangement is or contains a lease, the discount rate used for operating leases, fair value of convertible notes, and income taxes. Actual results could differ from those estimates.

Segments

We define the term “chief operating decision maker” to be our Chief Executive Officer. Our chief operating decision maker allocates resources and assesses financial performance based upon discrete financial information at the consolidated level. Accordingly, we have determined that we operate as a single operating and reportable segment.

Foreign Currency Translation and Transactions

The functional currencies for our foreign subsidiaries are primarily their local currencies. Assets and liabilities of the wholly-owned foreign subsidiaries are translated into U.S. Dollars at exchange rates in effect at each period end. Amounts classified in stockholders' equity are translated at historical exchange rates. Revenues and expenses are translated at the average exchange rates during the period. The resulting translation adjustments are recorded in accumulated other comprehensive income (loss) as a component of stockholders' equity. Foreign currency transaction gains and losses are included in interest income and other income (expense), net within the consolidated statements of comprehensive income (loss), and have not been material for all periods presented.

Derivative Financial Instruments and Hedging Activities

We use derivative financial instruments to manage foreign currency risks. These derivative contracts consist of forward contracts entered into with various counterparties and are not designated as hedging instruments under applicable accounting guidance. As such, all changes in the fair value of these derivative contracts are recorded in interest income and other income (expense), net on the consolidated statements of comprehensive income (loss), and are intended to offset the foreign currency gains or losses associated with the underlying monetary assets and liabilities. Realized gains (losses) from settlement of the derivative assets and liabilities not designated as hedging instruments are classified as investing activities in the consolidated statements of cash flows.

Allocation of Overhead Costs

Overhead costs associated with office facilities, IT and certain depreciation related to infrastructure that is not dedicated for customer use or research and development use are allocated to cost of revenues and operating expenses based on headcount.

Revenue Recognition

Effective January 1, 2018, we adopted the Accounting Standards Update (ASU) 2014-09, "Revenue from Contracts with Customers (Topic 606)" on a full retrospective basis.

We report our revenues in two categories: (i) subscriptions and (ii) professional services and other.

Revenues are 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 determine revenue recognition through the following steps:

- Identification of the contract, or contracts, with a customer
- Identification of the performance obligations in the contract
- Determination of the transaction price
- Allocation of the transaction price to the performance obligations in the contract
- Recognition of revenue when, or as, we satisfy a performance obligation

Subscription revenues

Subscription revenues are primarily comprised of subscription fees that give customers access to the ordered subscription service, related support and updates, if any, to the subscribed service during the subscription term. We recognize subscription revenues ratably over the contract term beginning on the commencement date of each contract, which is the date we make our services available to our customers. Our contracts with customers typically include a fixed amount of consideration and are generally non-cancelable and without any refund-type provisions. We typically invoice our customers annually in advance for our subscription services upon execution of the initial contract or subsequent renewal, and our invoices are typically due within 30 days from the invoice date.

Subscription revenues also include revenues from self-hosted offerings in which customers deploy, or we grant customers the option to deploy without significant penalty, our subscription service internally or contract with a third party to host the software. For these contracts, we account for the software element and the related support and updates separately as they are distinct performance obligations. Refer to the discussion below related to contracts with multiple performance obligations for further details. The transaction price is allocated to separate performance obligations on a relative SSP basis. The transaction price allocated to the software element is recognized when transfer of control of the software to the customer is complete. The transaction price allocated to the related support and updates are recognized ratably over the contract term.

Professional services and other revenues

Our professional services arrangements are primarily on a time-and-materials basis, and we generally invoice our customers monthly in arrears for these professional services based on actual hours and expenses incurred. Some of our professional services arrangements are on a fixed fee or subscription basis. Professional services revenues are recognized as services are delivered. Other revenues consist of fees from customer training delivered on-site or through publicly available classes. Typical payment terms require our customers to pay us within 30 days of invoice.

Contracts with multiple performance obligations

We enter into contracts that can include various combinations of products and services, which are generally capable of being distinct and accounted for as separate performance obligations. We evaluate the terms and conditions included within our customer contracts to ensure appropriate revenue recognition, including whether products and services are considered distinct performance obligations that should be accounted for separately versus together. For contracts with multiple performance obligations, the transaction price is allocated to the separate performance obligations on a relative SSP basis. We determine SSP by considering the historical selling price of these performance obligations in similar transactions as well as other factors, including, but not limited to, competitive pricing of similar products, other software vendor pricing, industry publications and current pricing practices.

Unbilled Receivables

Unbilled receivables, which is a contract asset, represent subscription revenues that are recognized upon delivery of the software prior to being invoiced. Unbilled receivables are primarily presented under prepaid expenses and other current assets on our consolidated balance sheets.

Deferred revenue

Deferred revenue, which is a contract liability, consists primarily of payments received in advance of revenue recognition from our contracts with customers and is recognized as the revenue recognition criteria are met. Once our services are available to customers, we record amounts due in accounts receivable and in deferred revenue. To the extent we bill customers in advance of the billing period commencement date, the accounts receivable and corresponding deferred revenue amounts are netted to zero on our consolidated balance sheets, unless such amounts have been paid as of the balance sheet date.

Customer deposits

Customer deposits primarily relate to payments received from customers which could be refundable pursuant to the terms of the contract and are presented under accrued expenses and other current liabilities on our consolidated balance sheets.

Deferred Commissions

Deferred commissions are the incremental selling costs that are associated with acquiring customer contracts and consist primarily of sales commissions paid to our sales force and referral fees paid to independent third-parties. Deferred commissions also include the associated payroll taxes and fringe benefit costs associated with payments to our sales employees to the extent they are incremental. Commissions and referral fees earned upon the execution of initial and expansion contracts are primarily deferred and amortized over a period of benefit that we have determined to be five years. Commissions earned upon the renewal of customer contracts are deferred and amortized over the average renewal term. Additionally, for self-hosted offerings, consistent with the recognition of subscription revenue for self-hosted offerings, a portion of the commission cost is expensed upfront when the self-hosted offering is made available. We determine the period of benefit by taking into consideration our customer contracts, our technology life cycle and other factors. We include amortization of deferred commissions in sales and marketing expense in our consolidated statements of comprehensive income (loss). There was no impairment loss in relation to the incremental selling costs capitalized for all periods presented.

Fair Value Measurements

We apply fair value accounting for all financial assets and liabilities and non-financial assets and liabilities that are recognized in the financial statements on a non-recurring basis or disclosed at fair value in the financial statements on a recurring basis. Fair value is defined as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. We use a fair value hierarchy that is based on three levels of inputs, of which the first two are considered observable and the last unobservable. The three levels of the fair value hierarchy are as follows:

Level 1—Quoted prices (unadjusted) in active markets for identical assets or liabilities that we have the ability to access;

Level 2—Inputs other than Level 1 that are directly or indirectly observable, such as quoted prices for identical or similar assets and liabilities, quoted prices in markets that are not active, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities, such as interest rates, yield curves and foreign currency spot rates; and

Level 3—Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets and liabilities.

Cash and Cash Equivalents

Cash and cash equivalents consist of highly liquid investments with original or remaining maturities of three months or less when purchased. Cash and cash equivalents are stated at fair value.

Investments

Investments consist of commercial paper, corporate notes and bonds, certificates of deposit and U.S. government and agency securities. We classify investments as available-for-sale at the time of purchase and re-evaluate such classification as of each balance sheet date. All investments are recorded at estimated fair value. Unrealized gains and losses for available-for-sale securities are included in accumulated other comprehensive income (loss), a component of stockholders' equity. We evaluate our investments to assess whether those with unrealized loss positions are other than temporarily impaired. We consider impairments to be other than temporary if they are related to deterioration in credit risk or if it is likely we will sell the securities before the recovery of their cost basis. Realized gains and losses and declines in value judged to be other than temporary are determined based on the specific identification method and are reported in interest income and other income (expense), net in the consolidated statements of comprehensive income (loss).

Strategic investments

Our strategic investments consist of debt and non-marketable equity investments in privately-held companies in which we do not have a controlling interest or significant influence. Debt investments in privately-held companies are classified as available-for-sale and are recorded at their estimated fair value with changes in fair value recorded through accumulated other comprehensive income (loss). We have elected to apply the measurement alternative for equity investments that do not have readily determinable fair values, measuring them at cost, less any impairment, plus or minus adjustments resulting from observable price changes in orderly transactions for the identical or a similar investment of the same issuer. An impairment loss is recorded when event or circumstance indicates a decline in value has occurred. We include these strategic investments in other assets on our consolidated balance sheets.

Accounts Receivable

We record trade accounts receivable at the net invoice value and such receivables are non-interest bearing. We consider receivables past due based on the contractual payment terms. We review our exposure to accounts receivable and reserve for specific amounts if collectability is no longer reasonably assured.

Property and Equipment

Property and equipment, net, are stated at cost, subject to review of impairment, and depreciated using the straight-line method over the estimated useful lives of the assets as follows:

Building	39 years
Computer equipment and software	3-5 years
Furniture and fixtures	3-7 years
Leasehold and other improvements	shorter of the lease term or estimated useful life

When assets are sold, or otherwise disposed of, the cost and related accumulated depreciation are removed and any gain or loss is included in cost of revenues or operating expenses depending on whether the asset sold is being used in our provision of services to our customers. Repairs and maintenance expenses are charged to our consolidated statements of comprehensive income (loss) as incurred.

Capitalized Software Development Costs

Software development costs for software to be sold, leased, or otherwise marketed are expensed as incurred until the establishment of technological feasibility, at which time those costs are capitalized until the product is available for general release to customers and amortized over the estimated life of the product. Technological feasibility is established upon the completion of a working prototype that has been certified as having no critical bugs and is a release candidate. To date, costs and time incurred between the establishment of technological feasibility and product release have not been material, and all software development costs have been charged to research and development expense in our consolidated statements of comprehensive income (loss).

Costs incurred to develop our internal administration, finance and accounting systems are capitalized during the application development stage and generally amortized over the software's estimated useful life of three to five years. Costs related to preliminary project activities and post implementation activities are expensed as incurred.

Leases

In February 2016, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) 2016-02, "Leases (Topic 842)," which requires lessees to generally recognize on the balance sheet operating and financing lease liabilities and corresponding right-of-use assets, and to recognize on the income statement the expenses in a manner similar to prior practice. We adopted Topic 842 using the modified retrospective method as of January 1, 2019 and elected the transition option that allows us not to restate the comparative periods in our financial statements in the year of adoption. We also elected the package of transition expedients available for expired or existing contracts, which allowed us to carryforward our historical assessment of (1) whether contracts are or contain leases, (2) lease classification and (3) initial direct costs.

We determine if an arrangement is or contains a lease at inception by evaluating various factors, including whether a vendor's right to substitute an identified asset is substantive. Lease classification is determined at the lease commencement date, on which the leased assets are made available for our use. Operating leases are included in "Operating lease right-of-use assets", "Current portion of operating lease liabilities", and "Operating lease liabilities, less current portion" in our consolidated balance sheets. We did not have any material financing leases in any of the periods presented.

Right-of-use assets represent our right to use an underlying asset for the lease term and lease liabilities represent our obligation to make payments arising from the lease. Operating lease right-of-use assets and liabilities are recognized at the lease commencement date based on the present value of lease payments over the lease term. The difference between the total right-of-use assets and total lease liabilities recorded as of January 1, 2019 is primarily due to the derecognition of deferred rent liabilities that were included in "Accrued expenses and other current liabilities" and "Other long-term liabilities", respectively, in our consolidated balance sheet as of December 31, 2018. Lease payments consist primarily of the fixed payments under the arrangement, less any lease incentives such as rent holidays. We use an estimate of our incremental borrowing rate (IBR) based on the information available at the lease commencement date in determining the present value of lease payments, unless the implicit rate is readily determinable. In determining the appropriate IBR, we consider information including, but not limited to, our credit rating, the lease term, and the currency in which the arrangement is denominated. For leases which commenced prior to our adoption of Topic 842, we used the IBR on January 1, 2019. Our lease terms may include the sole option for us to either renew or terminate the lease when the option is reasonably certain to be exercised. Lease expense for lease payments is recognized on a straight-line basis over the lease term.

For our office facility leases, we elected to account for lease and non-lease components as a single lease component. For other arrangements, lease and non-lease components are generally accounted for separately. Additionally, we do not record leases on the balance sheet that, at the lease commencement date, have a lease term of 12 months or less.

