Cornerstone OnDemand Inc
Form 10-K
February 26, 2019

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

FORM 10-K
(Mark One)
ý ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended December 31, 2018
Or
¨ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the transition period from to
Commission file number: 001-35098

Cornerstone OnDemand, Inc.
(Exact name of registrant as specified in its charter)

Delaware	13-4068197
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification Number)

1601 Cloverfield Blvd.
Suite 620 South
Santa Monica, California 90404
(Address of principal executive offices and zip code)
Registrant's telephone number, including area code: (310) 752-0200
Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Name of each exchange on which registered
Common Stock, par value $0.0001 per share	Nasdaq Stock Market LLC (Nasdaq Global Select Market)

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

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ý No ¨
Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 (the "Exchange Act"). Yes ¨ No ý
Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Exchange Act during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ý No ¨

Indicate by check mark whether the registrant has submitted electronically 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 and post such files).   Yes ý   No ¨
Indicate by a check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.   ý
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. (Check one):

Large accelerated filer	ý	Accelerated filer	¨
Non-accelerated filer	¨	Smaller reporting company	¨
		Emerging growth company	¨

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ¨
Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).   Yes ¨   No ý
The aggregate market value of voting and non-voting common stock equity held by non-affiliates of the registrant, as of June 30, 2018, the last day of the registrant's most recently completed second fiscal quarter, was $1,303,889,877 (based on the closing price for shares of the registrant's common stock as reported by the Nasdaq Global Select Market on June 30, 2018).
On February 20, 2019, 59,100,210 shares of the registrant's common stock, $0.0001 par value, were outstanding.

DOCUMENTS INCORPORATED BY REFERENCE
Portions of the information called for by Part III of this Form 10-K are hereby incorporated by reference from the Definitive Proxy Statement for the registrant's annual meeting of stockholders, which will be filed with the Securities and Exchange Commission not later than 120 days after December 31, 2018.

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PART I

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. Forward-looking statements are any statements that look to future events and consist of, among other things, statements regarding our business strategies; anticipated future operating results and operating expenses; our ability to attract new clients to enter into subscriptions for our products; our ability to service those clients effectively and induce them to renew and upgrade their deployments of our products; our ability to expand our sales organization to address effectively the new industries, geographies and types of organizations we intend to target; our ability to accurately forecast revenue and appropriately plan our expenses; market acceptance of enhanced products; alternate ways of addressing talent management needs or new technologies generally by us and our competitors; continued acceptance of SaaS as an effective method for delivering human capital management products and other business management products; the attraction and retention of qualified employees and key personnel; our ability to protect and defend our intellectual property; costs associated with defending intellectual property infringement and other claims; our ability to exploit Big Data to drive increased demand for our products; events in the markets for our products and alternatives to our products, as well as in the United States and global markets generally; future regulatory, judicial and legislative changes in our industry; our ability to successfully integrate our operations with those of recently acquired companies; and changes in the competitive environment in our industry and the markets in which we operate. In addition, forward-looking statements also consist of statements involving trend analyses and statements including such words as “may,” “believe,” “could,” “anticipate,” “would,” “might,” “plan,” “expect,” and similar expressions or the negative of such terms or other comparable terminology. These forward-looking statements speak only as of the date of this Annual Report on Form 10-K and are subject to business and economic risks. As such, our actual results could differ materially from those set forth in the forward-looking statements as a result of the factors set forth below in Part I, Item 1A, “Risk Factors,” and in our other reports filed with the Securities and Exchange Commission. We assume no obligation to update the forward-looking statements to reflect events that occur or circumstances that exist after the date on which they were made.

Item 1. Business

Overview

Cornerstone OnDemand, Inc. was incorporated on May 24, 1999 in the state of Delaware and began its principal operations in November 1999. Unless the context requires otherwise, the words “Cornerstone,” “we,” “Company,” “us” and “our” refer to Cornerstone OnDemand, Inc. and its wholly owned subsidiaries.

We were founded with a passion for empowering people through learning and a conviction that people should be an organization's greatest competitive advantage. We are a global human capital management leader with a core belief that companies thrive when they help their employees to realize their potential. Putting this belief into practice, we offer solutions to help companies strategically manage and continuously develop their talent throughout the entire employee lifecycle. Featuring comprehensive recruiting, personalized learning, development-driven performance management, and holistic HR planning, our human capital management platform is successfully used by more than 3,535 global clients of all sizes, spanning more than 40 million users across 192 countries and 43 languages.

We work with clients across all geographies, verticals and market segments. Our clients include multi-national corporations, large domestic and foreign-based enterprises, mid-market companies, public sector organizations, healthcare providers, higher education institutions, non-profit organizations and small businesses. We sell our platform domestically and internationally through both direct and indirect channels, including direct sales teams throughout North and South America, Europe and Asia-Pacific and distributor relationships with payroll companies, human resource consultancies and global system integrators.

Our enterprise human capital management platform is composed of four product suites:

- Our Recruiting suite helps organizations to attract, hire, and onboard the right employees;
- Our Learning suite provides robust, modern learning management software designed to scale with the organization. Cornerstone Learning comprehensively supports compliance, knowledge sharing, and employee-driven development training to close skills gaps. Our content offering delivers fresh, modern content, fueling employee curiosity and

inspiring growth;

- Our Performance suite provides tools to manage goal setting, performance reviews, competency assessments, development plans, continuous feedback, compensation management and succession planning; and
- Our HR suite provides an aggregated view of all employee data with workforce planning, self-service management, and compliance reporting capabilities resulting in more accurate data.

The Market

The Human Capital Management ("HCM") technology market is one of the largest in the software industry. According to an International Data Corporation ("IDC") market forecast report, titled "Worldwide Human Capital Management and Payroll Applications Forecast, 2017-2021," published in June 2017, the global market for Human Capital Management and Payroll Applications in 2018 was predicted to be $19.7 billion, of which $15 billion is for HCM applications. According to IDC, the HCM application market in particular is expected to grow to $19.7 billion by 2021, representing a 9.0% CAGR, and includes payroll, HR, talent acquisition, workforce management, document management, performance management, compensation management, and succession planning.

The global corporate training market is also one of the largest in the software industry. According to a Training Industry, Inc. report, titled "The Anatomy of the Modern Learning System," global spend on corporate training initiatives was estimated to be $362 billion in 2017, of which approximately $25 billion was spent on third-party external training courses in North America.

Our Human Capital Management Platform

Our human capital management platform is a comprehensive Software-as-a-Service ("SaaS") solution that consists of four integrated suites to help organizations manage their recruiting, learning, performance and HR administration processes. These suites are supplemented by state-of-the-art analytics and reporting as well as a number of cross-product tools for employee profile management and e-learning content aggregation and delivery. We believe that our human capital management platform delivers the following benefits:

- Comprehensive Functionality. Our platform provides a comprehensive approach to human capital management by offering products to address all stages of the employee lifecycle: recruiting, onboarding, learning, performance, succession, compensation, enterprise social collaboration and HR administration processes. Employees use our platform throughout their careers to engage in performance processes such as goal management, performance reviews, continuous feedback, competency assessments and compensatory reviews; to complete job-specific and compliance-related training; to evaluate potential career changes, development plans or succession processes; and to connect and collaborate with co-workers by leveraging enterprise social networking tools. Employee managers and HR managers use our platform to perform their human capital administrative responsibilities effectively throughout their employees' careers. We believe our comprehensive, unified platform enables our clients to align their human capital management processes and practices with their broader strategic goals.
- Flexible and Highly Configurable. Our platform offers substantial configurability that allows our clients to match the use of our software with their specific business processes and workflows. We also provide web services to facilitate the importing and exporting of data to and from other client systems, such as enterprise resource planning and human resource information system platforms. Our clients can configure various features, functions and work flows in our platform by business unit, division, department, region, location, job position, pay grade, cost center, or self-defined organizational unit. Our clients are able to adjust features to configure specific processes, such as performance review workflows or training approvals, to match their existing or desired practices. This high level of configurability means that custom coding projects generally are not required to meet the diverse needs of our clients.
- Easy-to-Use, Personalized User Interface. Our platform employs an intuitive user interface and may be personalized for the end user, typically based on position, division, pay grade, location, manager and particular use of the solution. This ease of use limits the need for end-user training, which we believe increases user adoption rates and usage.
- Software-as-a-Service Solution Lowers the Total Cost of Ownership and Speeds Delivery. Our platform is accessible through a standard web browser and does not require the large investments in implementation time, personnel, hardware and consulting that are typical of hosted or on-premise solutions. With a single code base to maintain, we are able to release improved functionality on a quarterly basis. This is a more rapid pace than most hosted or on-premise solution providers can afford to deliver.
- Scalable to Meet the Needs of Organizations. Our platform has been used by Fortune 100 companies since 2001. While the complex needs of these global corporations required us to build a solution that can scale to support large, geographically-distributed employee bases, our platform is capable of supporting deployments of various sizes. Today we service 40 multi-national corporations with over 150,000 active users each. Our largest deployment is for over 600,000 users.

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- Insights and Predictive Analysis. Our platform leverages technology powered by a highly refined machine learning system for human capital management. We also offer a large network of shared talent data. This enables leaders to answer critical questions about how to better hire, manage, retain, and reward talent with dashboards that can be drilled down to individual employees. Enhanced by additional Cornerstone suite usage, these insights allow organizations to manage their human capital proactively and be strategic with initiatives that affect thousands of employees across many groups and locations.
- Continued Innovation through Collaborative Product Development. We work collaboratively with our clients on an ongoing basis to develop almost every part of our platform. The vast majority of our thousands of software features were designed using feedback from existing and prospective clients based on their specific functional requests.
- Focus on Data Privacy. We have designed our platform to meet certain rigorous industry and jurisdictional security standards and to help assure clients that their sensitive data is protected across the system. We ensure high levels of security by logically segregating each client's data from the data of other clients and by enforcing a consistent approach to roles and rights within the system. These restrictions limit system access to only those individuals authorized by our clients. We also employ multiple standard technologies, protocols and processes to monitor, test and certify the security of our infrastructure continuously.

Our Human Capital Management Solutions

Our comprehensive human capital management platform is a collection of four integrated suites to help organizations manage key phases of the employee life cycle. To complement our platform, we offer a number of cross-product tools for analytics and reporting, employee profile management and e-learning content aggregation.

Cornerstone Recruiting

Cornerstone Recruiting. Our applicant tracking product supports the modern ways that organizations attract and hire new employees. From easily tracking applicants through the hiring process, to managing interviews and tracking feedback, our solution simplifies processes to save recruiters and hiring managers time. With mobile-friendly, customizable career sites, organizations can showcase their unique employer brand to attract top talent.