Business Combinations

We apply a screen test to evaluate if substantially all of the fair value of the gross assets acquired is concentrated in a single identifiable asset or group of similar identifiable assets to determine whether a transaction is accounted for as an asset acquisition or business combination. If the screen test is not met, the integrated set of activities and assets is considered a business based on whether there are inputs and substantive processes in place. The allocation of the purchase price in a business combination requires us to make significant estimates in determining the fair value of acquired assets and assumed liabilities, especially with respect to intangible assets. The excess of the purchase price in a business combination over the fair value of these tangible and intangible assets acquired and liabilities assumed is recorded as goodwill. These estimates are based upon a number of factors, including historical experience, market conditions and information obtained from the management of the acquired company. Critical estimates in valuing certain intangible assets included, but are not limited to, cash flows that an asset is expected to generate in the future, discount rates, the time and expense that would be necessary to recreate the assets and the profit margin a market participant would receive.

Goodwill, Intangible Assets and Other Long-Lived Assets

We evaluate and test the recoverability of goodwill for impairment at least annually, during the fourth quarter, or more frequently if circumstances indicate that goodwill may not be recoverable. We perform the impairment testing by first assessing qualitative factors to determine whether the existence of events or circumstances leads to a determination that it is more likely than not that the fair value of its reporting unit is less than its carrying amount. If, after assessing the totality of events or circumstances, we determine it is more likely than not that the fair value of a reporting unit is less than its carrying amount, we perform a goodwill impairment test. To calculate any potential impairment, we compare the fair value of a reporting unit with its carrying amount, including goodwill. Any excess of the carrying amount of the reporting unit's goodwill over its fair value is recognized as an impairment loss, and the carrying value of goodwill is written down. For purposes of goodwill impairment testing, we have one reporting unit.

We periodically review the carrying amounts of long-lived assets, such as property and equipment, and purchased intangible assets for impairment whenever events or changes in circumstances indicate that the carrying amount of the assets may not be recoverable. We measure the recoverability of these assets by comparing the carrying amount of each asset to the future undiscounted cash flows we expect the asset to generate. If we consider any of these assets to be impaired, the impairment to be recognized equals the amount by which the carrying value of the asset exceeds its fair value. In addition, we periodically evaluate the estimated remaining useful lives of long-lived assets to determine whether events or changes in circumstances warrant a revision to the remaining period of depreciation or amortization. Our intangible assets are amortized over their useful lives ranging from four years to ten years.

Advertising Costs

Advertising costs, excluding costs related to our annual Knowledge user conference and other user forums, are expensed as incurred and are included in sales and marketing expense. These costs for the years ended December 31, 2019, 2018 and 2017 were \$114.9 million, \$65.2 million and \$43.3 million, respectively. Costs, net of proceeds related to our annual Knowledge user conference and other user forums, are deferred and expensed when the respective events occur.

Convertible Senior Notes

In May and June 2017, we issued an aggregate of \$782.5 million of 0% convertible senior notes (the 2022 Notes) and in November 2013, we issued \$575.0 million of 0% convertible senior notes (the 2018 Notes, and together with the 2022 Notes, the Notes). In accounting for the issuance of the Notes, we separated the Notes into liability and equity components. The carrying cost of the liability component was calculated by measuring the fair value of a similar liability that does not have an associated convertible feature. The carrying amount of the equity component representing the conversion option was determined by deducting the fair value of the liability component from the par value of the Notes. The difference between the principal amount of the Notes and the proceeds allocated to the liability component, or the debt discount, is amortized to interest expense using the effective interest method over the term of the respective Notes. The equity component is not remeasured as long as it continues to meet the conditions for equity classification. In accounting for the transaction costs related to the issuance of the Notes, we allocated the total amount incurred to the liability and equity components based on their relative fair values. Transaction costs attributable to the liability component are being amortized to interest expense over the respective terms of the Notes, and transaction costs attributable to the equity component were netted with the equity component of the Notes in stockholders' equity. To the extent we receive note conversion requests prior to the maturity of the Notes, the difference between the fair value and the amortized book value of the Notes is recorded as a gain or loss on early note conversion. The fair value of the Notes is measured based on a similar liability that does not have an associated convertible feature, based on the remaining term of the Notes.

Legal Contingencies

From time to time, we are a party to litigation and other legal proceedings in the ordinary course of business. We accrue for loss contingencies when we can reasonably estimate the amount of loss or range of loss and when, based on the advice of counsel, we believe it is probable that we will incur the loss. Because of uncertainties related to these matters, we base our estimate on the information available at the time of our assessment. As additional information becomes available, we reassess our potential liability and may revise our estimate.

Stock-based Compensation

We recognize compensation expense related to stock options and restricted stock units (RSUs) with only service conditions on a straight-line basis over the requisite service period, which is generally the vesting term of four years. For stock options and RSUs granted with both service conditions and performance or market conditions, the expenses are recognized on a graded vesting basis over the requisite service period and, for awards with performance conditions, when it is probable that the performance condition will be achieved. This has the impact of greater stock-based compensation expense during the initial years of the vesting period as stock-based compensation cost is recognized over the requisite service period for each separately vesting tranche of the award as though the award were, in substance, multiple awards. We recognize compensation expense related to shares issued pursuant to the employee stock purchase plan (ESPP) on a straight-line basis over the six months offering period. We estimate the fair value of stock option grants with only service conditions and shares issued pursuant to the ESPP using the Black-Scholes options pricing model and fair value of RSU awards (including performance-based RSUs) using the fair value of our common stock on the date of grant. We recognize compensation expense net of estimated forfeiture activity, which is based on historical forfeiture rates. In some instances, shares are issued on the vesting dates net of the minimum statutory tax withholding requirements to be paid by us on behalf of our employees. In these instances, we record the liability for withholding amounts to be paid by us as a reduction to additional paid-in capital when paid, and include these payments as a reduction of cash flows from financing activities.

Concentration of Credit Risk and Significant Customers

Financial instruments potentially exposing us to credit risk consist primarily of cash, cash equivalents, derivative contracts, investments and accounts receivable. We hold cash at financial institutions that management believes are high credit, quality financial institutions and invest in securities with a minimum rating of BBB by Standard & Poor's, Baa2 by Moody's, or BBB by Fitch to minimize our credit risks. Our derivative contracts expose us to credit risk to the extent that the counterparties may be unable to meet the terms of the arrangement. We mitigate this credit risk by transacting with major financial institutions with high credit ratings and entering into master netting arrangements, which permit net settlement of transactions with the same counterparty. While the contract or notional amount is often used to express the volume of foreign currency derivative contracts, the amounts potentially subject to credit risk are generally limited to the amounts, if any, by which the counterparties' obligations under the agreements exceed the obligations of the Company to the counterparties. We are not required to pledge, and are not entitled to receive, cash collateral related to these derivative instruments. We are also exposed to credit risk under the convertible note hedge transactions that may result from counterparties' non-performance.

Credit risk arising from accounts receivable is mitigated due to our large number of customers and their dispersion across various industries and geographies. As of December 31, 2019 and 2018, there were no customers that represented more than 10% of our accounts receivable balance. There were no customers that individually exceeded 10% of our total revenues in any of the periods presented. For purposes of assessing concentration of credit risk and significant customers, a group of customers under common control or customers that are affiliates of each other are regarded as a single customer.

We review the composition of the accounts receivable balance, historical write-off experience and the potential risk of loss associated with delinquent accounts to determine if an allowance for doubtful accounts is necessary. Individual accounts receivable are written off when we become aware of a specific customer's inability to meet its financial obligation, and all collection efforts are exhausted. The following table presents the changes in the allowance for doubtful accounts (in thousands):

	Balance at Beginning of Year	Additions: Charged to Operations	Additions: Charged to Deferred Revenue	Less: Write-offs	Balance at End of Year
Year ended December 31, 2019					
Allowance for doubtful accounts	\$ 4,649	1,284	1,306	1,043	\$ 6,196
Year ended December 31, 2018					
Allowance for doubtful accounts	\$ 3,115	1,255	1,177	898	\$ 4,649
Year ended December 31, 2017					
Allowance for doubtful accounts	\$ 2,323	1,688	194	1,090	\$ 3,115

Warranties and Indemnification

Our cloud computing solutions are typically warranted to perform in material conformance with their specifications.

We include service level commitments to our customers that permit those customers to receive credits in the event we fail to meet those service levels. We establish an accrual based on an evaluation of the known service disruptions. Service level credit accrual charges are recorded against revenue and were not material for all periods presented.

We have also agreed to indemnify our directors, executive officers and certain other officers for costs associated with any fees, expenses, judgments, fines and settlement amounts incurred by any of these persons in any action or proceeding to which any of those persons is, or is threatened to be, made a party by reason of the person's service as a director or officer, including any action by us, arising out of that person's services as a director or officer of our company or that person's services provided to any other company or enterprise at our request. We maintain director and officer insurance coverage that may enable us to recover a portion of any future amounts paid. The fair values of these obligations are not material as of each balance sheet date.

Our agreements include provisions indemnifying customers against intellectual property and other third-party claims. We have not incurred any costs as a result of such indemnification obligations and have not recorded any liabilities related to such obligations in the consolidated financial statements.

Income Taxes

We use the asset and liability method of accounting for income taxes, in which deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the consolidated financial statement carrying amounts of existing assets and liabilities and their respective tax bases. We measure deferred tax assets and liabilities using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be reversed. We recognize the effect on deferred tax assets and liabilities of a change in tax rates within the provision for income taxes as income and expense in the period that includes the enactment date. A valuation allowance is established if it is more likely than not that all or a portion of the deferred tax asset will not be realized. In determining the need for a valuation allowance, we consider future growth, forecasted earnings, future taxable income, the mix of earnings in the jurisdictions in which we operate, historical earnings, taxable income in prior years, if carryback is permitted under the law, carryforward periods and prudent and feasible tax planning strategies.

Our tax positions are subject to income tax audits by multiple tax jurisdictions throughout the world. We recognize the tax benefit of an uncertain tax position only if it is more likely than not the position is sustainable upon examination by the taxing authority, based on the technical merits. We measure the tax benefit recognized as the largest amount of benefit which is more likely than not to be realized upon settlement with the taxing authority. We recognize interest accrued and penalties related to unrecognized tax benefits in our tax provision.

We calculate the current and deferred income tax provision based on estimates and assumptions that could differ from the actual results reflected in income tax returns filed in subsequent years and record adjustments based on filed income tax returns when identified. The amount of income taxes paid is subject to examination by U.S. federal, state and foreign tax authorities. The estimate of the potential outcome of any uncertain tax issue is subject to management's assessment of relevant risks, facts and circumstances existing at that time. To the extent the assessment of such tax position changes, we record the change in estimate in the period in which we make the determination.

Recently Adopted Accounting Pronouncement

Leases

As described in the "Leases" section above, we adopted Topic 842 using the modified retrospective method as of January 1, 2019 with an immaterial amount of cumulative effect adjustment recorded to our accumulated deficit as of January 1, 2019. As this standard was adopted on a modified prospective basis as of January 1, 2019, the adoption of this standard did not impact our previously reported consolidated financial statements for periods ended on or prior to December 31, 2018. Upon adoption, we recorded operating lease right-of-use assets of approximately \$334.7 million and corresponding operating lease liabilities of \$362.7 million on our consolidated balance sheets.

Recently Issued Accounting Pronouncements Pending Adoption

Income taxes

In December 2019, the FASB issued ASU 2019-12, "Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes," which simplifies the accounting for incomes taxes by removing certain exceptions to the general principles in Topic 740 and amending existing guidance to improve consistent application. This new standard is effective for our interim and annual periods beginning January 1, 2021 and earlier adoption is permitted. Most amendments within this standard are required to be applied on a prospective basis, while certain amendments must be applied on a retrospective or modified retrospective basis. We are currently evaluating the impact of the adoption of this standard on our consolidated financial statements.

Cloud computing arrangements implementation costs

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 aligns the requirements for capitalizing implementation costs incurred in a hosting arrangement that is a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software. The new standard requires capitalized costs to be amortized on a straight-line basis generally over the term of the arrangement, and the financial statement presentation for these capitalized costs would be the same as that of the fees related to the hosting arrangements. This new standard is effective for our interim and annual periods beginning January 1, 2020 and earlier adoption is permitted. This standard could be applied either retrospectively or prospectively to all implementation costs incurred after the date of adoption. We will adopt this standard on a prospective basis as of January 1, 2020. We do not anticipate that the adoption of this standard will have a material impact on our consolidated financial statements.

Credit losses

In June 2016, the FASB issued ASU 2016-13, "Financial Instruments—Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments," which requires a financial asset measured at amortized cost basis to be presented at the net amount expected to be collected, with further clarifications made more recently. For trade receivables, loans, and other financial assets, we will be required to use a forward-looking expected loss model rather than the incurred loss model for recognizing credit losses which reflects losses that are probable. Credit losses relating to available-for-sale debt securities are required to be recorded through an allowance for credit losses rather than as a reduction in the amortized cost basis of the securities. This new standard is effective for our interim and annual periods beginning January 1, 2020 and requires a cumulative effect adjustment to the balance sheet as of January 1, 2020. We do not anticipate that the adoption of this standard will have a material impact on our consolidated financial statements.

(3) Investments
Marketable Debt Securities

The following is a summary of our available-for-sale debt securities recorded within short-term and long-term investments on the consolidated balance sheets (in thousands):

	December 31, 2019			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
Available-for-sale securities:				
Commercial paper	\$ 101,416	\$ 83	\$ (9)	\$ 101,490
Corporate notes and bonds	1,654,166	7,360	(196)	1,661,330
Certificates of deposit	38,007	38	—	38,045
U.S. government and agency securities	127,544	254	(14)	127,784
Total available-for-sale securities	<u>\$ 1,921,133</u>	<u>\$ 7,735</u>	<u>\$ (219)</u>	<u>\$ 1,928,649</u>

	December 31, 2018			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
Available-for-sale securities:				
Commercial paper	\$ 108,061	\$ —	\$ —	\$ 108,061
Corporate notes and bonds	1,233,589	343	(4,218)	1,229,714
Certificates of deposit	73,584	1	—	73,585
U.S. government and agency securities	102,549	23	(358)	102,214
Total available-for-sale securities	<u>\$ 1,517,783</u>	<u>\$ 367</u>	<u>\$ (4,576)</u>	<u>\$ 1,513,574</u>

As of December 31, 2019, the contractual maturities of our available-for-sale debt investment securities, excluding those securities classified within cash and cash equivalents on the consolidated balance sheet, did not exceed 36 months. The fair values of available-for-sale investment securities, by remaining contractual maturity, are as follows (in thousands):

	December 31, 2019
Due within 1 year	\$ 915,317
Due in 1 year through 5 years	1,013,332
Total	<u>\$ 1,928,649</u>

The following table shows the fair values and the gross unrealized losses of these available-for-sale debt securities, classified by the length of time that the securities have been in a continuous unrealized loss position, and aggregated by investment types, excluding those securities classified within cash and cash equivalents on the consolidated balance sheets (in thousands):

	December 31, 2019					
	Less than 12 Months		12 Months or Greater		Total	
	Fair Value	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses
Commercial paper	\$ 20,752	\$ (9)	\$ —	\$ —	\$ 20,752	\$ (9)
Corporate notes and bonds	242,012	(181)	16,264	(15)	258,276	(196)
U.S. government and agency securities	17,806	(14)	—	—	17,806	(14)
Total	<u>\$ 280,570</u>	<u>\$ (204)</u>	<u>\$ 16,264</u>	<u>\$ (15)</u>	<u>\$ 296,834</u>	<u>\$ (219)</u>

	December 31, 2018					
	Less than 12 Months		12 Months or Greater		Total	
	Fair Value	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses
Corporate notes and bonds	\$ 714,605	\$ (2,603)	\$ 294,956	\$ (1,615)	\$ 1,009,561	\$ (4,218)
Certificates of deposit	1,000	—	—	—	1,000	—
U.S. government and agency securities	11,756	(5)	61,457	(353)	73,213	(358)
Total	<u>\$ 727,361</u>	<u>\$ (2,608)</u>	<u>\$ 356,413</u>	<u>\$ (1,968)</u>	<u>\$ 1,083,774</u>	<u>\$ (4,576)</u>

As of December 31, 2019, we had a total of 91 available-for-sale securities, excluding those securities classified within cash and cash equivalents on the consolidated balance sheet in an unrealized loss position. There were no impairments considered “other-than-temporary” as it is more likely than not we will hold the securities until maturity or a recovery of the cost basis.

Marketable Equity Securities

During the year ended December 31, 2018, we sold all of our marketable equity securities for total proceeds of \$40.0 million and recognized net gains of \$19.3 million. During the year ended December 31, 2017, prior to the adoption of ASU 2016-01, we recognized \$10.7 million of unrealized gains on our marketable equity securities offset by \$3.5 million of tax effect through accumulated other comprehensive income (loss) on our consolidated balance sheet. As of each of December 31, 2019 and 2018, we had no marketable equity securities on our consolidated balance sheets.

Strategic Investments

As of December 31, 2019 and 2018, the total amount of equity investments in privately-held companies included in other assets on our consolidated balance sheets was \$22.4 million and \$14.6 million, respectively. These non-marketable equity investments are recorded at fair value only if an impairment or observable price adjustment is recognized in the current period. We classify these assets as Level 3 within the fair value hierarchy only if an impairment or observable adjustment is recognized on these non-marketable equity securities during the period as they are based on observable transaction price at the transaction date and other unobservable inputs such as volatility.

(4) Fair Value Measurements

The following table presents our fair value hierarchy for our assets measured at fair value on a recurring basis as of December 31, 2019 (in thousands):

	Level 1	Level 2	Total
Cash equivalents:			
Money market funds	\$ 486,982	\$ —	\$ 486,982
Commercial paper	—	86,388	86,388
Marketable securities:			
Commercial paper	—	101,490	101,490
Corporate notes and bonds	—	1,661,330	1,661,330
Certificates of deposit	—	38,045	38,045
U.S. government and agency securities	—	127,784	127,784
Total	\$ 486,982	\$ 2,015,037	\$ 2,502,019

The following table presents our fair value hierarchy for our assets measured at fair value on a recurring basis as of December 31, 2018 (in thousands):

	Level 1	Level 2	Total
Cash equivalents:			
Money market funds	\$ 229,047	\$ —	\$ 229,047
Commercial paper	—	16,961	16,961
Certificates of deposit	—	2,465	2,465
Marketable securities:			
Commercial paper	—	108,061	108,061
Corporate notes and bonds	—	1,229,714	1,229,714
Certificates of deposit	—	73,585	73,585
U.S. government and agency securities	—	102,214	102,214
Total	\$ 229,047	\$ 1,533,000	\$ 1,762,047

We determine the fair value of our security holdings based on pricing from our service providers and market prices from industry-standard independent data providers. Such market prices may be quoted prices in active markets for identical assets (Level 1 inputs) or pricing determined using inputs other than quoted prices that are observable either directly or indirectly (Level 2 inputs), such as yield curve, volatility factors, credit spreads, default rates, loss severity, current market and contractual prices for the underlying instruments or debt, broker and dealer quotes, as well as other relevant economic measures.

Our equity investments in privately-held companies are not included in the table above and are discussed in Note 3. See Note 8 for the fair value measurement of our derivative contracts and Note 11 for the fair value measurement of our convertible senior notes, which are also not included in the table above.

(5) Business Combinations**2019 Business Combination**

During the year ended December 31, 2019, we completed a business combination for a purchase price of \$7.5 million in cash. In allocating the purchase price based on the estimated fair values, we recorded a total of \$3.0 million of developed technology intangible assets (to be amortized over estimated useful lives of five years), \$2.5 million of backlog intangible assets (to be recognized over estimated life of two years), \$1.4 million of deferred tax liabilities and \$2.2 million of goodwill which is not deductible for income tax purposes.

2018 Business Combinations

During the year ended December 31, 2018, we completed four business combinations for an aggregate purchase price of \$37.6 million in cash. In allocating the aggregate purchase price based on the estimated fair values, we recorded a total of \$13.5 million of developed technology intangible assets (to be amortized over estimated useful lives of five years), \$2.2 million of deferred tax liabilities and \$26.1 million of goodwill, of which \$8.0 million of the goodwill amount is deductible for income tax purposes.

2017 Business Combinations***SkyGiraffe***

On October 31, 2017, we completed the acquisition of a privately-held company, SkyGiraffe Ltd. (SkyGiraffe), by acquiring all issued and outstanding common shares of SkyGiraffe for approximately \$32.3 million in an all-cash transaction to enhance the consumer product-like mobile experience of our solutions. In allocating the aggregate purchase price based on the estimated fair values, we recorded \$15.6 million of developed technology intangible assets (to be amortized over estimated useful lives of five years), \$3.3 million of deferred tax liabilities and \$19.4 million of goodwill which is not deductible for income tax purposes.

Other 2017 Business Combinations

We also completed three other business combinations for an aggregate purchase price of approximately \$26.6 million in cash. In allocating the aggregate purchase price based on the estimated fair values, we recorded \$9.9 million of developed technology intangible assets (to be amortized over estimated useful lives of five years), \$3.6 million of deferred tax liabilities and a total of \$20.3 million of goodwill, of which \$4.1 million of the goodwill amount is deductible for income tax purposes.

For all of our 2019, 2018 and 2017 business combinations, the excess of purchase consideration over the fair value of net tangible and identifiable intangible assets acquired was recorded as goodwill. We believe the goodwill represents the synergies expected from expanded market opportunities when integrating the acquired technologies with our offerings. Aggregate acquisition-related costs associated with our business combinations are not material for each of the years presented and are included in general and administrative expenses in our consolidated statement of comprehensive income (loss). The results of operations of all of our business combinations have been included in our consolidated financial statements from their respective dates of purchase. These business combinations did not have a material impact on our consolidated financial statements, and therefore historical and pro forma disclosures have not been presented.

(6) Goodwill and Intangible Assets

Goodwill balances are presented below (in thousands):

	Carrying Amount
Balance as of December 31, 2017	\$ 128,728
Goodwill acquired	26,063
Foreign currency translation adjustments	(5,946)
Balance as of December 31, 2018	148,845
Goodwill acquired	2,246
Foreign currency translation adjustments	5,665
Balance as of December 31, 2019	<u>\$ 156,756</u>

Intangible assets consist of the following (in thousands):

	December 31, 2019	December 31, 2018
Developed technology	\$ 177,746	\$ 114,395
Patents	67,730	57,180
Other	3,594	650
Total intangible assets	249,070	172,225
Less: accumulated amortization	(105,220)	(71,643)
Net carrying amount	\$ 143,850	\$ 100,582

Apart from the business combinations described in Note 5, during the year ended December 31, 2019, we acquired \$72.7 million in intangible assets, comprising primarily \$61.0 million of developed technology and \$10.6 million in patents. The weighted-average useful lives for the developed technology and patents acquired during the year ended December 31, 2019 was approximately five years and eight years, respectively. During the year end of December 31, 2018, we acquired \$26.2 million of intangible assets in patents. The weighted-average useful life for patents acquired during the year ended December 31, 2018 was approximately seven years.

Amortization expense for intangible assets was approximately \$34.6 million, \$25.2 million, \$19.7 million for the years ended December 31, 2019, 2018 and 2017, respectively.

The following table presents the estimated future amortization expense related to intangible assets held at December 31, 2019 (in thousands):

Years Ending December 31,	
2020	\$ 35,641
2021	33,322
2022	28,343
2023	22,507
2024	15,809
Thereafter	8,228
Total future amortization expense	\$ 143,850

(7) Property and Equipment

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

	December 31,	
	2019	2018
Computer equipment	\$ 680,160	\$ 493,536
Computer software	59,511	58,303
Leasehold and other improvements	125,299	74,721
Furniture and fixtures	53,651	42,551
Building ⁽¹⁾	—	6,551
Construction in progress ⁽¹⁾	6,830	10,167
Property and equipment, gross	925,451	685,829
Less: Accumulated depreciation	(457,366)	(338,613)
Property and equipment, net	\$ 468,085	\$ 347,216

(1) We adopted Topic 842 using the modified retrospective method as of January 1, 2019 and derecognized \$10.6 million in building and construction in progress assets that we were previously deemed to own under the prior lease accounting standards. These assets are recognized under our operating lease right-of-use assets under Topic 842 as of December 31, 2019.

Construction in progress consists primarily of leasehold and other improvements and in-process software development costs. Depreciation expense was \$167.9 million, \$123.0 million and \$93.2 million for the years ended December 31, 2019, 2018 and 2017, respectively.

(8) Derivative Contracts

We conduct business on a global basis in multiple foreign currencies, subjecting us to foreign currency risk. In order to manage certain exposures to currency fluctuations, we initiated a limited hedging program during the year ended December 31, 2018 by entering into foreign currency derivative contracts with maturities of 12 months or less to hedge a portion of our net outstanding monetary assets and liabilities.

As of December 31, 2019 and 2018, we had foreign currency forward contracts with total notional values of \$358.0 million and \$872.8 million, respectively, which are not designated as hedge instruments. Our foreign currency contracts are classified within Level 2 because the valuation inputs are based on quoted prices and market observable data of similar instruments in active markets, such as currency spot and forward rates. The fair values of these outstanding derivative contracts were as follows (in thousands):

	Consolidated Balance Sheet Location	December 31, 2019	December 31, 2018
<i>Derivative Assets:</i>			
Foreign currency derivative contracts	Prepaid expenses and other current assets	\$ 2,237	\$ 22,831
<i>Derivative Liabilities</i>			
Foreign currency derivative contracts	Accrued expenses and other current liabilities	\$ 1,362	\$ 2,441

(9) Deferred Revenue and Performance Obligations

Revenues recognized during the year ended December 31, 2019 from amounts included in deferred revenue as of December 31, 2018 are \$1.6 billion. Revenues recognized during the year ended December 31, 2018 from amounts included in deferred revenue as of December 31, 2017 are \$1.1 billion.