Cornerstone Onboarding. Our onboarding product enables clients to tailor resources based on a new hire's specific position - avoiding wasted effort and enabling new hires to focus on meaningful activities that accelerate productivity to help new employees acclimate quickly by providing a personalized, modern, onboarding experience that equips them with the right resources. The onboarding product complements the recruiting product by providing a seamless and engaging experience for the employee, while reducing administrative burden and promoting collaboration across departments.

Our Recruiting suite is utilized by approximately 23% of our total base of 3,535 clients.

Cornerstone Learning

Cornerstone Learning. Our learning product helps clients deliver mobile-ready, enterprise-class training and development programs. It links employee development to other parts of the talent management lifecycle, including onboarding, performance management and succession planning. The learning product supports all forms of learning, including online, instructor-led and collaborative and on-the-job learning, as well as robust reporting and embedded predictive analytics. With tens of thousands of online training titles from dozens of global content providers accessible through our new engaging Learning Experience Platform, clients reduce overall training expenses, while quickly transforming their learning programs with modern, curated content. The access to personalized content delivered at scale with Cornerstone's machine learning technology builds a culture of continuous learning, boosting employee engagement and retention.

Cornerstone Extended Enterprise. Our extended enterprise product helps clients provide training and enablement to their customers, vendors and distributors. The extended enterprise product empowers clients to develop new profit centers, increase sales, cut support costs and boost channel productivity.

Cornerstone for Salesforce. Our Cornerstone for Salesforce product is an enablement solution for employees, partners and customers developed natively on the Salesforce.com platform. Cornerstone for Salesforce leverages clients' Salesforce investments across all products to build high-performance sales and service teams with triggered, just-in-time training, as well as leverage learning to engage and enable customers and partners.

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Cornerstone Content. Our Cornerstone Content solutions enable organizations to deliver fresh, modern content to their workforce. We have entered into license agreements with a wide range of vendors that provide off-the-shelf e-learning content and custom learning content development services. Through this network, we are able to offer an extensive library of online training content to our clients through our Learning Experience Platform. Content Anytime is our proprietary, foundational e-learning content subscription which integrates seamlessly into Cornerstone Learning. The subscription provides access to pre-curated packages around a variety of popular topics. We plan to expand our Content Anytime offering as part of our strategic initiative to grow our content sales.

Our Learning suite is utilized by approximately 87% of our total base of 3,535 clients.

Cornerstone Performance

Cornerstone Performance. Our performance management product allows clients to direct and measure performance at the individual, departmental and organizational levels through ongoing competency management, organizational goal setting, performance appraisal, development planning and feedback. Performance data can also be used by the learning product offering to set training priorities and to make informed workforce planning decisions.

Cornerstone Succession. Our succession product allows clients to proactively plan for organizational change and talent mobility. The succession product serves both the employee looking for career advancement and management team members planning for the future. Employees can share career preferences and discover development opportunities. Management team members can utilize tools provided to identify skill gaps, implement development plans and create talent pools for future needs.

Cornerstone Compensation. Our compensation product allows clients to reward their employees for hard work in direct relation to performance. The compensation product enables clients to make more informed decisions about the allocation of base pay, bonus and equity awards.

Our Performance suite is utilized by approximately 52% of our total base of 3,535 clients.

Cornerstone HR

Cornerstone HR. Our HR product offers a modern interface for centralized HR administration across an organization's disparate systems. Acting as a source of truth for core employee and talent data, the system supports employee self-service, absence management, organization management and records administration.

Cornerstone View. Our view product allows clients to access HR data across our human capital management products. The view product enables organizations to utilize interactive data visualization tools to discover their top performers and future leaders, proactively answer workforce questions, and achieve business results.

Cornerstone Benchmark. Our benchmark product enables organizations to compare internal employee data with peers in external companies or across divisions, subdivisions, subsidiaries, or regions within their own organization. Both options allow the organization to visualize how they compare against custom and internal business segments across a variety of metrics.

Our HR suite is utilized by approximately 5% of our total base of 3,535 clients.

Our Strategy

Our goal is to empower people, organizations and communities to realize their potential with a comprehensive human capital management platform that is built to last. Our growth strategy since inception has been deliberate and focused on long-term success. This has allowed us to weather periods of economic turmoil and significant changes in the markets we serve without experiencing business contraction. We plan to continue with the same systematic approach in the future. Key elements of our strategy include:

Continue to Innovate and Extend Our Technological Leadership. We believe we have developed over the last twenty years a deep understanding of the human capital management challenges our clients face. We continually collaborate with our clients to build extensive functionality that addresses their specific needs and requests. We plan to continue to leverage our expertise in human capital management and client relationships to develop new products, features and functionality that will enhance our platform and expand our addressable market.

Retain and Expand Business with Existing Clients. We believe our existing installed base of clients offers a substantial opportunity for growth.

- Focus on Client Success, Retention and Growth. We believe focusing on our clients' success will lead to our own success. We have developed a Client Success Framework that governs our operating model. Since 2002, we have averaged annual gross dollar retention rates of approximately 95%. We strive to maintain our strong retention rates by continuing to provide our clients with high levels of service, support and increasing functionality.
- Sell Additional Products to Existing Clients. We believe there is a significant growth opportunity in selling additional functionality to our existing clients. Many clients have added functionality subsequent to their initial deployments as they recognize the benefits of our unified platform. As a result, approximately 71% of our clients today utilize two or more products and approximately 41% utilize three or more products. With our expanding product portfolio functionality, we believe significant upsell opportunity remains within our existing client base.

Focus on Growing Recurring Revenue. Beginning in 2018, we focused our go-to-market capabilities on driving recurring revenue growth. We believe our primary growth drivers are as follows:

- Invest in Direct Sales in North America. We believe that the market for human capital management is large and remains significantly underpenetrated. In particular, Recruiting and Content provide an opportunity to increase our recurring sales to both new and existing clients. Additionally, we believe the Small and Medium-sized Business (SMB) market represents a very large and underpenetrated opportunity.
- Significantly Grow Our International Operation. We believe a substantial opportunity exists to continue to grow sales of our platform internationally. We intend to grow our Europe, Middle-East and Africa ("EMEA") and Asia-Pacific and Japan ("APJ") operations. As of December 31, 2018, we had 827 clients in EMEA and 198 clients in APJ.
- Grow Our Cornerstone Content Anytime Sales. We believe there is a significant market opportunity for developing employees throughout their careers with modern, fresh e-learning content. Our Content Anytime subscription offering provides access to industry leading content which we believe will increase user engagement on our platform. Our content partners for Content Anytime include industry leaders as well as regional, functional and vertically-focused online training providers. In addition, we have agreements with providers of specific competency models for use by our clients directly in our human capital management platform. We intend to enter into additional license agreements to continue providing the best content available for our clients.
- Expand the Ecosystem. During 2018, we migrated a sizable portion of our implementation services to our partners. We have also expanded in recent years our relationships with various third-party consulting firms to deliver the successful implementation of our platform and to optimize our clients' use of our platform during the terms of their engagements. Our partner strategy and experience includes certifications and curricula developed to ensure successful delivery by our partners and continued high client satisfaction. We believe we have a significant opportunity to leverage these third-parties interested in building or expanding their businesses to increase our market penetration.

Increase Operating Income and Free Cash Flow. In November 2017, we announced a strategic plan designed to better position us for long-term growth and increase shareholder value. We believe managing our operating costs while making smart investments in scaling our middle and back-office operations to support recurring revenue growth is critical to our long-term success. We intend to focus on operational excellence initiatives that drive increases in operating income and free cash flow.

Acquisitions. We may acquire or invest in additional businesses, products or technologies that we believe will complement or expand our platform, enhance our technical capabilities or otherwise offer growth opportunities. Most recently, in November 2018, we acquired Grovo Learning, Inc., a leading provider of Microlearning® content, and in September 2018, we acquired Workpop Inc., a web and mobile solution for candidates and hiring managers in service-based industries. We completed these transactions to support our strategic initiatives to enhance the Recruiting and Content areas of our platform.

Global Client Success

We are dedicated to the success of our clients. We have developed a Client Success Framework which governs our operational model, the structure of our Client Management teams and the types of services necessary at each stage of a client's lifecycle.

Within this framework, we have developed the following roles with primary responsibility to our clients at various levels of their organizations:

- Client Executives who interact with executive-level sponsors and human resources executives at a client and are focused on the overall relationship, including sales to existing clients;

- Client Success Managers who work directly with executive-level sponsors and human resources executives at our clients to maximize the value of their investment in our human capital management platform; and
- Product Specialists who interact with client administrators and are focused on features and functions of our human capital management platform.

We believe this life cycle driven approach to client support and client success has contributed directly to our high client retention rate and high rankings for client satisfaction in independent research studies.

We offer support in multiple languages, at multiple levels and through multiple channels, including global support coverage available 24 hours a day, seven days a week. We use our own enterprise social collaboration product to provide our clients and distributors with a virtual community to collaborate on product design, release management and best practices.

We monitor client satisfaction internally as part of formalized programs and at regular intervals during the client lifecycle, including during the transition from sales to implementation, at the completion of a consulting project and daily based on interactions with our client-facing teams.

Technology, Operations and Research and Development

Our human capital management platform is designed and deployed with an on-demand, multi-tenant, and multi-user architecture which our clients access via a standard web browser. It currently uses a single code base, with all of our clients running on the current version of our software. We employ a modularized architecture to balance the load of clients on separate sub-environments, as well as to provide a flexible method for scalability without impacting other parts of the current environment. This architecture allows us to provide the high levels of uptime required by our clients. Our existing infrastructure has been designed with sufficient capacity to meet our current and estimated near term future needs. Global uptime in 2018 was 99.986%.

We physically host our human capital management platform for our clients in secure third-party data center facilities located in the United States, the United Kingdom, France, and Germany. These facilities provide physical security, including biometric access controls and systems security, redundant power and environmental controls.

We are continuing to build out services and functionality in the public cloud with a view to migrating more software to the public cloud over time. This strategy provides us flexibility to service customers in new and emerging regions and scale our deployment capabilities as we continue moving from a monolithic to a microservices architecture. We maintain the same or higher standards of security and compliance with our public cloud providers as we do in our leased facilities.

Our ability to compete depends largely on our continuous commitment to product development and ability to rapidly introduce new products, technologies, features, and functionality. The responsibilities of our research and development organization include product management, product development, quality assurance, IT security, and technology operations. Our research and development organization is global, with major engineering centers in the United States, Israel, New Zealand, and India.