Remaining Performance Obligations

Transaction price allocated to remaining performance obligations (RPO) represents contracted revenue that has not yet been recognized, which includes deferred revenue and non-cancelable amounts that will be invoiced and recognized as revenue in future periods. RPO excludes contracts that are billed in arrears, such as certain time and materials contracts, as we apply the "right to invoice" practical expedient under relevant accounting guidance.

As of December 31, 2019, our RPO was approximately \$6.6 billion, and we expect to recognize revenues on approximately 50% of these RPO over the following 12 months, with the balance to be recognized thereafter.

(10) Accrued Expenses and Other Current Liabilities

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

	December 31,	
	2019	2018
Accrued payroll	\$ 230,682	\$ 158,006
Taxes payable	38,326	35,122
Other employee related liabilities	74,853	60,889
Other	117,542	76,229
Total accrued expenses and other current liabilities	\$ 461,403	\$ 330,246

(11) Convertible Senior Notes

In May and June 2017, we issued an aggregate of \$782.5 million of 0% convertible senior notes (the 2022 Notes), which are due June 1, 2022 (Maturity Date) unless earlier converted or repurchased in accordance with their terms. The 2022 Notes do not bear interest, and we cannot redeem the 2022 Notes prior to maturity. In November 2013, we issued \$575.0 million of 0% convertible senior notes (the 2018 Notes, and together with the 2022 Notes, the Notes), which were earlier converted prior to, or settled on November 1, 2018, in accordance with their terms.

The 2022 Notes are unsecured obligations and do not contain any financial covenants or restrictions on the payments of dividends, the incurrence of indebtedness or the issuance or repurchase of securities by us or any of our subsidiaries.

Upon conversion of the 2022 Notes, we may choose to pay or deliver, as the case may be, cash, shares of our common stock or a combination of cash and shares of our common stock upon settlement. We settled the principal amount of our 2018 Notes with cash and currently intend to settle the principal amount of the 2022 Notes with cash.

	<u>Convertible Date</u>	<u>Initial Conversion Price per Share</u>	<u>Initial Conversion Rate per \$1,000 Par Value</u>	<u>Initial Number of Shares</u>
				(in thousands)
2022 Notes	February 1, 2022	\$ 134.75	7.42 shares	5,807
2018 Notes	July 1, 2018	\$ 73.88	13.54 shares	7,783

Conversion of the 2022 Notes prior to the Convertible Date. At any time prior to the close of business on the business day immediately preceding February 1, 2022 (Convertible Date), holders of the 2022 Notes may convert their Notes at their option, only if one of the following conditions are met:

- during any calendar quarter (and only during such calendar quarter) if the last reported sale price of our common stock for at least 20 trading days (whether or not consecutive) during the period of 30 consecutive trading days ending on the last trading day of the immediately preceding calendar quarter is greater than or equal to 130% of the conversion price on each applicable trading day (in each case, the Conversion Condition); or
- during the five-business day period after any five-consecutive trading day period, or the measurement period, in which the trading price per \$1,000 principal amount of the Notes for each trading day of the measurement period was less than 98% of the product of the last reported sale price of our common stock and the conversion rate on each such trading day; or
- upon the occurrence of specified corporate events.

Conversion of the 2022 Notes on or after the Convertible Date. On or after the Convertible Date, a holder may convert all or any portion of its Notes at any time prior to the close of business on the second scheduled trading day immediately preceding the Maturity Date regardless of the foregoing conditions, and such conversions will settle upon the Maturity Date. Upon settlement, we will pay or deliver, as the case may be, cash, shares of our common stock or a combination of cash and shares of our common stock, at our election.

The conversion price of the 2022 Notes will be subject to adjustment in some events. Holders of the 2022 Notes who convert their 2022 Notes in connection with certain corporate events that constitute a “make-whole fundamental change” are, under certain circumstances, entitled to an increase in the conversion rate. Additionally, in the event of a corporate event that constitutes a “fundamental change,” holders of the 2022 Notes may require us to purchase with cash all or a portion of the 2022 Notes upon the occurrence of a fundamental change, at a purchase price equal to 100% of the principal amount of the 2022 Notes plus any accrued and unpaid special interest, if any.

In accounting for the issuance of the 2022 Notes and the related transaction costs, we separated the 2022 Notes into liability and equity components. The 2022 Notes consisted of the following (in thousands):

	December 31, 2019	December 31, 2018
Liability component:		
Principal:		
2022 Notes	\$ 782,491	\$ 782,500
Less: debt issuance cost and debt discount, net of amortization		
2022 Notes	(87,510)	(120,793)
Net carrying amount	<u>\$ 694,981</u>	<u>\$ 661,707</u>
		2022 Notes
Equity component recorded at issuance:		
Note		\$ 162,039
Issuance cost		(2,148)
Net amount recorded in equity		<u>\$ 159,891</u>

The Conversion Condition for the 2022 Notes was met for all quarters ended June 30, 2018 through December 31, 2019, except for the quarter ended December 31, 2018. Therefore, our 2022 Notes became convertible at the holders' option beginning on July 1, 2018 and continue to be convertible through March 31, 2020, except for the quarter ended March 31, 2019 because the Conversion Condition for the 2022 Notes was not met for the quarter ended December 31, 2018. During the year ended December 31, 2019, we paid cash to settle an immaterial principal amount of the 2022 Notes. Based on additional conversion requests we have received through the filing date, we expect to settle in cash an aggregate of approximately \$2.5 million and \$5.2 million in principal amount of the 2022 Notes during the first and second quarter of 2020, respectively. We may receive additional conversion requests that require settlement in the second quarter of 2020.

The Conversion Condition for the 2018 Notes was met for all quarters ended June 30, 2017 through March 31, 2018. Therefore, our 2018 Notes became convertible at the holders' option beginning on July 1, 2017 and continued to be convertible at the holders' option through June 30, 2018. Conversion requests received subsequent to June 30, 2018 were settled on the maturity date. We settled \$413.2 million principal amount of the 2018 Notes in early conversions and the remaining principal amount of \$161.8 million was settled on November 1, 2018, the maturity date of our 2018 Notes.

The conversion value over the principal amount for the early 2018 Note conversions was settled in cash from the exercise of the 2018 Note Hedges (as defined below). The conversion value over the principal amount for the principal amount settled on November 1, 2018 was satisfied with approximately 1.3 million shares of our common stock, which was entirely offset by shares of our common stock delivered to us by the 2018 Note Hedge counterparties under the 2018 Note Hedge, and cash in lieu of fractional shares. The shares delivered to us by the 2018 Note Hedge counterparties were immediately retired. As a result of the early note conversions, we recorded a loss of \$4.1 million for the year ended December 31, 2018. As a result of the settlement of the 2018 Notes and the 2018 Note Hedges, we recorded an aggregate \$6.4 million net reduction to additional paid-in capital, reflecting \$773.3 million of fair value adjustments to the conversion option settled, offset by a \$766.9 million benefit from the exercise of the 2018 Note Hedges.

For statement of cash flow presentation, we bifurcated the principal amount of the 2018 Notes paid during the year ended December 31, 2018 into two components: the portion of the repayment attributable to debt discount is classified as cash outflows from operating activities, and the portion of the repayment attributable to the principal is classified as cash outflows from financing activities.

We consider the fair value of the 2022 Notes at December 31, 2019 to be a Level 2 measurement. The estimated fair value of the 2022 Notes at December 31, 2019 and 2018 based on the closing trading price per \$100 of the Notes was as follows (in thousands):

	December 31, 2019	December 31, 2018
2022 Notes	\$ 1,645,970	\$ 1,105,281

As of December 31, 2019, the remaining life of the 2022 Notes is 29 months, and the 2018 Notes were no longer outstanding. The following table sets forth total interest expense recognized related to the Notes (in thousands):

	Year Ended December 31,		
	2019	2018	2017
Amortization of debt issuance cost			
2022 Notes	\$ 1,606	\$ 1,531	\$ 860
2018 Notes	—	1,131	1,911
Amortization of debt discount			
2022 Notes	31,677	30,159	16,921
2018 Notes	—	19,912	33,702
Total	\$ 33,283	\$ 52,733	\$ 53,394
Effective interest rate of the liability component			
2022 Notes		4.75%	
2018 Notes		6.50%	

Note Hedges

To minimize the impact of potential economic dilution upon conversion of the Notes, we entered into convertible note hedge transactions (the 2022 Note Hedge and 2018 Note Hedge, respectively, and collectively, the Note Hedges) with certain investment banks, with respect to our common stock concurrently with the issuance of the 2022 Notes and 2018 Notes. The 2018 Note Hedge offset the dilution and cash payments in excess of the principal amount of the converted 2018 Notes and expired upon the maturity date of the 2018 Notes, which was November 1, 2018.

	Purchase	Initial Shares	Shares as of December 31, 2019
		(in thousands)	
2022 Note Hedge	\$ 128,017	5,807	5,807
2018 Note Hedge	\$ 135,815	7,783	—

The 2022 Note Hedge covers shares of our common stock at a strike price per share that corresponds to the initial conversion price of the 2022 Notes, subject to adjustment, and are exercisable upon conversion of the 2022 Notes. If exercised, we may elect to receive cash, shares of our common stock, or a combination of cash and shares. The 2022 Note Hedge will expire upon the maturity of the 2022 Notes. The 2022 Note Hedge is intended to reduce the potential economic dilution upon conversion of the 2022 Notes in the event that the fair value per share of our common stock at the time of exercise is greater than the conversion price of the 2022 Notes. The 2022 Note Hedge is a separate transaction and is not part of the terms of the 2022 Notes. Holders of the 2022 Notes will not have any rights with respect to the 2022 Note Hedge. The 2022 Note Hedge does not impact earnings per share, as it was entered into to offset any dilution from the 2022 Notes.

Warrants

	Proceeds	Shares	Strike Price	First Expiration Date	Shares as of December 31, 2019
	(in thousands)	(in thousands)			(in thousands)
2022 Warrants	\$ 54,071	5,807	\$ 203.40	September 1, 2022	5,807
2018 Warrants	\$ 84,525	7,783	\$ 107.46	February 1, 2019	—

Separately, we entered into warrant transactions with certain investment banks, whereby we sold warrants to acquire, subject to adjustment, the number of shares of our common stock shown in the table above (the 2022 Warrants and 2018 Warrants, respectively, and collectively, the Warrants). If the average market value per share of our common stock for the reporting period, as measured under the Warrants, exceeds the strike price of the respective Warrants, such Warrants would have a dilutive effect on our earnings per share to the extent we report net income. According to the terms of each of the Warrants, the 2018 Warrants were automatically exercised and the 2022 Warrants will be automatically exercised over a 60 trading day period beginning on the first expiration date of the respective Warrants as set forth above. The Warrants are separate transactions and are not remeasured through earnings each reporting period. The Warrants are not part of the Notes or Note Hedges.

As the 2022 Warrants will be net share settled, the total number of shares of our common stock we will issue depends on the daily volume-weighted average stock prices over a 60 trading day period beginning on the first expiration date of the 2022 Warrants, which will be September 1, 2022. During the year end December 31, 2019, we issued approximately 4.3 million shares of our common stock upon the automatic exercise of the 2018 Warrants. The 2018 Warrants were no longer outstanding as of the second quarter of 2019. We expect to issue additional shares of our common stock in the second half of 2022 upon the automatic exercise of the 2022 Warrants. The 2022 Warrants could have a dilutive effect to the extent that the daily volume-weighted average stock prices over a 60 trading day period beginning on September 1, 2022 exceeds the strike price of the 2022 Warrants. Based on the volume-weighted average stock price on December 31, 2019, the total number of shares of our common stock to be issued upon the automatic exercise of the 2022 Warrants would be approximately 1.6 million. The actual number of shares of our common stock issuable upon the automatic exercise of the 2022 Warrants, if any, is unknown at this time.

(12) Accumulated Other Comprehensive Income (Loss)

The components of accumulated other comprehensive income (loss), net of tax, consist of the following (in thousands):

	December 31,	
	2019	2018
Foreign currency translation adjustment	\$ 20,884	\$ 344
Net unrealized gain (loss) on investments, net of tax	4,371	(4,379)
Accumulated other comprehensive income (loss)	\$ 25,255	\$ (4,035)

Reclassification adjustments out of accumulated other comprehensive income (loss) into net income (loss) were immaterial for all periods presented.

(13) Stockholders' Equity**Common Stock**

We are authorized to issue a total of 600.0 million shares of common stock as of December 31, 2019. Holders of our common stock are not entitled to receive dividends unless declared by our board of directors. As of December 31, 2019, we had 189.5 million shares of common stock outstanding and had reserved shares of common stock for future issuance as follows:

	December 31, 2019
	(in thousands)
Stock plans:	
Options outstanding	1,154
RSUs ⁽¹⁾	8,733
Shares of common stock available for future grants:	
2012 Equity Incentive Plan ⁽²⁾	29,641
2012 Employee Stock Purchase Plan ⁽²⁾	10,196
Total shares of common stock reserved for future issuance	49,724

(1) Represents the number of shares issuable upon settlement of outstanding RSUs and performance-based RSUs, as discussed under the section entitled "RSUs" in Note 14.

(2) Refer to Note 14 for a description of these plans.

During the years ended December 31, 2019 and 2018, we issued a total of 5.0 million shares and 5.9 million shares, respectively, from stock option exercises, vesting of RSUs, net of employee payroll taxes and purchases from ESPP. In addition, as described in Note 11, we issued approximately 4.3 million shares of our common stock upon the automatic exercise of the 2018 Warrants during the year end December 31, 2019, and received and retired 1.3 million shares of our common stock in conjunction with our exercise of the 2018 Note Hedge during the year end December 31, 2018.

Preferred Stock

Our board of directors has the authority, without further action by stockholders, to issue up to 10.0 million shares of preferred stock in one or more series. Our board of directors may designate the rights, preferences, privileges and restrictions of the preferred stock, including dividend rights, conversion rights, voting rights, terms of redemption, liquidation preference and number of shares constituting any series or the designation of any series. The issuance of preferred stock could have the effect of restricting dividends on our common stock, diluting the voting power of our common stock, impairing the liquidation rights of our common stock, or delaying or preventing a change in control. At December 31, 2019 and 2018, no shares of preferred stock were outstanding.

(14) Equity Awards

We currently have two equity incentive plans, our 2005 Stock Option Plan (the 2005 Plan) and our 2012 Equity Incentive Plan (the 2012 Plan). Our 2005 Plan was terminated in connection with our initial public offering in 2012 but continues to govern the terms of outstanding stock options that were granted prior to the termination of the 2005 Plan. We no longer grant equity awards pursuant to our 2005 Plan.

Our 2012 Plan provides for the grant of incentive stock options, nonqualified stock options, stock appreciation rights, RSUs, performance-based stock awards and other forms of equity compensation (collectively, equity awards). In addition, the 2012 Plan provides for the grant of performance cash awards. Incentive stock options may be granted only to employees. All other equity awards may be granted to employees, including officers, as well as directors and consultants. The share reserve may increase to the extent outstanding stock options under the 2005 Plan expire or terminate unexercised. Prior to January 2019, the share reserve also automatically increased on January 1 of each year until January 1, 2022, by up to 5% of the total number of shares of common stock outstanding on December 31 of the preceding year as determined by our board of directors. Our board of directors elected not to increase the number of shares of common stock reserved for issuance under the 2012 Plan pursuant to the provision described in the preceding sentence for the year ending December 31, 2019. In January 2019, our Board of Directors amended the 2012 Plan to remove the automatic increase provision. Therefore, for the remaining term of the 2012 Plan, the share reserve will not be increased without stockholder approval.

Our 2012 Employee Stock Purchase Plan (the 2012 ESPP) authorizes the issuance of shares of common stock pursuant to purchase rights granted to our employees. The price at which common stock is purchased under the 2012 ESPP is equal to 85% of the fair market value of our common stock on the first or last day of the offering period, whichever is lower. Offering periods are six months long and begin on February 1 and August 1 of each year. The number of shares of common stock reserved for issuance automatically increases on January 1 of each year until January 1, 2022, by up to 1% of the total number of shares of common stock outstanding on December 31 of the preceding year as determined by our board of directors. Our board of directors elected not to increase the number of shares of common stock reserved for issuance under the 2012 ESPP pursuant to the provision described in the preceding sentence for the years ending December 31, 2019 and December 31, 2020.

Stock Options

Stock options are exercisable at a price equal to the market value of the underlying shares of common stock on the date of the grant as determined by our board of directors or, for those stock options issued subsequent to our initial public offering, the closing price of our common stock as reported on the New York Stock Exchange on the date of grant. Stock options granted under our 2005 Plan and the 2012 Plan to new employees generally vest 25% one year from the date the requisite service period begins and continue to vest monthly for each month of continued employment over the remaining three years. Options granted generally are exercisable for a period of up to ten years contingent on each holder's continuous status as a service provider.

A summary of stock option activity was as follows:

	Number of Shares (in thousands)	Weighted- Average Exercise Price Per Share	Weighted- Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value (in thousands)
Outstanding at December 31, 2017	3,370	\$ 38.43		
Exercised	(1,462)	\$ 26.23		\$ 204,337
Canceled	(97)	\$ 70.52		
Outstanding at December 31, 2018	1,811	\$ 46.55		
Granted	161	\$ 266.31		
Exercised	(640)	\$ 34.61		\$ 138,389
Canceled	(178)	\$ 86.02		
Outstanding at December 31, 2019	1,154	\$ 77.70	5.1	\$ 236,055
Vested and expected to vest as of December 31, 2019	1,119	\$ 72.37	5.0	\$ 234,889
Vested and exercisable as of December 31, 2019	907	\$ 43.75	4.1	\$ 216,458

Aggregate intrinsic value represents the difference between the estimated fair value of our common stock and the exercise price of outstanding, in-the-money options. The total intrinsic value of the options exercised was \$277.7 million for the year ended December 31, 2017. The weighted-average grant date fair value per share of options granted was \$266.31 and \$37.57 for the years ended December 31, 2019 and 2017, respectively. No stock options were granted during the year ended December 31, 2018. The total fair value of shares vested was \$7.7 million, \$12.3 million and \$11.8 million for the years ended December 31, 2019, 2018 and 2017, respectively.

All of the options granted during the year ended December 31, 2019 are options with both service and market-based vesting conditions. These options were granted to our Chief Executive Officer in connection with the commencement of his employment with us during the year. The fair values of the options granted and the corresponding derived service periods were calculated using a Monte Carlo simulation, which estimates the potential outcome of reaching the market condition based on simulated future stock prices. A Monte Carlo simulation requires the use of various assumptions, including the stock price volatility and risk-free interest rate as of the valuation date corresponding to the length of time remaining in the performance period and expected dividend yield. The stock-based compensation expense associated with these options is recorded on a graded vesting basis.

Included in the number of shares canceled during the year ended December 31, 2019 are 171,912 options with both service and market-based vesting conditions. These options were granted to our former Chief Executive Officer during the year ended December 31, 2017 in connection with the commencement of his employment with us, and were canceled in connection with the termination of his employment as our Chief Executive Officer during the year ended December 31, 2019. The fair value of the options granted and the corresponding derived service periods were calculated using a Monte Carlo simulation as described above.

As of December 31, 2019, total unrecognized compensation cost, adjusted for estimated forfeitures, related to unvested stock options was approximately \$17.9 million. The weighted-average remaining vesting period of unvested stock options at December 31, 2019 was 3.3 years.

RSUs

A summary of RSU activity was as follows:

	Number of Shares	Weighted-Average Grant- Date Fair Value Per Share	Aggregate Intrinsic Value
	(in thousands)		(in thousands)
Outstanding at December 31, 2017	11,403	\$ 81.50	
Granted	5,303	\$ 160.08	
Vested	(5,486)	\$ 77.38	\$ 931,848
Forfeited	(1,018)	\$ 100.55	
Outstanding at December 31, 2018	10,202	\$ 121.84	
Granted	5,338	\$ 240.32	
Vested	(5,487)	\$ 126.85	\$ 1,369,918
Forfeited	(1,320)	\$ 145.34	
Outstanding at December 31, 2019	8,733	\$ 185.39	\$ 2,465,387
Expected to vest as of December 31, 2019	7,506		\$ 2,119,197

RSUs outstanding as of December 31, 2019 were comprised of 8.1 million RSUs with only service conditions and 0.6 million RSUs with both service conditions and performance conditions.

RSUs granted with only service conditions under the 2012 Plan to employees generally vest over a four-year period. The total intrinsic value of the RSUs vested was \$573.9 million for the year ended December 31, 2017.

PRSUs with both service and performance conditions are considered as eligible to vest when approved by the compensation committee of our board of directors in January of the year following the grant. The ultimate number of shares eligible to vest for PRSUs range from 0% to 180% of the target number of shares depending on achievement relative to the performance metric over the applicable period. The PRSUs shares granted in the years ended December 31, 2019 and 2018 will vest 33% in February of the following year and continue to vest quarterly for the remaining two subsequent years, contingent on each holder's continuous status as a service provider on the applicable vesting dates. The number of PRSUs granted shown in the table above reflects the shares that could be eligible to vest at 100% of target for PRSUs and includes adjustments for over or under achievement for PRSUs granted in the prior year. We recognized \$67.6 million, \$91.8 million, and \$40.5 million of stock-based compensation expense, net of actual and estimated forfeitures, associated with PRSUs on a graded vesting basis during the year ended December 31, 2019, 2018, and 2017, respectively.

As of December 31, 2019, total unrecognized compensation cost, adjusted for estimated forfeitures, related to unvested RSUs was approximately \$1.2 billion and the weighted-average remaining vesting period was 2.8 years.

(15) Stock-based Compensation

We use the Black-Scholes options pricing model to estimate the fair value of our stock option grants with only service conditions and the fair value of our common stock under the 2012 ESPP. This model incorporates various assumptions including expected volatility, expected term, risk-free interest rates and expected dividend yields. The following assumptions were used to calculate our stock-based compensation for each stock option grant on the date of the grant:

	Year Ended
	December 31, 2017
Stock Options with only service conditions:	
Expected volatility	39% - 42%
Expected term (in years)	4.89
Risk-free interest rate	1.78% - 2.47%
Dividend yield	—%

Apart from the options granted to our Chief Executive Officer as described in Note 14, which have both service and market-based vesting conditions, no other stock options were granted during the years ended December 31, 2019 and 2018.

The following assumptions were used in the Black-Scholes options pricing model to calculate our stock-based compensation for each stock purchase right granted under the 2012 ESPP:

	Year Ended December 31,		
	2019	2018	2017
ESPP:			
Expected volatility	30% - 49%	26% - 31%	28% - 49%
Expected term (in years)	0.50	0.50	0.50
Risk-free interest rate	2.04% - 2.46%	1.15% - 2.22%	0.40% - 1.15%
Dividend yield	—%	—%	—%

Expected volatility. The expected volatility is based on the historical volatility of our common stock for a period similar to our expected term.

Expected term. We determine the expected term for stock options based on historical experience of similar awards, giving consideration to the contractual terms of the stock-based awards, vesting schedules and expectations of future employee behavior. We estimate the expected term for ESPP using the purchase period.

Risk-free interest rate. The risk-free interest rate is based on the U.S. Treasury yield curve in effect at the time of grant for the expected term of the stock-based award.

Expected dividend yield. Our expected dividend yield is zero, as we have not and do not currently intend to declare dividends in the foreseeable future.

(16) Net Income (Loss) Per Share

Basic net income (loss) per share attributable to common stockholders is computed by dividing net income (loss) attributable to common stockholders by the weighted-average number of shares of common stock outstanding during the period. Diluted net income (loss) per share is computed by dividing net income (loss) attributable to common stockholders by the weighted-average number of shares of common stock outstanding during the period, adjusted for the effects of dilutive shares of common stock, which are comprised of outstanding stock options, RSUs, ESPP obligations, the Notes and the Warrants. Stock awards with performance conditions are included in dilutive shares to the extent the performance condition is met. The dilutive potential shares of common stock are computed using the treasury stock method or the as-if converted method, as applicable. The effects of outstanding stock options, RSUs, ESPP obligations, Notes and Warrants are excluded from the computation of diluted net income (loss) per share in periods in which the effect would be antidilutive.