Sales and Marketing

Sales

We sell our software, content and services both directly through our sales force and indirectly through our domestic and international network of distributors. We currently service clients in a wide range of industries, including, among others business services, financial services, healthcare, pharmaceuticals, insurance, manufacturing, retail and high technology. We have a number of direct sales teams organized by market segment, industry vertical, and geographic regions such as the Americas, EMEA, and Asia-Pacific and Japan.

Our direct sales team is supported by product specialists who provide technical and product expertise to facilitate the sales process. Our sales enablement professionals provide on-boarding and ongoing professional development for the sales professionals to increase their effectiveness at selling in the field. We also maintain a separate team of client executives responsible for renewals and up-sales to existing clients.

Marketing

We manage global demand generation programs, develop sales pipelines and enhance brand awareness through our marketing initiatives. Our marketing programs target HR executives, technology professionals and senior business leaders. Our principal marketing initiatives include:

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- Demand Generation. Our demand generation activities include lead generation through email and direct mail campaigns, participation in industry events, securing event speaking opportunities and online marketing, including both SEM and organic SEO online marketing.
- Corporate Marketing. We market to our clients by leveraging product marketing, client success stories, thought leadership content and brand awareness advertising campaigns. Additionally, we host regional client user group meetings and we also co-market with our strategic distributors, including joint press announcements and demand generation activities.
- Marketing Communications. We undertake media relations, corporate communications, industry analyst relations activities, client advocacy and social media outreach.

Competition

The market for human capital management software is highly competitive, rapidly evolving and fragmented. This market is subject to changing technology, shifting client needs and frequent introductions of new products and services.

Most of our sales efforts are competitive, often involving requests for proposals. We compete primarily on the basis of providing a highly configurable, comprehensive, fully unified platform for human capital management as opposed to specific service offerings.

In the applicant tracking systems segment, which our Recruiting suite offerings serve, our principal competitors include companies such as Oracle Corporation, International Business Machines Corporation and Saba Software, Inc. (Lumesse). In the learning management systems segment, which our Learning suite offerings each serve, our principal competitors include companies such as Oracle Corporation, Saba Software, Inc., SAP America, Inc. and SkillSoft Corp. In the performance management systems segment, which our Performance suite offerings each serve, our principal competitors include companies such as Saba Software, Inc., Talentsoft SA, Oracle Corporation, Peoplefluent, Inc. and SAP America, Inc. These vendors are, like us, largely SaaS providers. We compete in these segments primarily on the basis of:

- the level of integration of our product offerings within our human capital management platform;
- the breadth and depth of our product functionality;
- the flexibility and configurability of our product offerings to meet the changing content and workflow requirements of our clients' business units;
- the quality of our service and focus on client success;
- our ability to provide scalability and flexibility for large and complex global deployments; and
- the ease of use of our product offerings and overall user experience.

In addition, we occasionally compete with custom-built software that is designed to support the needs of a single organization, as well as with third-party talent and human resource application providers that focus on specific aspects of human capital management.

Many of our competitors and potential competitors have greater name recognition, longer operating histories and larger marketing budgets than we do. For additional information, see "Risk Factors—Risks Related to Our Business and Industry—The market in which we participate is intensely competitive and if we do not compete effectively, our operating results could be harmed" and "Risk Factors—Mergers of or other strategic transactions by our competitors could weaken our competitive position or reduce our revenue."

Proprietary Rights

To safeguard our proprietary and intellectual property rights, we rely upon a combination of patent, copyright, trade secret and trademark laws in the United States and in other jurisdictions and on contractual restrictions. We have confidentiality and license agreements with employees, contractors, clients, distributors and other third parties, which limit access to and use of our proprietary information and software.

Though we rely in part upon these legal and contractual protections, we believe that factors such as the skills and ingenuity of our employees, creation of new suites, features and functionality, collaboration with our clients and frequent enhancements to our platform are larger contributors to our success in the marketplace.

Government Contracts

Many of our contracts with government agencies are subject to termination at the election of the government agency. While our government contracts generally do not provide for renegotiation of fees at the election of the government, it is possible that the government agency could request, and that we could under certain circumstances agree to, the renegotiation of the payments otherwise payable under such contracts. However, we have not in the past renegotiated significant payment terms under our government contracts. For additional information, see “Risk Factors-Our sales to government entities are subject to a number of additional challenges and risks.”

Seasonality

Our sales are seasonal in nature. We sign a higher percentage of agreements with new clients, as well as renewal agreements with existing clients, in the fourth quarter of each year. In addition, within a given quarter, we sign a significant portion of these agreements during the last month, and often the last two weeks, of that quarter. Our agreements generally come up for renewal at the same time of the year they were originally signed, which further amplifies the seasonal nature of our sales.

We believe this seasonality is driven by several factors, most notably the tendency of our clients’ procurement departments to purchase technology at the end of a quarter or calendar year, possibly in order to use up their available quarterly or annual funding allocations.

Employees

At December 31, 2018, we had 1,953 employees. None of our employees are covered by a collective bargaining agreement and we have never experienced a strike or similar work stoppage. We consider our relations with our employees to be strong.

The Cornerstone OnDemand Foundation

To demonstrate our commitment to empowering people and communities, we helped form the Cornerstone OnDemand Foundation, or the Foundation, in 2010. The Foundation seeks to empower communities in the United States and internationally by increasing the impact of the non-profit sector through the utilization of our human capital management platform and capacity building programs.

The Foundation focuses its efforts on the areas of education, workforce development and disaster relief. We have enlisted the help of our employees, clients and distributors to support the Foundation in its efforts. The Foundation is designed to be self-sustaining over time through a variety of ongoing funding streams, such as donations, sponsorships and distribution fees.

Available Information

Our Internet address is www.cornerstoneondemand.com and our investor relations website is located at http://investors.cornerstoneondemand.com. We make available free of charge through our investor relations website our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) of the Securities Exchange Act of 1934, as amended, as soon as reasonably practicable after we electronically file such materials with, or furnish them to, the SEC. Information contained on, or that can be accessed through, our website is not incorporated by reference into this report and you should not consider information on our website to be part of this report.

The SEC maintains an Internet site (www.sec.gov) that contains reports, proxy and information statements and other information regarding issuers that file electronically with the SEC.

Item 1A. Risk Factors

The following risk factors and other information included in this Annual Report on Form 10-K should be carefully considered. The risks and uncertainties described below are not the only ones we face. Additional risks and uncertainties not presently known to us or that we presently deem less significant may also impair our business operations. Please see Part I, “Special Note Regarding Forward-Looking Statements” for a discussion of the forward-looking statements that are qualified by these risk factors. If any of the events or circumstances described in the following risk factors actually occurs, our business, operating results and financial condition could be materially adversely affected.

Risks Related to Our Business and Industry

Unfavorable conditions in our industry or the global economy, or reductions in information technology spending, could limit our ability to grow our business and negatively affect our operating results.

Our operating results may vary based on the impact of changes in our industry or the global economy on us or our clients. The revenue growth and potential profitability of our business depends on demand for enterprise application software generally and for human capital management platform in particular. We sell our human capital management platform primarily to large, mid-sized and small business organizations whose businesses fluctuate based on general economic and business conditions. In addition, a portion of our revenue is attributable to the number of users of our products at each of our clients, which in turn is influenced by the employment and hiring patterns of our clients and potential clients. To the extent that economic uncertainty or weak economic conditions cause our clients and potential clients to freeze or reduce their headcount, demand for our products may be negatively affected. Historically, economic downturns have resulted in overall reductions in spending on information technology and human capital management platforms as well as pressure from clients and potential clients for extended billing terms. If economic conditions deteriorate, our clients and potential clients may elect to decrease their information technology and human capital management budgets by deferring or reconsidering product purchases, which would limit our ability to grow our business and negatively affect our operating results.

Our business depends substantially on the level of our client satisfaction and specifically on clients renewing their agreements with us, purchasing additional products from us or adding additional users. Any significant decline in our client satisfaction rates or clients renewing their agreements, purchasing additional products or adding additional users would harm our future operating results.

In order for us to improve our operating results, it is important that our client satisfaction remains high and that our clients renew their agreements with us when the initial contract term expires and also purchase additional products or add additional users. Our clients have no obligation to renew their subscriptions after the initial subscription period, and we cannot assure you that our clients will renew their subscriptions at the same or a higher level of service, if at all. Every year, some of our clients elect not to renew their agreements with us. Moreover, certain of our clients have the right to cancel their agreements for convenience, subject to certain notice requirements and, in some cases, early termination fees. Our client renewal rates may decline or fluctuate as a result of a number of factors, including their satisfaction or dissatisfaction with our products, our pricing, the prices of competing products or services, mergers and acquisitions affecting our client base, reduced hiring by our clients or reductions in our clients’ spending levels. If our clients do not renew their subscriptions, renew on less favorable terms, fail to purchase additional products or fail to add new users, our revenue may decline and our operating results may be harmed.

If we fail to retain key employees and recruit qualified technical and sales personnel, our business could be harmed.

We believe that our success depends on the continued employment of our senior management and other key employees, such as our chief executive officer. In addition, because our future success is dependent on our ability to continue to enhance and introduce new software and services, we are heavily dependent on our ability to attract and retain qualified engineers with the requisite education, background and industry experience. As we expand our business, our continued success will also depend, in part, on our ability to attract and retain qualified sales, marketing and operational personnel capable of supporting a larger and more diverse client base. The loss of the services of a significant number of our engineers or sales people could be disruptive to our development efforts or business

relationships. In addition, if any of our key employees joins a competitor or decides to otherwise compete with us, we may experience a material disruption of our operations and development plans, which may cause us to lose clients or increase operating expenses as the attention of our remaining senior managers is diverted to recruit replacements for the departed key employees.
Changes to U.S. immigration and work authorization laws and regulations can be significantly affected by political forces and levels of economic activity. Our international expansion and our business may be materially adversely affected if legislative or administrative changes to immigration or visa laws and regulations impair our hiring processes or projects involving personnel who are not citizens of the country where the work is to be performed.
Our financial results may fluctuate due to various business factors, some of which may be beyond our control.
There are a number of other factors that may cause our financial results to fluctuate from period to period, including among others:
- changes in billing terms and collection cycles in client agreements;
- the extent to which new clients are attracted to our products to satisfy their human capital management needs;
- the timing and rate at which we sign agreements with new clients;
- our access to service providers and partners when we outsource client service projects;