The following tables present the calculation of basic and diluted net income (loss) per share attributable to common stockholders (in thousands, except per share data):

	Year Ended December 31,		
	2019	2018	2017
Numerator:			
Net income (loss)	\$ 626,698	\$ (26,704)	\$ (116,846)
Denominator:			
Weighted-average shares outstanding - basic	186,466	177,846	171,176
Weighted-average effect of potentially dilutive securities:			
Common stock options	1,109	—	—
RSUs	4,897	—	—
2018 Warrants	842	—	—
In-the-money portion of 2022 Notes	2,737	—	—
2022 Warrants	1,172	—	—
Weighted-average shares outstanding - diluted	197,223	177,846	171,176
Net income (loss) per share - basic	\$ 3.36	\$ (0.15)	\$ (0.68)
Net income (loss) per share - diluted	\$ 3.18	\$ (0.15)	\$ (0.68)

Potentially dilutive securities that are not included in the calculation of diluted net income (loss) per share because doing so would be antidilutive are as follows (in thousands):

	Year Ended December 31,		
	2019	2018	2017
Common stock options	161	1,811	3,370
Restricted stock units	413	10,202	11,403
ESPP obligations	273	318	362
2018 Notes	—	—	7,783
2018 Warrants	—	7,783	7,783
2022 Notes	—	5,807	5,807
2022 Warrants	—	5,807	5,807
Total potentially dilutive securities	847	31,728	42,315

(17) Income Taxes

The provision for (benefit from) income taxes consists of the following (in thousands):

	Year Ended December 31,		
	2019	2018	2017
Current provision:			
Federal	\$ 391	\$ (336)	\$ (445)
State	204	163	137
Foreign	15,657	22,204	9,512
	<u>16,252</u>	<u>22,031</u>	<u>9,204</u>
Deferred provision:			
Federal	(3,481)	(2,026)	(5,934)
State	(882)	(377)	(886)
Foreign	(571,402)	(31,948)	1,056
	<u>(575,765)</u>	<u>(34,351)</u>	<u>(5,764)</u>
(Benefit from) provision for income taxes	\$ (559,513)	\$ (12,320)	\$ 3,440

The components of income (loss) before income taxes by U.S. and foreign jurisdictions were as follows (in thousands):

	Year Ended December 31,		
	2019	2018	2017
United States	\$ (48,558)	\$ (153,290)	\$ (61,259)
Foreign	115,743	114,266	(52,147)
Total	\$ 67,185	\$ (39,024)	\$ (113,406)

The effective income tax rate differs from the federal statutory income tax rate applied to the income (loss) before income taxes due to the following (in thousands):

	Year Ended December 31,		
	2019	2018	2017
Tax computed at U.S. federal statutory rate	\$ 14,109	\$ (8,195)	\$ (38,558)
State taxes, net of federal benefit	122	98	64
Tax rate differential for international subsidiaries	(5,005)	(41,429)	23,532
Stock-based compensation	(108,023)	(93,073)	(116,953)
Tax credits	(51,237)	(44,695)	(21,038)
Foreign restructuring and amortization	—	(625,292)	2,794
Non-deductible expenses	21,953	9,657	2,833
Tax effects associated with Topic 606	—	(23,073)	3,314
Other	448	408	607
Valuation allowance	(431,880)	813,274	146,845
(Benefit from) provision for income taxes	\$ (559,513)	\$ (12,320)	\$ 3,440

Significant components of our deferred tax assets are shown below (in thousands). A valuation allowance has been recognized to offset our deferred tax assets, as necessary, by the amount of any tax benefits that, based on evidence, are not expected to be realized.

	December 31,	
	2019	2018
Deferred tax assets:		
Net operating loss carryforwards	\$ 734,755	\$ 610,314
Credit carryforwards	171,856	120,594
Lease liability	108,224	—
Depreciation and amortization	577,599	594,496
Other	96,535	103,917
Total deferred tax assets	1,688,969	1,429,321
Less valuation allowance	(918,596)	(1,342,981)
	770,373	86,340
Deferred tax liabilities:		
Right of use asset	(101,091)	—
Other	(73,818)	(67,686)
Net deferred tax assets	\$ 595,464	\$ 18,654

The unremitted earnings of our foreign subsidiaries are not considered indefinitely reinvested, except in certain designated jurisdictions in which the resident entity is a service provider that is not expected to generate substantial amounts of cash in excess of what may be reinvested by the local entity. We have not provided for state income or withholding taxes on the undistributed earnings of foreign subsidiaries which are considered indefinitely invested outside of the U.S. The amount of unrecognized deferred tax liability on these undistributed earnings is not material as of December 31, 2019.

As of December 31, 2019, we had U.S. federal net operating loss and federal tax credit carryforwards of approximately \$2.9 billion and \$125.7 million, respectively. The federal tax credits and a portion of the federal net operating loss carryforwards will begin to expire in 2024 if not utilized. In addition, we had state net operating loss and state tax credit carryforwards of approximately \$1.7 billion and \$91.7 million, respectively. The state net operating loss will begin to expire in 2020 if not utilized, however the tax effected amount due to expire in 2020 is immaterial. State tax credits and a portion of the federal net operating loss carryforwards can be carried forward indefinitely. Utilization of our net operating loss and credit carryforwards may be subject to annual limitation due to the ownership change limitations provided by the Internal Revenue Code and similar state provisions. Such an annual limitation could result in the expiration of the net operating loss and tax credit carryforwards before utilization.

We maintain a full valuation allowance against our U.S. deferred tax assets as of December 31, 2019. We regularly assess the need for a valuation allowance against our deferred tax assets. In making that assessment, we consider both positive and negative evidence related to the likelihood of realization of the deferred tax assets to determine, based on the weight of available evidence, whether it is more likely than not that some or all of the deferred tax assets will not be realized. Due to cumulative losses over recent years and based on all available evidence, we have determined that it is more likely than not that our U.S. deferred tax assets will not be realized as of December 31, 2019. We recognized an income tax benefit of \$574.2 million due to the release of the valuation allowance on the Irish deferred tax assets for the year ended December 31, 2019. These Irish deferred tax assets were created primarily as a result of the difference between the tax basis in our Irish subsidiary and the cost reported in our consolidated financial statements resulting from the transfer of intangible assets to the Irish subsidiary as part of our foreign restructuring in 2018. Management applied significant judgment in assessing the positive and negative evidence available in the determination of the amount of deferred tax assets that were more-likely-than-not to be realized in the future. The \$424.4 million decrease in the 2019 valuation allowance was primarily attributable to the release of the valuation allowance on the Irish deferred tax assets. The \$759.7 million increase in the 2018 valuation allowance was primarily attributable to an increase of approximately \$590 million in deferred tax assets that are not realizable related to our foreign restructuring completed during 2018 giving rise to foreign amortizable assets. The \$106.9 million decrease in the 2017 valuation allowance was primarily attributable to remeasuring the U.S. net deferred tax assets at the applicable tax rate of 21% in accordance with the Tax Act, offset by increases in deferred tax assets primarily related to net operating losses. To the extent sufficient positive evidence becomes available, we may release a portion, or all, of our valuation allowance in one or more future periods. A release of the valuation allowance, if any, would result in the recognition of certain deferred tax assets and a material income tax benefit for the period in which such release is recorded.

A reconciliation of the beginning and ending balance of total unrecognized tax benefits is as follows (in thousands):

	Year Ended December 31,		
	2019	2018	2017
Balance, beginning period	\$ 27,591	\$ 27,648	\$ 18,440
Tax positions taken in prior period:			
Gross increases	1,516	3,721	398
Gross decreases	—	(2,896)	—
Tax positions taken in current period:			
Gross increases	7,682	5,796	8,810
Lapse of statute of limitations	—	(1,078)	—
Settlements	—	(5,600)	—
Balance, end of period	\$ 36,789	\$ 27,591	\$ 27,648

As of December 31, 2019, we had gross unrecognized tax benefits of approximately \$36.8 million, of which \$6.1 million would impact the effective tax rate, if recognized. We recognize accrued interest and penalties related to unrecognized tax benefits as income tax expense. Accrued interest and penalties included in our liability related to unrecognized tax benefits were \$0.8 million and \$0.3 million at December 31, 2019 and 2018, respectively. The amount of unrecognized tax benefits could be reduced upon expiration of the applicable statutes of limitations. The potential reduction in unrecognized tax benefits during the next 12 months is not expected to be material. Interest and penalties accrued on these uncertain tax positions are recognized as income tax expense and will be released upon the expiration of the statutes of limitations. These amounts are also not material for any periods presented.

We are subject to taxation in the United States and foreign jurisdictions. As of December 31, 2019, our tax years 2004 to 2018 remain subject to examination in most jurisdictions.

There are differing interpretations of tax laws and regulations, and as a result, disputes may arise with tax authorities involving issues of the timing and amount of deductions and allocations of income among various tax jurisdictions. We periodically evaluate our exposures associated with our tax filing positions. We believe that adequate amounts have been reserved for any adjustments that may ultimately result from these examinations, and we do not anticipate a significant impact to our gross unrecognized tax benefits within the next 12 months related to these years. Although the timing of the resolution, settlement, and closure of any audit is highly uncertain, it is reasonably possible that the balance of gross unrecognized tax benefits could significantly change in the next 12 months. However, given the number of years that remain subject to examination, we are unable to estimate the full range of possible adjustments to the balance of gross unrecognized tax benefits.

(18) Commitments and Contingencies

Operating Leases

For some of our offices and data centers, we have entered into non-cancelable operating lease agreements with various expiration dates through 2035. Certain lease agreements include options to renew or terminate the lease, which are not reasonably certain to be exercised and therefore are not factored into our determination of lease payments.

Total operating lease costs was \$64.2 million, excluding short-term lease costs, variable lease costs and sublease income each of which were immaterial, for the year ended December 31, 2019. Total lease expenses recognized prior to our adoption of Topic 842 were \$46.8 million and \$42.8 million for the years ended December 31, 2018 and 2017, respectively.

For the year ended December 31, 2019, cash paid for amounts included in the measurement of operating lease liabilities was \$44.1 million and operating lease liabilities arising from obtaining operating right-of-use assets totaled \$115.0 million.

As of December 31, 2019, the weighted-average remaining lease term is 9.7 years, and the weighted-average discount rate is 3.7%.

Maturities of operating lease liabilities as of December 31, 2019 are presented in the table below (in thousands):

Years Ending December 31,		
2020	\$	67,629
2021		65,934
2022		62,754
2023		57,957
2024		45,820
Thereafter		230,605
Total operating lease payments		530,699
Less: imputed interest		(94,810)
Present value of operating lease liabilities	\$	435,889

In addition to the amounts above, as of December 31, 2019, we have operating leases, primarily for offices, that have not yet commenced with undiscounted cash flows of \$445.7 million. These operating leases will commence between 2020 and 2022 with lease terms of 3 to 15 years.

Future minimum commitments under our non-cancelable operating leases as of December 31, 2018 are presented in the table below (in thousands):

Years Ending December 31,		
2019	\$	55,435
2020		60,996
2021		63,348
2022		67,707
2023		72,491
Thereafter		578,874
Total	\$	898,851

Other Contractual Commitments

Other contractual commitments consist of data center and IT operations and sales and marketing activities related to our daily business operations. Future minimum payments under our non-cancelable purchase commitments as of December 31, 2019 are presented in the table below (in thousands):

Years Ending December 31,		Purchase Obligations ⁽¹⁾
2020	\$	70,819
2021		62,450
2022		32,572
2023		9,069
2024		2,699
Thereafter		2,630
Total	\$	180,239

(1) Not included in the table above are certain purchase commitments related to our future annual Knowledge user conferences and other customer or sales conferences to be held in 2021 and future years. If we had canceled these contractual commitments as of December 31, 2019 we would have been obligated to pay cancellation penalties of approximately \$16.3 million in aggregate.

In addition to the amounts above, the repayment of our 2022 Notes with an aggregate principal amount of \$782.5 million is due on June 1, 2022. Refer to Note 11 for further information regarding our Notes.

Also, approximately \$6.1 million of unrecognized tax benefits have been recorded as liabilities as of December 31, 2019.

Letters of Credit

As of December 31, 2019, we had letters of credit in the aggregate amount of \$22.9 million, primarily in connection with our customer contracts and operating leases.

Legal Proceedings

From time to time, we are party to litigation and other legal proceedings in the ordinary course of business. While the results of any litigation or other legal proceedings are uncertain, management does not believe the ultimate resolution of any pending legal matters is likely to have a material adverse effect on our financial position, results of operations or cash flows, except for those matters for which we have recorded a loss contingency. We accrue for loss contingencies when it is both probable that we will incur the loss and when we can reasonably estimate the amount of the loss or range of loss.

Generally, our subscription agreements require us to defend our customers for third-party intellectual property infringement and other claims. Any adverse determination related to intellectual property claims or other litigation could prevent us from offering our services and adversely affect our financial condition and results of operations.

(19) Information about Geographic Areas and Products

Revenues by geographic area, based on the location of our users, were as follows for the periods presented (in thousands):

	Year Ended December 31,		
	2019	2018	2017
Revenues by geography			
North America ⁽¹⁾	\$ 2,276,549	\$ 1,725,255	\$ 1,290,043
EMEA ⁽²⁾	865,661	654,677	475,411
Asia Pacific and other	318,227	228,884	153,040
Total revenues	\$ 3,460,437	\$ 2,608,816	\$ 1,918,494

Property and equipment, net by geographic area were as follows (in thousands):

	December 31,	
	2019	2018
Property and equipment, net:		
North America ⁽³⁾	\$ 269,754	\$ 227,471
EMEA ⁽²⁾	118,399	82,526
Asia Pacific and other	79,932	37,219
Total property and equipment, net	\$ 468,085	\$ 347,216

(1) Revenues attributed to the United States were approximately 94% of North America revenues for each of the years ended December 31, 2019, 2018 and 2017.

(2) Europe, the Middle East and Africa (EMEA)

(3) Property and equipment, net attributed to the United States were approximately 73% and 76% of property and equipment, net attributable to North America as of December 31, 2019 and 2018, respectively.

Subscription revenues consist of the following (in thousands):

	Year Ended December 31,		
	2019	2018	2017
Digital workflow products ⁽¹⁾	\$ 2,810,887	\$ 2,111,702	\$ 1,534,591
ITOM products ⁽¹⁾	444,192	309,611	204,909
Total subscription revenues	\$ 3,255,079	\$ 2,421,313	\$ 1,739,500

(1) As we have expanded the scope of IntegrationHub (formerly included within our ITOM offering) beyond ITOM to align more closely with our broader platform offering, revenues associated with IntegrationHub have been reclassified from ITOM products to platform, which is part of our digital workflow products. Revenues reclassified from ITOM product revenues to digital workflow products revenues were \$60.9 million and \$44.4 million for the years ended December 31, 2018 and 2017, respectively.

Our digital workflow products include the Now Platform, Now IT Service Management, Now IT Business Management, Now DevOps, Now IT Asset Management, Now Security Operations, Now Integrated Risk Management, Now HR Service Delivery, Now Finance Operations Management, Now Customer Service Management, and Now Field Service Management, and are generally priced on a per user basis. Our ITOM products are generally priced on a per node (physical or virtual server) basis. In previously issued consolidated financial statements, we referred to digital workflow products as “service management products.”

(20) Subsequent Events

On February 6, 2020, we completed the acquisition of a privately-held company, Loom Systems Ltd. (Loom), by acquiring all issued and outstanding shares of Loom for approximately \$58.4 million in an all-cash transaction to extend our AIOps capabilities. Our accounting and analysis of this transaction is pending completion.

On February 7, 2020, we completed the acquisition of another privately-held company, Rupert Labs, Inc. d/b/a Passage AI (Passage AI), by acquiring all issued and outstanding shares of Passage AI for approximately \$33.2 million in an all-cash transaction to advance our deep learning of AI capabilities. Our accounting and analysis of this transaction is pending completion.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A. CONTROLS AND PROCEDURES

(a) Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our Chief Executive Officer and our Chief Financial Officer, evaluated the effectiveness of our disclosure controls and procedures as of December 31, 2019. The term “disclosure controls and procedures,” as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act, means controls and other procedures of a company that are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the SEC’s rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the company’s management, including its principal executive and principal financial officers, as appropriate to allow timely decisions regarding required disclosure. Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives, and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures.

Based on the evaluation of our disclosure controls and procedures as of December 31, 2019, our Chief Executive Officer and Chief Financial Officer concluded that, as of such date, our disclosure controls and procedures were effective at the reasonable assurance level.

(b) Management’s Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) to provide reasonable assurance regarding the reliability of our financial reporting and the preparation of consolidated financial statements for external purposes in accordance with generally accepted accounting principles.

Our management, under the supervision of our Chief Executive Officer and Chief Financial Officer, conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework in Internal Control—Integrated Framework (2013), issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on this evaluation, management concluded that our internal control over financial reporting was effective as of December 31, 2019.

The effectiveness of our internal control over financial reporting as of December 31, 2019 has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report, which is included in Item 8 of this Annual Report on Form 10-K.

(c) Changes in Internal Control over Financial Reporting

Regulations under the Exchange Act require public companies, including our company, to evaluate any change in our “internal control over financial reporting” as such term is defined in Rule 13a-15(f) and Rule 15d-15(f) of the Exchange Act. Under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, we conducted an evaluation of any changes in our internal control over financial reporting (as such term is defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) that occurred during our most recently completed fiscal quarter. Based on that evaluation, our Chief Executive Officer and Chief Financial Officer did not identify any change in our internal control over financial reporting during the most recently completed fiscal quarter that materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

As previously disclosed on Current Reports on Form 8-K filed with the SEC on May 2, 2019 and July 24, 2019, Michael Scarpelli resigned as Chief Financial Officer effective on August 15, 2019.

As previously disclosed on Current Reports on Form 8-K filed with the SEC on October 23, 2019 and November 18, 2019, John J. Donahoe resigned as President and Chief Executive Officer, effective on November 18, 2019. Mr. Donahoe will continue to serve as a member of our board of directors until his current term expires at our annual meeting of shareholders in 2020. In addition, William R. McDermott was appointed as President and Chief Executive Officer and as a member of our board of directors, effective as of the close of business on November 15, 2019, and Gina Mastantuono was appointed Chief Financial Officer, effective on January 8, 2020.

We do not believe that the resignations of Mr. Donahoe and Mr. Scarpelli have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

ITEM 9B. OTHER INFORMATION

None.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information required by this item will be included in an amendment to this Annual Report on Form 10-K or incorporated by reference from our definitive proxy statement to be filed pursuant to Regulation 14A.

ITEM 11. EXECUTIVE COMPENSATION

The information required by this item will be included in an amendment to this Annual Report on Form 10-K or incorporated by reference from our definitive proxy statement to be filed pursuant to Regulation 14A.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The information required by this item will be included in an amendment to this Annual Report on Form 10-K or incorporated by reference from our definitive proxy statement to be filed pursuant to Regulation 14A.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS AND DIRECTOR INDEPENDENCE

The information required by this item will be included in an amendment to this Annual Report on Form 10-K or incorporated by reference from our definitive proxy statement to be filed pursuant to Regulation 14A.

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

The information required by this item will be included in an amendment to this Annual Report on Form 10-K or incorporated by reference from our definitive proxy statement to be filed pursuant to Regulation 14A.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

The following documents are filed as a part of this Annual Report on Form 10-K:

(a) Financial Statements

The information concerning our financial statements, and Report of Independent Registered Public Accounting Firm required by this Item is incorporated by reference herein to the section of this Annual Report on Form 10-K in Item 8, entitled "Consolidated Financial Statements and Supplementary Data."

(b) Financial Statement Schedules

All schedules have been omitted because the required information is not present or not present in amounts sufficient to require submission of the schedules, or because the information required is included in Item 8, entitled the "Consolidated Financial Statements and Supplementary Data."

(c) Exhibits

The list of exhibits filed with this report is set forth in the Exhibit Index following the signature pages and is incorporated herein by reference.

ITEM 16. FORM 10-K SUMMARY

None.

EXHIBIT INDEX

Exhibit Number	Description of Document	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
3.1	Restated Certificate of Incorporation	10-Q	001-35580	3.1	8/10/2012	
3.2	Restated Bylaws	8-K	001-35580	3.1	10/25/2017	
4.1	Form of Common Stock Certificate	S-1/A	333-180486	4.1	6/19/2012	
4.2	Indenture dated November 13, 2013 between the Registrant and Wells Fargo Bank, National Association	8-K	001-35580	4.1	11/13/2013	
4.3	Indenture dated May 30, 2017 between the Registrant and Wells Fargo Bank, National Association	8-K	001-35580	4.1	5/30/2017	
4.4	Description of Registrant's Securities Registered Under Section 12 of the Exchange Act					X
10.1*	Form of Indemnification Agreement	10-K	001-35580	10.1	2/27/2015	
10.2*	2005 Stock Plan, Forms of Stock Option Agreement and Form of Restricted Stock Unit Agreement thereunder	S-1	333-180486	10.2	3/30/2012	
10.3*	2012 Equity Incentive Plan, as amended through January 29, 2019	10-K	001-35580	10.3	2/27/2019	
10.4*	Form of Stock Option Award Agreement under 2012 Equity Incentive Plan, adopted as of April 22, 2019	10-Q	001-35580	10.1	8/6/2019	
10.5*	Form of Restricted Stock Unit Award Agreement under 2012 Equity Incentive Plan, adopted as of April 22, 2019	10-Q	001-35580	10.2	8/6/2019	
10.6*	2012 Employee Stock Purchase Plan and Form of Subscription Agreement thereunder	10-K	001-35580	10.4	3/8/2013	
10.7*	Form of Subscription Agreement under 2012 Employee Stock Purchase Plan, adopted as of April 22, 2019	10-Q	001-35580	10.3	8/6/2019	
10.8*	Employment Agreement dated October 22, 2019 between the Registrant and William R. McDermott	8-K	001-35580	10.1	10/23/2019	
10.9*	Employment Agreement dated November 15, 2019 between the Registrant and Gina Mastantuono	8-K	001-35580	10.1	11/18/2019	
10.10*	Employment Agreement dated May 12, 2011 between the Registrant and Michael P. Scarpelli	S-1	333-180486	10.6	3/30/2012	
10.11*	First Amendment to Employment Agreement dated August 15, 2014 between the Registrant and Michael P. Scarpelli	10-Q	001-35580	10.2	11/5/2014	

Exhibit Number	Description of Document	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
10.12*	Amendment No. 2 to Employment Agreement, dated August 8, 2017, between the Registrant and Michael P. Scarpelli	10-Q	001-35580	10.2	8/8/2017	
10.13*	Employment Agreement dated May 21, 2011 between the Registrant and David L. Schneider	S-1	333-180486	10.7	3/30/2012	
10.14*	First Amendment to Employment Agreement dated July 3, 2014 between the Registrant and David L. Schneider	10-Q	001-35580	10.1	11/5/2014	
10.15*	Amendment No. 2 to Employment Agreement, dated June 6, 2017, between the Registrant and David L. Schneider	10-Q	001-35580	10.1	8/8/2017	
10.16*	Employment Agreement dated February 22, 2017 between the Registrant and John J. Donahoe	8-K	001-35580	10.1	2/27/2017	
10.17*	Confirmatory Employment Letter Agreement dated October 31, 2017, between the Registrant and Chirantan J. Desai	10-Q	001-35580	10.1	11/6/2017	
10.18*	Confirmatory Employment Letter Agreement dated December 30, 2017, between the Registrant and Pat Wadors	10-Q	001-35580	10.4	8/8/2018	
10.19*	Confirmatory Employment Letter Agreement dated November 13, 2018, between the Registrant and Russell Elmer	10-K	001-35580	10.17	2/27/2019	
10.20	Lease Agreement dated November 8, 2012 between the Registrant and Jay Ridge LLC	S-1/A	333-184674	10.12	11/9/2012	
10.21	Office Lease dated December 12, 2014 between Registrant and SI 55 LLC	8-K	001-35580	10.1	12/15/2014	
10.22	Third Amendment to Lease dated May 3, 2018 between the Registrant and SI 55, LLC	10-Q	001-35580	10.1	5/8/2018	
10.23	Lease dated May 3, 2018, between the Registrant and SI 55, LLC	10-Q	001-35580	10.2	5/8/2018	
10.24	Lease dated May 3, 2018, between the Registrant and SI 55, LLC	10-Q	001-35580	10.3	5/8/2018	
10.25	Form of Base Convertible Note Hedge Transaction Confirmation	8-K	001-35580	99.1	11/13/2013	
10.26	Form of Base Convertible Note Hedge Transaction Confirmation	8-K	001-35580	99.1	5/30/2017	
10.27	Form of Base Warrant Transaction Confirmation	8-K	001-35580	99.2	11/13/2013	
10.28	Form of Base Warrant Transaction Confirmation	8-K	001-35580	99.2	5/30/2017	
10.29	Form of Additional Convertible Note Hedge Transaction Confirmation	8-K	001-35580	99.3	11/13/2013	
10.30	Form of Additional Convertible Note Hedge Transaction Confirmation	8-K	001-35580	99.1	6/22/2017	
10.31	Form of Additional Warrant Transaction Confirmation	8-K	001-35580	99.4	11/13/2013	

Exhibit Number	Description of Document	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
10.32	Form of Additional Warrant Transaction Confirmation	8-K	001-35580	99.2	6/22/2017	
10.33+	Settlement Agreement between the Registrant and BMC Software, Inc., dated March 7, 2016	10-Q	001-35580	10.1	8/3/2016	
21.1	Subsidiaries of the Registrant					X
23.1	Consent of independent registered public accounting firm					X
24.1	Power of Attorney. Reference is made to the signature page hereto					X
31.1	Certification of Periodic Report by Chief Executive Officer under Section 302 of the Sarbanes-Oxley Act of 2002					X
31.2	Certification of Periodic Report by Chief Financial Officer under Section 302 of the Sarbanes-Oxley Act of 2002					X
32.1**	Certification of Chief Executive Officer Pursuant to 18 U.S.C. Section 1350 as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002					X
32.2**	Certification of Chief Financial Officer Pursuant to 18 U.S.C. Section 1350 as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002					X
101.INS	XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document					X
101.SCH	Inline XBRL Taxonomy Extension Schema Document					X
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document					X
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document					X
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document					X
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document					X
104	Cover Page Interactive Data File (formatted as inline XBRL and contained in Exhibit 101)					X

+ Registrant has omitted portions of the relevant exhibit and filed such exhibit separately with the Securities and Exchange Commission pursuant to a request for confidential treatment granted under Rule 406 under the Securities Act of 1933, as amended.