- our ability to manage the quality and completion of the client implementations performed by partners;
- the timing and duration of our client implementations, which is often outside of our direct control;
- our ability to provide, or partner with effective partners to provide, resources for client implementations and consulting projects;
- the extent to which we retain existing clients and satisfy their requirements;
- the extent to which existing clients renew their subscriptions to our products and the timing of those renewals;
- the extent to which existing clients purchase or discontinue the use of additional products and add or decrease the number of users;
- the extent to which our clients request enhancements to underlying features and functionality of our products and the timing of our delivery of these enhancements to our clients;
- the addition or loss of large clients, including through acquisitions or consolidations;
- the number and size of new clients, as well as the number and size of renewal clients in a particular period;
- the mix of clients among large, mid-sized and small organizations;
- changes in our pricing policies or those of our competitors;
- seasonal factors affecting demand for our products or potential clients' purchasing decisions;
- the financial condition and creditworthiness of our clients;
- the amount and timing of our operating expenses, including those related to the maintenance, expansion and restructuring of our business, operations and infrastructure;
- changes in the operational efficiency of our business;
- the timing and success of our new product and service introductions;
- the timing of expenses of the development of new products and technologies, including enhancements to our products;
- our ability to exploit Big Data to drive increased demand for our products;
- continued strong demand for human capital management in the U.S. and globally;
- our ability to successfully integrate our operations with those of recently acquired privately-held companies;
- the success of current and new competitive products and services by our competitors;
- other changes in the competitive dynamics of our industry, including consolidation among competitors, clients or strategic partners;
- our ability to manage our existing business and future growth, including in terms of additional headcount, additional clients, incremental users and new geographic regions;
- expenses related to our network and data centers and the expansion of such networks and data centers;
- the effects of, and expenses associated with, acquisitions of third-party technologies or businesses and any potential future charges for impairment of goodwill resulting from those acquisitions;
- equity issuances, including as consideration in acquisitions or due to the conversion of our outstanding convertible notes due 2021;
- business disruptions, costs and future events related to shareholder activism;
- legal or political changes in local or foreign jurisdictions that decrease demand for, or restrict our ability to sell or provide, our products;
- fluctuations in foreign currency exchange rates, including any fluctuation caused by uncertainties relating to the United Kingdom's vote in favor of exiting the European Union (often referred to as “Brexit”);
- general economic, industry and market conditions; and
- various factors related to disruptions in our SaaS hosting network infrastructure, defects in our products, privacy and data security and exchange rate fluctuations, each of which is described elsewhere in these risk factors.

In light of the foregoing factors, we believe that our financial results, including our revenue, operating income and free cash flows may vary significantly from period-to-period. As a result, period-to-period comparisons of our operating results may not be meaningful and should not be relied on as an indication of future performance.

Existing or future laws and regulations relating to privacy or data security could increase the cost of our products, limit their use and adoption, and subject us or our clients to litigation, regulatory investigations and penalties and other potential liabilities.

Our human capital management platform enables our clients to collect, manage and store a wide range of data, including personal data, related to every phase of the employee performance and management cycle. The United States and various state governments have adopted or proposed laws governing the collection, use, storage, sharing and processing of personal data. Several foreign jurisdictions, including but not limited to the European Union (the “EU”) and its member states, the United Kingdom (the “UK”), Korea, Japan, Singapore, Australia and India, have adopted legislation (including directives or regulations) that increase or change the requirements governing the personal data of individuals in these jurisdictions. In some cases, these laws impose obligations not only on many of our clients, but also directly on us. These laws and regulations are complex and change frequently, at times due to differing economic conditions and changes in political climate, with new laws and regulations proposed frequently and existing laws and regulations subject to different and conflicting interpretations. These laws have the potential to increase costs of compliance, risks of noncompliance and penalties for noncompliance and the cost and complexity of selling and delivering our solutions.

For example, the EU’s General Data Protection Regulation (“GDPR”), which took effect on May 25, 2018, imposes new obligations on our clients and directly on us. Among other obligations under the GDPR, we are required to give more detailed disclosure about how we collect, use and share personal data; contractually commit to data protection measures in our contracts with customers; maintain adequate data security measures; notify regulators and affected individuals of certain personal data breaches; meet extensive privacy governance and documentation requirements; and honor individuals’ expanded data protection rights, including their rights to access, correct and delete their personal data. Companies that violate the GDPR can face fines of up to the greater of 20 million euros or 4% of their worldwide annual turnover.

In addition, the mechanisms allowing companies to transfer personal data outside of the European Economic Area (“EEA”) face ongoing legal challenges in the EU and threaten our ability to lawfully process personal data where we operate outside of the EEA. One of these challenges has been brought against the EU-U.S. Privacy Shield Framework, which we rely on for transfers of personal data from the EEA to the United States. We also rely on the European Commission’s recognition of Israel and New Zealand, where we maintain significant support centers, as providing an “adequate” level of protection for personal data transferred from the EEA to those countries. Finally, we rely on the European Commission’s Standard Contractual Clauses for transfers of personal data from the EEA to India, where we also maintain a significant support center. Loss of our ability to lawfully transfer personal data out of the EEA to these or any other jurisdictions may cause reluctance or refusal by current or prospective European clients to use our products. Additionally, other countries outside of the EEA have passed or are considering passing laws requiring local data residency, which could increase the cost and complexity of delivering our services.

Further, “Brexit” has created uncertainty with regard to data protection regulation in the United Kingdom, where our operations involve the processing of EU residents’ personal data. In particular, it is unclear whether, after Brexit, the UK will enact data protection legislation equivalent to the GDPR and how data transfers to and from the UK will be regulated. Thus, it is uncertain whether our operations in, and data transfers to and from, the UK, can comply with UK and EU law post-Brexit.

Just over a month after the GDPR took effect, the California legislature passed the California Consumer Privacy Act of 2018 (“CCPA”), which takes effect on January 1, 2020. The CCPA gives California residents certain rights similar to the individual rights given under the GDPR, including the right to access and delete their personal information, opt out of certain personal information sharing and receive detailed information about how their personal information is used. The CCPA prohibits discrimination against individuals who exercise their privacy rights, provides for civil penalties for violations, and creates a private right of action for data breaches that is expected to increase data breach litigation.

The costs of compliance with, and other burdens imposed by, privacy and data security laws and regulations may limit the use and adoption of our services, lead to negative publicity, reduce overall demand for our services, make it more difficult to meet expectations of or commitments to customers, require us to take on more onerous obligations in our contracts with customers, lead to significant fines, penalties or liabilities for noncompliance, or slow the pace at which we close sales transactions, any of which could harm our business. These laws could also impact our ability to offer, or our customers' ability to deploy, our services in certain locations. The costs, burdens and potential liabilities imposed by existing privacy laws could be compounded if other jurisdictions in the U.S. or abroad begin to adopt similar laws.

In addition to government activity, privacy advocacy and other industry groups have established or may establish new self-regulatory standards that may place additional burdens on our ability to provide our services globally. Our customers expect us to meet voluntary certifications and other standards established by third parties, such as ISO 27001. If we are unable to earn and maintain these certifications or meet these standards, it could adversely affect our ability to provide our solutions to certain customers and could harm our business.

Furthermore, concerns regarding data privacy and security may cause our customers' customers to resist providing the data necessary to allow our customers to use our services effectively. Even the perception that the privacy of personal information is not satisfactorily protected or does not meet regulatory requirements could inhibit sales of our products or services and could limit adoption of our cloud-based solutions.

Any of these matters could materially adversely affect our business, financial condition or operational results.

The market in which we participate is intensely competitive, and if we do not compete effectively, our operating results could be harmed.

The market for human capital management platforms is highly competitive, rapidly evolving and fragmented. Many of our competitors and potential competitors are larger and have greater brand name recognition, much longer operating histories, larger marketing budgets and significantly greater resources than we do. In addition, with the introduction of new technologies and market entrants, we expect competition to intensify in the future. If we fail to compete effectively, our business will be harmed. Some of our principal competitors offer their products or services at a lower price, which has resulted in pricing pressures. Similarly, some competitors offer different billing terms, which has resulted in pressures on our billing terms. If we are unable to maintain our pricing levels and billing terms, our operating results could be negatively impacted. In addition, pricing pressures and increased competition generally could result in reduced sales, reduced margins, losses or the failure of our products to achieve or maintain more widespread market acceptance, any of which could harm our business.

We face competition from paper-based processes and desktop software tools. We also face competition from custom-built software that is designed to support the needs of a single organization, as well as from third-party talent and human resource application providers. These software vendors include, without limitation, International Business Machines Corporation, Oracle Corporation, Peoplefluent, Inc., Saba Software, Inc., SAP America, Inc., Skillsoft Corp., Talentsoft and Workday, Inc. In addition, some of the parties with which we maintain business alliances offer or may offer products or services that compete with our products or services.

Many of our competitors are able to devote greater resources to the development, promotion and sale of their products and services. In addition, many of our competitors have established marketing relationships, access to larger client bases and major distribution agreements with consultants, system integrators and distributors. Moreover, many software vendors can bundle human resource products or offer such products at a lower price as part of a larger product sale. In addition, some competitors may offer software that addresses one or a limited number of human capital management functions at a lower price point or with greater depth than our products. As a result, our competitors may be able to respond more quickly and effectively than we can to new or changing opportunities, technologies, standards or client requirements. Further, some potential clients, particularly large enterprises, may elect to develop their own internal products. For all of these reasons, we may not be able to compete successfully against our current and future competitors.

Our systems collect, access, use and store personal and other client proprietary information. As a result, we are subject to security risks and are required to invest significant resources to prevent, mitigate, or correct issues arising from potential or actual security breaches. If a security breach occurs, our reputation could be harmed, our business may suffer and we could incur significant liability.

Our human capital management platform involves the storage and transmission of clients' sensitive, proprietary and confidential information, including personal information, over the Internet (including public networks). Our security measures may be breached as a result of efforts by individuals or groups of hackers and sophisticated organizations, including state-sponsored organizations or nation-states. Our security measures could also be compromised by employee error or malfeasance, which could result in someone obtaining unauthorized access to, or denying authorized access to our IT systems, our customers' data or our data, including our intellectual property and other confidential business information. Additionally, third parties may attempt to fraudulently induce employees or customers into disclosing sensitive information such as user names, passwords or other information to gain access to our customers' data, our data or our IT systems.

Such breaches and other incidents can result in a risk of unauthorized, unlawful or inappropriate access to, denial of access to, disclosure of, or loss of our customers' or our sensitive, proprietary and confidential information, as well as damage to our IT systems and our ability to make required reporting and disclosures as a public company. An actual or perceived security breach or similar incident could adversely affect our operating results and financial condition due to loss of confidence in the security of our products, damage to our reputation, early termination of contracts, decline in sales, disruption to our operations, litigation, regulatory investigations and penalties, or other liabilities. In particular, federal, state and foreign governments continue to adopt new, or modify existing, laws requiring companies and their service providers to maintain certain security measures or to report data breaches to government authorities or affected individuals. In turn, customers' expectations for the security measures we implement have increased. If we experience security breaches that could have been prevented by measures required by these laws or our customer contracts, or fail to report security breaches within timeframes mandated by law or our customer contracts, we could face significant liability.

Techniques to compromise IT systems have become more complex over time and are often not identified until they are exploited. As a result, we may be unable to anticipate or prevent such techniques. Our products operate in conjunction with and are dependent on a broad range of products, components and third-party services, and a vulnerability in any of them can expose us to a security breach. In addition, our customers and their third-party service providers may not have adequate security measures in place to protect their data that is stored in our platform, and, because we do not control our customers or their service providers, we cannot prevent vulnerabilities in their security measures from being exploited.

Our efforts to detect, prevent and remediate known or potential security vulnerabilities, including those arising from third-party hardware or software, may result in additional direct and indirect costs.

Finally, if a high profile security breach occurs with respect to another SaaS provider, our clients and potential clients may lose trust in the security of the SaaS business model generally, which could adversely impact our ability to retain existing clients or attract new ones.

Any significant disruption in our SaaS hosting network infrastructure could harm our reputation, require us to provide credits or refunds, result in early terminations of client agreements or a loss of clients and adversely affect our business.

Our SaaS hosting network infrastructure is a critical part of our business operations. Our clients access our human capital management platform through a standard web browser and depend on us for fast and reliable access to our products. Our software is proprietary, and we currently rely on four third-party data center hosting facilities, which we lease, and the expertise of members of our engineering and software development teams for the continued performance of our platform. We are in the process of migrating our platform from our leased data center hosting facilities to public cloud third-party data center providers. After we complete this migration, we will rely extensively on these public cloud providers to provide to our clients and their users with fast and reliable access to our products. Any disruption of or interference with our SaaS hosting network infrastructure, including the services and operations of the public cloud providers could harm our reputation, business and results of operations. We have experienced, and may in the future experience, disruptions in our computing and communications infrastructure. Factors that may cause such disruptions that may harm our reputation include:

- human error;
- security breaches;
- telecommunications outages from third-party providers;
- computer viruses;
- acts of terrorism, sabotage or other intentional acts of vandalism, including cyber attacks;
- unforeseen interruption or damages experienced in moving hardware to a new location;
- fire, earthquake, flood and other natural disasters; and
- power loss.

Although we generally back-up our client databases hourly, store our data in more than one geographically distinct location at least weekly and perform real-time mirroring of data to disaster recovery locations, we do not currently offer immediate access to disaster recovery locations in the event of a disaster or major outage. Thus, in the event of any of the factors described above, or certain other failures of our computing infrastructure, clients may not be able to access their data for 24 hours or more and there is a remote chance that client data from recent transactions may be permanently lost or otherwise compromised. In addition, we may not have adequate insurance coverage to compensate for losses from a major interruption. Moreover, some of our agreements include performance guarantees and service level standards that obligate us to provide credits, refunds or termination rights in the event of a significant disruption in our SaaS hosting network infrastructure or other technical problems that relate to the functionality or design of our platform.

Defects in our platform could affect our reputation, result in significant costs to us and impair our ability to sell our products and related services.

Defects in our platform could adversely affect our reputation, result in significant costs to us and impair our ability to sell our products in the future. The costs incurred in correcting any product defects may be substantial and could adversely affect our operating results. Although we continually test our products for defects and work with clients through our client support organization to identify and correct errors, defects in our products are likely to occur in the future. Any defects that cause interruptions to the availability of our products could result in:

- lost or delayed market acceptance and sales of our products;
- early termination of client agreements or loss of clients;
- credits or refunds to clients;
- product liability suits against us;
- diversion of development resources;
- injury to our reputation; and
- increased maintenance and warranty costs.

While our client agreements typically contain limitations and disclaimers that purport to limit our liability for damages related to defects in our products, such limitations and disclaimers may not be enforced by a court or other tribunal or otherwise effectively protect us from such claims.

Evolving regulation of the Internet, changes in the infrastructure underlying the Internet, or interruptions in Internet access may adversely affect our financial condition by increasing our expenditures and causing client dissatisfaction.

As Internet commerce continues to evolve, regulation by federal, state or foreign agencies may increase. We are particularly sensitive to these risks because the Internet is a critical component of our business model. In addition, taxation of services provided over the Internet or other charges for accessing the Internet may be imposed by government agencies or private organizations. Changes in laws or regulations that adversely affect the growth, popularity or use of the Internet, or impact the way that Internet service providers treat Internet traffic, including laws impacting net neutrality, may negatively increase our operating costs or otherwise impact our business. Any regulation imposing greater fees for Internet use or restricting information exchanged over the Internet could result in a decline in the use of the Internet and the viability of Internet-based services, which could harm our business.

In addition, the rapid and continual growth of traffic on the Internet has resulted at times in slow connection and download speeds among Internet users. Our business expansion may be harmed if the Internet infrastructure cannot handle our clients' demands or if hosting capacity becomes insufficient. If our clients become frustrated with the speed at which they can utilize our products over the Internet, our clients may discontinue the use of our human capital management platform and choose not to renew their contracts with us. Further, the performance of the Internet has also been adversely affected by viruses, worms, hacking, phishing attacks, denial of service attacks and other similar malicious programs, as well as other forms of damage to portions of its infrastructure, which have resulted in a variety of Internet outages, interruptions and other delays. These service interruptions could diminish the overall attractiveness of our products to existing and potential users and could cause demand for our products to suffer.

Failure to effectively retain, expand, and continue to increase the productivity of our direct sales teams and develop and expand our indirect sales channel will impede our growth.

We will need to continue to increase the productivity of and expand our sales and marketing infrastructure in order to grow our client base and our business. We plan to expand our direct sales teams and engage additional third-party distributors, both domestically and internationally. Identifying, recruiting and training these people and entities will require significant time, expense and attention. Our business will be seriously harmed and our financial resources will be wasted if our efforts to expand our direct and indirect sales channels do not generate a corresponding increase in revenue, and we may be required to sacrifice near-term growth and divert management attention in order to restructure our direct sales teams. In particular, if we are unable to achieve our expected productivity increases, we may not be able to significantly increase our revenue, profitability and/or free cash flows.

If for any reason we are not able to develop enhancements and new features, keep pace with technological developments or respond to future disruptive technologies, our business will be harmed.

Our future success will depend on our ability to adapt and innovate. To attract new clients and increase revenue from existing clients, we will need to enhance and improve our existing products and introduce new features. The success of any enhancement or new feature depends on several factors, including timely completion, introduction and market acceptance. If we are unable to enhance our existing products to meet client needs or successfully develop or acquire new features or products, or if such new features or products fail to be successful, our business and operating results will be adversely affected.

In addition, because our products are designed to operate on a variety of network, hardware and software platforms using Internet tools and protocols, we will need to continuously modify and enhance our products to keep pace with changes in internet-related hardware, software, communication, browser and database technologies. If we are unable to respond in a timely and cost-effective manner to these rapid technological developments, our products may become less marketable and less competitive or obsolete, and our operating results may be negatively impacted.

Finally, our ability to grow is subject to the risk of future disruptive technologies. If new technologies emerge that are able to deliver a human capital management platform at lower prices, more efficiently or more conveniently, such technologies could adversely impact our ability to compete.

We rely significantly on implementation partners to deliver professional services to our clients, and if these implementation partners fail to deliver these professional services effectively, or if we are unable to incentivize new partners to service our customers, our operating results will be harmed.

We rely significantly on various partners to assist us in the successful implementation of our products and to optimize our clients' use of our products during the terms of their engagements. We provide our implementation partners with specific training and programs to assist them in servicing our clients, but there can be no assurance that these steps will be utilized or effective. If these partners fail to deliver these services to our customers in an effective and timely manner, we may suffer reputational harm and our results of operations may be adversely impacted. We also may not be able to incentivize new partners to service our customers. If we are unable to maintain our existing relationships or enter into new ones, we would have to devote substantially more resources to delivering our professional services. If we fail to effectively manage our implementation partners, our ability to sell our products and subscriptions and our operating results will be harmed.

Our growth depends in part on the success of our strategic relationships with third parties.

We anticipate that we will continue to depend on various third-party relationships in order to grow our business. In addition to growing our indirect sales channels, we intend to pursue additional relationships with other third parties, such as technology and content providers and implementation consultants. For example, in June 2018 we expanded our learning and content offerings with new content partnerships and learning content subscriptions, in addition to the availability of integrations with LinkedIn Learning and Workplace by Facebook. Identifying, negotiating and documenting relationships with third parties require significant time and resources, as does integrating third-party content and technology. Our agreements with distributors and providers of technology, content and consulting services are typically non-exclusive and do not prohibit them from working with our competitors or from offering competing services. Our competitors may be effective in providing incentives to third parties to favor their products or services or to prevent or reduce subscriptions to our products. In addition, these distributors and providers may not perform as expected under our agreements, and we have had and may in the future have, disagreements or disputes with such distributors and providers, which could negatively affect our brand and reputation. A global economic slowdown could also adversely affect the businesses of our distributors and it is possible that they may not be able to devote the resources we expect to our relationships with such distributors.

If we are unsuccessful in establishing or maintaining our relationships with these third parties, our ability to compete in the marketplace or to grow our revenue could be impaired and our operating results could suffer. Even if we are successful, we cannot assure you that these relationships will result in improved operating results.

Our financial results may fluctuate due to our long, variable and, therefore, unpredictable sales cycle and our focus on large and mid-market organizations.

We plan our expenses based on certain assumptions about the length and variability of our sales cycle. If our sales cycle becomes longer or more variable, our results may be adversely affected. Our sales cycle generally varies in duration from two to nine months and, in some cases, much longer depending on the size of the potential client. Factors that may influence the length and variability of our sales cycle include among others:

- the need to educate potential clients about the uses and benefits of our products;
- the relatively long duration of the commitment clients make in their agreements with us;
- the discretionary nature of potential clients' purchasing and budget cycles and decisions;
- the competitive nature of potential clients' evaluation and purchasing processes;
- the lengthy purchasing approval processes of potential clients;
- the evolving functionality demands of potential clients;
- fluctuations in the human capital management needs of potential clients; and
- announcements or planned introductions of new products by us or our competitors.

The fluctuations that result from the length and variability of our sales cycle may be magnified by our focus on sales to large and mid-sized organizations. If we are unable to close an expected significant transaction with one or more of these companies in a particular period, or if an expected transaction is delayed until a subsequent period, our operating results for that period, and for any future periods in which revenue from such transaction would otherwise have been recognized, may be adversely affected.