* Indicates a management contract, compensatory plan or arrangement.

** The certifications on Exhibit 32 hereto are deemed not "filed" for purposes of Section 18 of the Securities and Exchange Act of 1934, as amended, or otherwise subject to the liability of that Section. Such certifications will not be deemed incorporated by reference into any filing under the Securities Act or the Exchange Act.

SIGNATURES

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

Dated: February 20, 2020

SERVICENOW, INC.

By: */s/ William R. McDermott*
William R. McDermott
President and Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints William R. McDermott and Gina Mastantuono, and each of them, as his or her true and lawful attorneys-in-fact and agents, each with the full power of substitution, for him or her and in his or her name, place or stead, in any and all capacities, to sign any and all amendments to this report, and to file the same, with exhibits thereto and other 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 in and about the premises, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or their or his substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

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

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ William R. McDermott</u> William R. McDermott	President, Chief Executive Officer and Director <i>(Principal Executive Officer)</i>	February 20, 2020
<u>/s/ Gina Mastantuono</u> Gina Mastantuono	Chief Financial Officer <i>(Principal Financial Officer)</i>	February 20, 2020
<u>/s/ Fay Sien Goon</u> Fay Sien Goon	Chief Accounting Officer <i>(Principal Accounting Officer)</i>	February 20, 2020
<u>/s/ Frederic B. Luddy</u> Frederic B. Luddy	Chairman of the Board of Directors	February 20, 2020
<u>/s/ Susan L. Bostrom</u> Susan L. Bostrom	Director	February 20, 2020
<u>/s/ Teresa Briggs</u> Teresa Briggs	Director	February 20, 2020
<u>/s/ Jonathan C. Chadwick</u> Jonathan C. Chadwick	Director	February 20, 2020
<u>/s/ Paul E. Chamberlain</u> Paul E. Chamberlain	Director	February 20, 2020
<u>/s/ John J. Donahoe</u> John J. Donahoe	Director	February 20, 2020
<u>/s/ Jeffrey A. Miller</u> Jeffrey A. Miller	Director	February 20, 2020
<u>/s/ Anita M. Sands</u> Anita M. Sands	Director	February 20, 2020
<u>/s/ Dennis M. Woodside</u> Dennis M. Woodside	Director	February 20, 2020
<u>/s/ Tamar Yehoshua</u> Tamar Yehoshua	Director	February 20, 2020

**DESCRIPTION OF THE REGISTRANT'S SECURITIES
REGISTERED PURSUANT TO SECTION 12 OF THE SECURITIES
EXCHANGE ACT OF 1934**

As of December 31, 2019, ServiceNow, Inc. ("ServiceNow," the "Company," or "us") had one class of securities registered under Section 12 of the Securities Exchange Act of 1934, as amended: our common stock.

Description of Common Stock

The following description of our common stock is a summary and does not purport to be complete. It is subject to and qualified in its entirety by reference to our Restated Certificate of Incorporation (the "Certificate of Incorporation") and our Restated Bylaws (the "Bylaws"), each of which are incorporated by reference as an exhibit to the Annual Report on Form 10-K of which this Exhibit 4.4 is a part. We encourage you to read our Certificate of Incorporation, our Bylaws and the applicable provisions of the Delaware General Corporation Law (the "DGCL"), for additional information.

General

Our authorized capital stock consists of 600,000,000 shares of common stock, \$0.001 par value per share, and 10,000,000 shares of preferred stock, \$0.001 par value per share.

Common Stock

Dividend Rights

Subject to preferences that may apply to shares of preferred stock outstanding at the time, the holders of outstanding shares of our common stock are entitled to receive dividends out of funds legally available if our board of directors, in its discretion, determines to issue dividends and only then at the times and in the amounts that our board of directors may determine.

Voting Rights

Each holder of common stock is entitled to one vote for each share of common stock held on all matters submitted to a vote of stockholders. Our Certificate of Incorporation eliminates the right of stockholders to cumulate votes for the election of directors. Our Certificate of Incorporation establishes a classified board of directors, to be divided into three classes with staggered three-year terms. Only one class of directors will be elected at each annual meeting of our stockholders, with the other classes continuing for the remainder of their respective three-year terms.

No Preemptive or Similar Rights

Our common stock is not entitled to preemptive rights and is not subject to conversion, redemption or sinking fund provisions.

Right to Receive Liquidation Distributions

Upon our dissolution, liquidation or winding-up, the assets legally available for distribution to our stockholders are distributable ratably among the holders of our common stock, subject to prior satisfaction of all outstanding debt and liabilities and the preferential rights and payment of liquidation preferences, if any, on any outstanding shares of preferred stock.

Anti-Takeover Provisions

The provisions of Delaware law, our Certificate of Incorporation and our Bylaws may have the effect of delaying, deferring or discouraging another person from acquiring control of us.

Delaware Law

We are governed by the provisions of Section 203 of the DGCL regulating corporate takeovers. This section prevents some Delaware corporations, including us, from engaging, under some circumstances, in a business combination, which includes a merger or sale of at least 10% of the corporation's assets with any interested stockholder, meaning a stockholder who, together with affiliates and associates, owns or, within three years prior to the determination of interested stockholder status, did own 15% or more of the corporation's outstanding voting stock, unless:

- the transaction is approved by the board of directors prior to the time that the interested stockholder became an interested stockholder;
- upon consummation of the transaction which resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced; or
- at or subsequent to such time that the stockholder became an interested stockholder, the business combination is approved by the board of directors and authorized at an annual or special meeting of stockholders by at least two-thirds of the outstanding voting stock not owned by the interested stockholder.

A Delaware corporation may "opt out" of these provisions with an express provision in its original certificate of incorporation or an express provision in its certificate of incorporation or bylaws resulting from a stockholders' amendment approved by at least a majority of the outstanding voting shares. We do not plan to "opt out" of these provisions. The statute could prohibit or delay mergers or other takeover or change in control attempts and, accordingly, may discourage attempts to acquire us.

Restated Certificate of Incorporation and Restated Bylaw Provisions

Our Certificate of Incorporation and our Bylaws include a number of provisions that may have the effect of deterring hostile takeovers or delaying or preventing changes in control, including the following:

- *Board of Directors Vacancies.* Our Certificate of Incorporation and Bylaws authorize only our board of directors to fill vacant directorships. In addition, the number of directors constituting our board of directors is set only by resolution adopted by a majority vote of our entire board of directors. These provisions prevent a stockholder from increasing the size of our board of directors and gaining control of our board of directors by filling the resulting vacancies with its own nominees.

- *Classified Board.* Our Certificate of Incorporation and Bylaws provide that our board of directors is classified into three classes of directors. The existence of a classified board could delay a successful tender offeror from obtaining majority control of our board of directors, and the prospect of that delay might deter a potential offeror.
- *Stockholder Action; Special Meeting of Stockholders.* Our Certificate of Incorporation provides that our stockholders may not take action by written consent, but may only take action at annual or special meetings of our stockholders. Stockholders are not permitted to cumulate their votes for the election of directors. Our Bylaws further provide that special meetings of our stockholders may be called only by a majority of our board of directors, the chairman of our board of directors, our chief executive officer or our president.
 - *Advance Notice Requirements for Stockholder Proposals and Director Nominations.* Our Bylaws provide advance notice procedures for stockholders seeking to bring business before our annual meeting of stockholders, or to nominate candidates for election as directors at our annual meeting of stockholders. Our Bylaws also specify certain requirements regarding the form and content of a stockholder's notice. These provisions may preclude our stockholders from bringing matters before our annual meeting of stockholders or from making nominations for directors at our annual meeting of stockholders (though our Bylaws have implemented stockholder proxy access).
 - *Issuance of Undesignated Preferred Stock.* Our board of directors has the authority, without further action by the stockholders, to issue up to 10,000,000 shares of undesignated preferred stock with rights and preferences, including voting rights, designated from time to time by the board of directors. The existence of authorized but unissued shares of preferred stock enables our board of directors to render more difficult or to discourage an attempt to obtain control of us by means of a merger, tender offer, proxy contest or otherwise.
 - *Super Majority Vote to Amend Certificate of Incorporation and Bylaws.* Our Certificate of Incorporation provides that if two-thirds of our board of directors approves the amendment of our certificate of incorporation and bylaws, or any provisions thereof, then such amendment need only be approved by stockholders holding a majority of our outstanding shares of common stock entitled to vote. Otherwise, such amendment must be approved by stockholders holding two-thirds of our outstanding shares of common stock entitled to vote.

New York Stock Exchange Listing

Our common stock is listed on the New York Stock Exchange under the symbol "NOW."

SUBSIDIARIES

Name of Subsidiary	Jurisdiction of Incorporation or Organization
ServiceNow Australia Pty. Ltd.	Australia
ServiceNow GmbH	Austria
ServiceNow Belgium BVBA	Belgium
ServiceNow Brasil Gerenciamento de Servicos Ltda	Brazil
ServiceNow Canada Inc.	Canada
ITapp Inc.	Delaware
ServiceNow Delaware LLC	Delaware
ServiceNow Denmark ApS	Denmark
ServiceNow Finland Oy	Finland
ServiceNow France SAS	France
Service-now.com GmbH	Germany
ServiceNow Hong Kong Limited	Hong Kong
ServiceNow Software Development India Private Limited	India
ITapp Software Private Limited	India
ServiceNow Ireland Limited	Ireland
ServiceNow Israel A.B 2012 Ltd.	Israel
SkyGiraffe Ltd.	Israel
ServiceNow Italy S.R.L.	Italy
ServiceNow Japan K.K.	Japan
Fairchild Consulting Services LLC	Massachusetts
ServiceNow Operations Mexico S. de R.L. de C.V.	Mexico
ServiceNow Nederland B.V.	Netherlands
ServiceNow Norway AS	Norway
ServiceNow Portugal, Unipessoal LDA	Portugal
ServiceNow Pte. Ltd.	Singapore
ServiceNow South Africa (Pty) Ltd.	South Africa
ServiceNow Spain SL	Spain
ServiceNow Sweden AB	Sweden
ServiceNow Switzerland GmbH	Switzerland
ServiceNow Turkey Bilisim Sanayi Ve Ticaret Limited Sirketi	Turkey
ServiceNow UK Ltd.	United Kingdom

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statements on Form S-8 (No. 333-182445, 333-188462, 333-194210, 333-202331, 333-209785, 333-216330, and 333-223331) and Form S-3 (No. 333-224670) of ServiceNow, Inc. of our report dated February 20, 2020 relating to the financial statements and the effectiveness of internal control over financial reporting, which appears in this Form 10-K.

/s/ PricewaterhouseCoopers LLP

San Jose, California

February 20, 2020

**CERTIFICATION OF PERIODIC REPORT UNDER SECTION 302 OF
THE SARBANES-OXLEY ACT OF 2002**

I, William R. McDermott, certify that:

1. I have reviewed this annual report on Form 10-K of ServiceNow, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 20, 2020

/s/ William R. McDermott

William R. McDermott
President, Chief Executive Officer and Director
(Principal Executive Officer)

**CERTIFICATION OF PERIODIC REPORT UNDER SECTION 302 OF
THE SARBANES-OXLEY ACT OF 2002**

I, Gina Mastantuono, certify that:

1. I have reviewed this annual report on Form 10-K of ServiceNow, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 20, 2020

/s/ Gina Mastantuono

Gina Mastantuono
Chief Financial Officer
(Principal Financial Officer)

**CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350
AS ADOPTED PURSUANT TO SECTION 906
OF THE SARBANES-OXLEY ACT OF 2002**

I, William R. McDermott, Chief Executive Officer of ServiceNow, Inc. (the "Company"), do hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

- the Annual Report on Form 10-K of the Company for the period ended December 31, 2019 (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company at the dates and for the periods presented therein.

Date: February 20, 2020

/s/ William R. McDermott

William R. McDermott
President, Chief Executive Officer and Director
(Principal Executive Officer)

A signed original of this written statement required by Section 906 has been provided to ServiceNow, Inc. and will be retained by it and furnished to the Securities and Exchange Commission or its staff upon request.

**CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350
AS ADOPTED PURSUANT TO SECTION 906
OF THE SARBANES-OXLEY ACT OF 2002**

I, Gina Mastantuono, Chief Financial Officer of ServiceNow, Inc. (the "Company"), do hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

- the Annual Report on Form 10-K of the Company for the period ended December 31, 2019 (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company at the dates and for the periods presented therein.

Date: February 20, 2020

/s/ Gina Mastantuono

Gina Mastantuono
Chief Financial Officer
(Principal Financial Officer)

A signed original of this written statement required by Section 906 has been provided to ServiceNow, Inc. and will be retained by it and furnished to the Securities and Exchange Commission or its staff upon request.