Mergers of or other strategic transactions by our competitors could weaken our competitive position or reduce our revenue.

If one or more of our competitors were to merge, acquire or partner with another of our competitors, the change in the competitive landscape could adversely affect our ability to compete effectively. For example, in May 2017, Saba Software, Inc. acquired Halogen Software, Inc.; and in October 2018, Saba Software, Inc. acquired Lumesse. Our competitors may also establish or strengthen cooperative relationships with our current or future strategic distributors, systems integrators, HR outsourcers, payroll services companies, third-party consulting firms or other parties with whom we have relationships, thereby limiting our ability to promote our products and limiting the number of consultants available to implement our products. Disruptions in our business caused by these events could reduce our revenue.

Our business and operations are experiencing growth and organizational change. If we fail to effectively manage such growth and change in a manner that preserves the key aspects of our corporate culture, our business and operating results could be harmed.

We have experienced, and may continue to experience, rapid growth and organizational change, which has placed, and may continue to place, significant demands on our operational, financial and management resources. We may continue to expand our international operations into other countries in the future, either organically or through acquisitions. We have also experienced significant growth in the number of users, transactions and data that our SaaS hosting infrastructure supports. Finally, our organizational structure is becoming more complex as we improve our operational, financial and management controls as well as our reporting systems and procedures. We will require significant capital expenditures and the allocation of valuable management resources to grow and change in these areas without undermining our corporate culture of rapid innovation, teamwork and attention to client success that has been central to our growth so far. If we fail to manage our anticipated growth and change in a manner that preserves the key aspects of our corporate culture, the quality of our products may suffer, which could negatively affect our brand and reputation and harm our ability to retain and attract clients.

For a detailed discussion of the risks related to our ability to expand our business internationally, manage growth in our SaaS hosting network infrastructure and expand parts of our organization to implement improved operational, financial and management controls and reporting systems and procedures, see the risk factors titled "—As a public company, we are obligated to maintain proper and effective internal control over financial reporting. If our internal control over financial reporting is ineffective, our financial reporting may not be accurate, complete and timely and our auditors may be unable to attest to its effectiveness when required, thus adversely affecting investor confidence in our company." and "—We currently have a number of international offices and are expanding our international operations. Doing business internationally has unique risks with respect to operational execution and regulatory compliance."

Fluctuations in the exchange rate of foreign currencies could result in foreign currency gains and losses.
We conduct our business in the Americas, Europe, and Asia Pacific. As we continue to expand our international operations, we will become more exposed to the effects of fluctuations in currency exchange rates. This exposure is the result of selling in multiple currencies and operating in foreign countries where the functional currency is the local currency. Further, our overseas subsidiaries' results are also impacted by exchange rates affecting the carrying value of U.S. dollar denominated intercompany loans with us. Because we conduct business in currencies other than U.S. dollars, but report our results of operations in U.S. dollars, fluctuations in the exchange rates of these foreign currencies, including any fluctuations caused by uncertainties relating to Brexit, may hinder our ability to predict our future results and earnings and materially impact our business, financial condition and operating results. Due to our legal structure, any fluctuations in the exchange rates of the British pound may be particularly impactful. We have not previously engaged in foreign currency hedging. If we decide to hedge our foreign currency exposure, we may not be able to completely eliminate the impact of fluctuations in the exchange rates.
We have in the past acquired, and may in the future acquire, other companies or technologies, which could divert our management's attention, result in additional dilution to our stockholders or otherwise disrupt our operations and harm our operating results.
We have in the past acquired, and may in the future acquire, other companies or technologies. Most recently, in November 2018 we acquired Grovo Learning, Inc., a leading provider of Microlearning® content, and in September 2018, we acquired Workpop Inc., a web and mobile solution for candidates and hiring managers in service-based industries. In the future, we may seek to acquire or invest in other businesses, products or technologies that we believe could complement or expand our existing platform, enhance our technical capabilities or otherwise offer growth opportunities. The pursuit of potential acquisitions may divert the attention of management, result in additional dilution, and cause us to incur various expenses in identifying, investigating and pursuing suitable acquisitions, whether or not they are ultimately consummated.
We have limited experience in acquiring other businesses. We may not be able to successfully integrate the personnel, operations and technologies of any businesses that we have acquired or may acquire in the future or effectively manage the combined business following the acquisition. We may also not achieve the anticipated benefits from other acquired businesses due to a number of factors, including:

- unanticipated costs or liabilities associated with the acquisition;
- incurrence of acquisition-related costs;
- diversion of management's attention from other business concerns;
- harm to our existing relationships with partners, distributors and clients, including as a result of competing in the markets in which such parties operate;
- the potential loss of key employees and clients;
- exposure to claims and disputes by third parties, including intellectual property claims and disputes;
- the use of resources that are needed in other parts of our business; and
- the use of substantial portions of our available cash to consummate the acquisition.

In addition, a significant portion of the purchase price of companies we acquire may be allocated to acquired goodwill, which must be assessed for impairment at least annually, or to intangible assets, which are assessed for impairment upon certain triggering events. In the future, if our acquisitions do not yield expected returns, we may be required to take charges to our operating results based on this impairment assessment process, which could harm our operating results.
Acquisitions could also result in dilutive issuances of equity securities or the incurrence of debt, which could adversely affect our operating results. For example, in our acquisition of Sonar Limited, we issued an aggregate of 46,694 shares of our common stock. In addition, if an acquired business fails to meet our expectations, our operating results, business and financial condition may suffer.
As a public company, we are obligated to maintain proper and effective internal control over financial reporting. If our internal control over financial reporting is ineffective, our financial reporting may not be accurate, complete and timely and our auditors may be unable to attest to its effectiveness when required, thus adversely affecting investor confidence in our company.

We are required, pursuant to Section 404 of the Sarbanes-Oxley Act of 2002, to furnish a report by management on, among other things, the effectiveness of our internal control over financial reporting. Our auditors also need to audit the effectiveness of our internal control over financial reporting. These assessments need to include disclosure of any material weaknesses in our internal control over financial reporting.

We have incurred and continue to incur significant costs assessing our system of internal control over financial reporting and processing documentation necessary to perform the evaluation needed to comply with Section 404. We may discover, and may not be able to remediate, future significant deficiencies or material weaknesses, or we may be unable to complete our evaluation, testing or any required remediation in a timely fashion. Further, to the extent we acquire other businesses, the acquired company may not have a sufficiently robust system of internal controls and we may discover deficiencies. Failure of our internal control over financial reporting to be effective could cause our financial reporting to be inaccurate, incomplete or delayed. Moreover, even if there is no inaccuracy, incompletion or delay of reporting results, if we identify one or more material weaknesses in our internal control over financial reporting, we will be unable to assert, and our auditors will be unable to affirm, that our internal control is effective, in which case investors may lose confidence in the accuracy and completeness of our financial reports, which could have a material adverse effect on the price of our common stock.

Certain of our operating results and financial metrics are difficult to predict as a result of seasonality.

We have historically experienced seasonality in terms of when we enter into client agreements for our products. We sign a significantly higher percentage of agreements with new clients, and renewal agreements with existing clients, in the fourth quarter of each year and a significant portion of these agreements are signed during the last month, and with respect to each quarter, often the last two weeks of the quarter. This seasonality is reflected to a much lesser extent, and sometimes is not immediately apparent, in our revenue, due to the fact that we generally recognize subscription revenue over the term of the client agreement, which is generally three years. We expect this seasonality to continue, which may cause fluctuations in certain of our operating results and financial metrics, and thus difficulties in predictability.

We rely on third-party computer hardware and software that may be difficult to replace or could cause errors or failures of our service.

In addition to the software we develop, we rely on computer hardware, purchased or leased, and software licensed from third parties in order to deliver our platform. This hardware and software may not continue to be available on commercially reasonable terms, if at all. Any loss of the right to use any of this hardware or software could result in delays in our ability to provide our platform until equivalent technology is either developed by us or, if available, identified, obtained and integrated. In addition, errors or defects in third-party hardware or software used in our platform could result in errors or a failure of our products, which could harm our business.

If we fail to manage our SaaS hosting network infrastructure capacity, our existing clients may experience service outages and our new clients may experience delays in the deployment of our human capital management platform.

We have experienced significant growth in the number of users, transactions and data that our hosting infrastructure supports. We seek to maintain sufficient excess capacity in our SaaS hosting network infrastructure to meet the needs of all of our clients. We also seek to maintain excess capacity to facilitate the rapid provision of new client deployments and the expansion of existing client deployments. However, the provision of new hosting infrastructure requires significant lead time. If we do not accurately predict our infrastructure capacity requirements, our existing clients may experience service outages that may subject us to financial penalties, financial liabilities and client losses. If our hosting infrastructure capacity fails to keep pace with increased sales, clients may experience delays as we seek to obtain additional capacity, which could harm our reputation and adversely affect our revenue growth.

Restructuring activities could adversely affect our ability to execute our business strategy.

In December 2017, we implemented a restructuring plan to reduce the headcount of our global service delivery team, as well as the headcount of some of our sales teams, representing a workforce reduction of approximately six percent. In connection with this action, we incurred approximately $8.9 million of expenditures in the year ended December 31, 2018 and $10.5 million of expenditures since the plan was announced in December 2017 through December 31, 2018. This restructuring and any future restructurings, should it become necessary for us to continue to restructure our business due to worldwide market conditions or other factors that reduce the demand for our products and services, could adversely affect our ability to execute our business strategy.

Failure to effectively manage client deployments by our third-party service providers could adversely impact our business.

In cases where our third-party service providers are engaged either by us or by a client directly to deploy a product for a client, our third-party service providers need to have a substantial understanding of such client's business so that they can configure the product in a manner that complements its existing business processes and integrates the product into its existing systems. It may be difficult for us to manage the timeliness of these deployments and the allocation of personnel and resources by our clients. Failure to successfully manage client deployments by us or our third-party service providers could harm our reputation and cause us to lose existing clients, face potential client disputes or limit the rate at which new clients purchase our products.

Forecasts of our business growth and profitability may prove to be inaccurate, and even if the markets in which we compete achieve the forecasted growth, we cannot assure you our business will grow at similar rates, or at all.

Our forecasts are subject to significant uncertainty and are based on assumptions and estimates which may not prove to be accurate. These assumptions and estimates include the timing and value of agreements with our customers, variability in the service delivery periods for our customers, impact of foreign currency exchange rate fluctuations and expected growth in our market and related costs to support the growth of our business. Our assumptions and estimates related to our business growth and profitability, including the performance of our core business and emerging businesses and the demand for our products in the United States, Europe, Japan and other regions, may prove to be inaccurate. Even if the markets experience the forecasted growth, we may not grow our business at similar rates, or at all. Our growth is subject to many factors, including our success in implementing our business strategy, which is subject to many risks and uncertainties.

Even if demand for human capital management products and services increases generally, there is no guarantee that demand for SaaS products like ours will increase to a corresponding degree.

The widespread adoption of our products depends not only on strong demand for human capital management products and services generally, but also for products and services delivered via a SaaS business model in particular. There are still a significant number of organizations that have adopted no human capital management functions at all, and it is unclear whether such organizations will ever adopt such functions and, if they do, whether they will desire a SaaS human capital management platform like ours. As a result, we cannot assure you that our SaaS human capital management platform will achieve and sustain the high level of market acceptance that is critical for the success of our business.

Integrated, comprehensive SaaS products such as ours represent a relatively recent approach to addressing organizations' human capital management challenges, and we may be forced to change the prices we charge for our products, or the pricing model upon which they are based, as the market for these types of products evolves.

Providing organizations with applications to address their human capital management challenges through integrated, comprehensive SaaS products is a developing market. The market for these products is therefore still evolving, and competitive dynamics may cause pricing levels, as well as pricing models generally, to change, as the market matures and as existing and new market participants introduce new types of products and different approaches to enable organizations to address their human capital management needs. As a result, we may be forced to reduce the prices we charge for our products or the pricing model on which they are based, and may be unable to renew existing client agreements or enter into new client agreements at the same prices and upon the same terms that we have historically, which could have a material adverse effect on our revenue, gross margin and other operating results.

We currently have a number of international offices and are expanding our international operations. Doing business internationally has unique risks with respect to operational execution and regulatory compliance.

We currently have international offices in several countries, and we may expand our international operations into other countries in the future. International operations involve a variety of risks that may decrease demand for, or restrict our ability to sell or provide, our products, including:

- unexpected changes in regulatory requirements, taxes, trade laws, tariffs, export quotas, custom duties or other trade restrictions;
- differing labor regulations;
- regulations relating to data security and the unauthorized use of, or access to, commercial and personal information;
- potential penalties or other adverse consequences for violations of anti-corruption, anti-bribery and other similar laws and regulations, including the U.S. Foreign Corrupt Practices Act and the U.K. Bribery Act;
- greater difficulty in supporting and localizing our products;
- unrest and/or changes in a specific country's or region's social, political, legal or economic conditions;
- challenges inherent in efficiently managing an increased number of employees over large geographic distances, including the need to implement appropriate systems, controls, policies, benefits and compliance programs;
- currency exchange rate fluctuations, including any fluctuations caused by uncertainties relating to Brexit;
- limited or unfavorable intellectual property protection; and
- restrictions on repatriation of earnings.

We have less significant experience in marketing, selling and supporting our products and services abroad than domestically. Our less significant experience in operating our business internationally increases the risk that any potential future expansion efforts that we may undertake will not be successful. In addition, it may take us longer to build our presence in international markets. If we invest substantial time and resources to expand our international operations and are unable to do so successfully and in a timely manner, our business and operating results will suffer.
Our operations could be materially affected by changes in domestic and foreign economic, political or legal conditions. For example, in 2016 the UK held a referendum to determine whether the UK should leave the EU or remain as a member state, the outcome of which was in favor of leaving the EU. This event is commonly referred to as Brexit. We are monitoring developments related to Brexit, which could have significant implications for our business. Lack of clarity about future UK laws and regulations as the UK determines which EU rules and regulations to replace or replicate in the event of a withdrawal from the EU, including financial laws and regulations, tax and free trade agreements, intellectual property rights, supply chain logistics, environmental, health and safety laws and regulations, immigration laws and employment laws, could decrease foreign direct investment in the UK, increase costs, depress economic activity and restrict access to capital. The political and economic instability created by the UK's vote to leave the EU has also caused and may continue to cause significant volatility in global financial markets and the value of the British pound currency or other currencies, including the euro.
Such a withdrawal from the EU is unprecedented, and it is unclear how the UK's access to the European single market for goods, capital, services and labor within the EU, or single market, and the wider commercial, legal and regulatory environment, will impact our UK operations and customers. Our UK operations service customers in the UK as well as in other countries in the EU and the EEA, and these operations could be disrupted by Brexit, particularly if there is a change in the UK's relationship to the single market.
We may also face new regulatory costs and challenges that could have an adverse effect on our operations. Depending on the terms of the UK's withdrawal from the EU, the UK could lose the benefits of global trade agreements negotiated by the EU on behalf of its members, which may result in increased trade barriers that could make our doing business in the EU and the EEA more difficult. Even prior to any change to the UK's relationship with the EU, the announcement of Brexit has created economic uncertainty surrounding the terms of Brexit and its consequences could adversely impact customer confidence resulting in customers reducing their spending budgets on our solutions, which could adversely affect our business, revenue, financial condition, and results of operations.
Failure to comply with anti-bribery, anti-corruption and anti-money laundering laws could subject us to penalties and other adverse consequences.
We are subject to the Foreign Corrupt Practices Act (the "FCPA"), the U.K. Bribery Act and other anti-corruption, anti-bribery and anti-money laundering laws in various jurisdictions both domestic and abroad. We leverage third parties, including channel partners, to sell subscriptions to our platform and conduct our business abroad. We and our third-party intermediaries may have direct or indirect interactions with officials and employees of government agencies or state-owned or affiliated entities and may be held liable for the corrupt or other illegal activities of these third-party business partners and intermediaries, our employees, representatives, contractors, channel partners and agents, even if we do not explicitly authorize such activities. While we have policies and procedures to address compliance with such laws, we cannot assure you that all of our employees and agents will not take actions in violation of our policies and applicable law, for which we may be ultimately held responsible. Any violation of the FCPA or other applicable anti-bribery, anti-corruption laws and anti-money laundering laws could result in whistleblower complaints, adverse media coverage, investigations, loss of export privileges, severe criminal or civil sanctions, or suspension or debarment from U.S. government contracts, all of which may have an adverse effect on our reputation, business, operating results and prospects.
If we fail to develop our brand cost-effectively, our business may suffer.
We believe that developing and maintaining awareness of the Cornerstone OnDemand brand in a cost-effective manner is critical to achieving widespread acceptance of our existing and future products and is an important element in attracting new clients. Furthermore, we believe that the importance of brand recognition will increase as competition in our market increases. Successful promotion of our brand will depend largely on the effectiveness of our marketing efforts and on our ability to provide reliable and useful services at competitive prices. In the past, our

efforts to build our brand have involved significant expenses. Brand promotion activities may not yield increased revenue, and even if they do, any increased revenue may not offset the expenses we incurred in building our brand. In addition, the Cornerstone OnDemand Foundation shares our company name and any negative perceptions of any kind about the Cornerstone OnDemand Foundation could adversely affect our brand and reputation. If we fail to successfully promote and maintain our brand, or incur substantial expenses in an unsuccessful attempt to promote and maintain our brand, we may fail to attract enough new clients or retain our existing clients to the extent necessary to realize a sufficient return on our brand-building efforts, and our business could suffer.

Our sales to government entities are subject to a number of additional challenges and risks.
We sell to U.S. federal and state and foreign governmental agency customers, and we may increase sales to government entities in the future. For example, in June 2017, we entered into an agreement with the U.S. Postal Service that authorizes, but does not guarantee, the purchase by the U.S. Postal Service of our software and services to support their more than 600,000 employees. The additional risks and challenges associated with doing business with governmental entities include, but are not limited to, the following:

- Selling to governmental entities can be more competitive, expensive and time-consuming than selling to private entities, often requiring significant upfront time and expense without any assurance that these efforts will generate a sale;
- Government certification requirements may change, or we may lose one or more government certifications, such as FedRAMP, and in doing so restrict our ability to sell into the government sector until we have attained revised certificates;
- Governmental entities may have significant leverage in negotiations, thereby enabling such entities to demand contract terms that differ from what we generally agree to in our standard agreements, including, for example, most favored nation clauses and terms allowing contract termination for convenience;
- Government demand and payment for our products may be influenced by public sector budgetary cycles and funding authorizations, with funding reductions or delays having an adverse impact on public sector demand for our products; and
- Government contracts are generally subject to audits and investigations, which we have limited experience with, potentially resulting in termination of contracts, refund of a portion of fees received, forfeiture of profits, suspension of payments, fines and suspensions or debarment from future government business.

To the extent that we become more reliant on contracts with government entities in the future, our exposure to such risks and challenges could increase, which, in turn, could adversely impact our business.
We may require additional capital to support business growth, and this capital may not be available on acceptable terms, if at all.
We intend to continue to make investments to support our business growth and may seek additional funds to respond to business challenges, including the need to develop new features or enhance our existing products, improve our operating infrastructure or acquire complementary businesses and technologies. Accordingly, we may need to engage in additional equity or debt financings to secure additional funds. If we raise additional funds through issuances of equity or debt securities, our existing stockholders could suffer significant dilution, and any new equity securities we issue could have rights, preferences and privileges superior to those of holders of our common stock. Any debt financing secured by us in the future could involve restrictive covenants relating to our capital raising activities and other financial and operational matters, which may make it more difficult for us to obtain additional capital and to pursue business opportunities, including potential acquisitions. In addition, we may not be able to obtain additional financing on terms favorable to us, if at all. If we are unable to obtain adequate financing or financing on terms satisfactory to us, when we require it, our ability to continue to support our business growth and to respond to business challenges could be significantly impaired.
Further, the indenture governing the convertible notes due 2021 includes a restrictive covenant that, subject to specified exceptions and parameters, limits our ability to incur additional debt. We may be unable to take advantage of strategic or business development opportunities as they arise, or we may not be able to react to market conditions, if we are restricted in our ability to raise debt financing, or we may be required to seek alternative means to generate cash, including by selling assets, refinancing or obtaining additional equity capital on terms that may be onerous or highly dilutive, if available at all.
In addition, in connection with the sale of our convertible notes due 2021, we entered into an investment agreement with Silver Lake providing Silver Lake with the option to purchase all or a portion of any equity securities, or instruments convertible into or exchangeable for any equity securities, in any proposed offerings by us until the earlier of June 2019 or such time as Silver Lake no longer has a representative and no longer has rights to have a representative on our board of directors. Although Silver Lake’s option will not apply to equity securities issued in connection with acquisitions, underwritten public offerings, strategic partnerships or commercial arrangements, or

equity compensation plans, Silver Lake's participation rights could impact our ability to raise additional capital.

Servicing our debt will require a significant amount of cash, which could adversely affect our business, financial condition and results of operations.

Our ability to make scheduled payments of the principal of, to pay interest on or to refinance our indebtedness, including our convertible notes due 2021, which represent an aggregate principal amount of $300.0 million, depends on our future performance, which is subject to economic, financial, competitive and other factors beyond our control. Our business may not generate cash flow from operations in the future sufficient to satisfy our obligations under the notes and any future indebtedness we may incur and to make necessary capital expenditures. If we are unable to generate such cash flow, we may be required to adopt one or more alternatives, such as reducing or delaying investments or capital expenditures, selling assets, refinancing or obtaining additional equity capital on terms that may be onerous or highly dilutive. Our ability to refinance the notes or future indebtedness will depend on the capital markets and our financial condition at such time. We may not be able to engage in any of these activities or engage in these activities on desirable terms, which could result in a default on the notes or future indebtedness.

Further, with certain exceptions, upon a change of control, the holders of our convertible notes due 2021 may require that we repurchase all or part of such notes at a purchase price equal to the principal amount plus the total sum of all remaining scheduled interest payments through the remainder of the term of the notes. In such event, we may not have enough cash available or be able to obtain financing to repurchase the notes, and our ability to repurchase notes may be limited by law, regulatory authority or agreements governing our other indebtedness.

Because of how we recognize revenue, a significant downturn in our business may not be immediately reflected in our operating results.

Generally, we recognize revenue from subscription agreements monthly over the terms of these agreements, which is typically three years for our human capital management platform. As a result, a significant portion of the revenue we report in each quarter is generated from client agreements entered into during previous periods. Consequently, a decline in new subscriptions in any one quarter may not significantly impact our revenue and financial performance in that quarter, but will negatively affect our revenue, or rate of revenue growth and financial performance in future quarters.

In addition, if subscription agreements expire and are not renewed in the same quarter, our revenue and financial performance in that quarter and subsequent quarters will be negatively affected. However, the revenue impact may not be immediately reflected in our operating results to the extent there is an offsetting increase in revenue from services contracts performed in that same quarter.

Finally, we may be unable to adjust our fixed costs in response to reduced revenue. Accordingly, the effect of significant declines in sales and market acceptance of our products may not be reflected in our short-term operating results.

Because we generally recognize subscription revenue from our clients over the terms of their agreements but incur most costs associated with generating such agreements upfront, rapid growth in our client base may put downward pressure on our operating margin in the short term.

The expenses associated with generating client agreements are generally incurred up front but the resulting subscription revenue is generally recognized over the life of the agreements; therefore, increased growth in the number of our clients will result in our recognition of more costs than revenue during the early periods covered by such agreements, even in cases where the agreements are expected to be profitable for us over their full terms.

We have a history of losses, and we cannot be certain that we will achieve or sustain profitability.

We have a history of incurring losses. We experienced net losses of $33.8 million, $61.3 million and $66.8 million in 2018, 2017 and 2016, respectively. At December 31, 2018, our accumulated deficit was $530.0 million and total stockholders' equity was $55.9 million. Although our operating losses have decreased in each of the last three years, and in the second half of 2018 we reported operating income, it is possible that we may continue to incur operating losses in the future as a result of expenses associated with the continued development and expansion of our business. Our expenses include among others, sales and marketing, research and development, consulting and support services and other costs relating to the development, marketing and sale and service of our products that may not generate revenue until later periods, if at all. Any failure to increase revenue or manage our cost structure as we implement initiatives to grow our business could prevent us from sustaining profitability. In addition, our ability to achieve sustained profitability is subject to a number of the risks and uncertainties discussed below, many of which are beyond our control. We cannot be certain that we will be able to sustain profitability on a quarterly or annual basis.

The nature of our business requires the application of complex revenue and expense recognition rules and the current legislative and regulatory environment affecting GAAP is uncertain. Changes in financial accounting standards or practices may cause adverse, unexpected financial reporting fluctuations and affect our reported operating results.
The accounting rules and regulations that we must comply with are complex and subject to interpretation by the Financial Accounting Standards Board (“FASB”), the Securities and Exchange Commission and various bodies formed to promulgate and interpret appropriate accounting principles. In addition, many companies’ accounting disclosures are being subjected to heightened scrutiny by regulators and the public. A change in accounting standards or practices can have a significant effect on our reported results and may even affect our reporting of transactions completed before the change is effective. New accounting pronouncements and varying interpretations of accounting pronouncements have occurred and may occur in the future. Changes to existing rules or the questioning of current practices may adversely affect our reported financial results or the way we conduct our business.
To the extent that our pre-tax income or loss becomes relatively modest, our ability to conclude that a control deficiency is not a material weakness or that an accounting error does not require a restatement could be adversely affected.
Under the Sarbanes-Oxley Act of 2002, our management is required to assess the impact of control deficiencies based upon both quantitative and qualitative factors, and depending upon that analysis, we classify such identified deficiencies as either a control deficiency, significant deficiency or a material weakness. One element of our analysis of the significance of any control deficiency is its actual or potential financial impact. This assessment will vary depending on our level of pre-tax income or loss. For example, a smaller pre-tax income or loss will increase the likelihood of a quantitative assessment of a control deficiency as a significant deficiency or material weakness.
To the extent that our pre-tax income or loss is relatively small, if management or our independent registered public accountants identify an error in our interim or annual financial statements, it is more likely that such an error may be determined to be a material weakness or be considered a material error that could, depending upon the complete quantitative and qualitative analysis, result in our having to restate previously issued financial statements.
If we fail to adequately protect our proprietary rights, our competitive advantage and brand could be impaired and we may lose valuable assets, generate reduced revenue and incur costly litigation to protect our rights.
Our success is dependent, in part, upon protecting our proprietary technology. We rely on a combination of patents, copyrights, trademarks, service marks, trade secret laws and contractual restrictions to establish and protect our proprietary rights in our products and services. However, the steps we take to protect our intellectual property may be inadequate. We will not be able to protect our intellectual property if we are unable to enforce our rights or if we do not detect unauthorized use of our intellectual property. Despite our precautions, it may be possible for unauthorized third parties to copy our products and use information that we regard as proprietary to create products and services that compete with ours. Some license provisions protecting against unauthorized use, copying, transfer and disclosure of our licensed products may be unenforceable under the laws of certain jurisdictions and foreign countries. Further, the laws of some countries do not protect proprietary rights to the same extent as the laws of the United States. To the extent we expand our international activities, our exposure to unauthorized copying and use of our products and proprietary information may increase. We enter into confidentiality and invention assignment agreements with our employees and consultants and enter into confidentiality agreements with the parties with whom we have strategic relationships and business alliances. These agreements may not be effective in controlling access to and distribution of our products and proprietary information. Further, these agreements do not prevent our competitors from independently developing technologies that are substantially equivalent or superior to our products. Litigation brought to protect and enforce our intellectual property rights could be costly, time consuming and distracting to management and could result in the impairment or loss of portions of our intellectual property. If we fail to secure, protect and enforce our intellectual property rights, we may lose valuable assets, generate reduced revenue and incur costly litigation to protect our rights, which could seriously harm our brand and adversely impact our business.

We may be sued by third parties for alleged infringement of their proprietary rights or may find it necessary to enter into licensing arrangements with third parties to settle or forestall such claims, either of which could have a material adverse effect on our operating results and financial condition.

There is considerable patent and other intellectual property development activity in our industry. Our success depends in part upon our not infringing the intellectual property rights of others. However, our competitors, as well as a number of other entities and individuals, may own or claim to own intellectual property relating to our industry or, in some cases, our technology or products. From time to time, such third parties may claim that we are infringing their intellectual property rights, and we may actually be found to be infringing such rights. Moreover, we may be subject to claims of infringement with respect to technology that we acquire or license from third parties. The risk that we could be subject to infringement claims is increasing as the number of products and companies competing with our platform grows. Any claims or litigation could require the commitment of substantial time and resources and, if successfully asserted against us, could require that we pay substantial damages or ongoing royalty or licensing payments, indemnify our clients, distributors or other third parties, modify or discontinue the sale of our products, or refund fees, any of which would deplete our resources and adversely impact our business. We have in the past obtained, and may in the future obtain, licenses from third parties to forestall or settle potential claims that our products and technology infringe the intellectual property rights of others. Discussions and negotiations with such third parties, whether successful or unsuccessful, could result in substantial costs and the diversion of management resources, either of which could seriously harm our business.

Indemnity provisions in various agreements potentially expose us to substantial liability for intellectual property infringement and other losses.

Our agreements with clients and other third parties may include indemnification provisions under which we agree to indemnify them for losses suffered or incurred as a result of claims of intellectual property infringement, damages caused by us to property or persons, or other liabilities relating to or arising from our products, services or other contractual obligations. The term of these indemnity provisions generally survives termination or expiration of the applicable agreement. Large indemnity payments could harm our business, operating results and financial condition. From time to time, we are requested by clients to indemnify them for breach of confidentiality with respect to personal data. Although we normally do not agree to, or contractually limit our liability with respect to, such requests, the existence of such a dispute with a client may have adverse effects on our client relationships and reputation.

We use open source software in our products, which could subject us to litigation or other actions.

We use open source software in our products and may use more open source software in the future. From time to time, there have been claims challenging the ownership of open source software against companies that incorporate open source software into their products. As a result, we could be subject to suits by parties claiming ownership of what we believe to be open source software. Litigation could be costly for us to defend, have a negative effect on our operating results and financial condition or require us to devote additional research and development resources to change our products. In addition, if we were to combine our proprietary software products with open source software in a certain manner, we could, under certain of the open source licenses, be required to release the source code of our proprietary software products. If we inappropriately use open source software, we may be required to re-engineer our products, discontinue the sale of our products or take other remedial actions.

We are subject to governmental export and import controls that could impair our ability to compete in international markets due to licensing requirements and subject us to liability if we are not in full compliance with applicable laws.

Our products are subject to export controls, including the Commerce Department's Export Administration Regulations and various economic and trade sanctions regulations established by the Treasury Department's Office of Foreign Assets Controls, and exports of our products must be made in compliance with these laws. If we fail to comply with these U.S. export control laws and import laws, including U.S. Customs regulations, we and certain of our employees could be subject to substantial civil or criminal penalties, including the possible loss of export or import privileges; fines, which may be imposed on us and responsible employees or managers; and, in extreme cases, the incarceration of responsible employees or managers. In addition, if our distributors fail to obtain appropriate import, export or re-export licenses or authorizations, we may also be adversely affected through reputational harm and penalties. Obtaining the necessary authorizations, including any required license, for a particular sale may be time-consuming and is not guaranteed, and may result in the delay or loss of sales opportunities. Furthermore, the U.S. export control laws and economic sanctions laws prohibit the shipment of certain products and services to U.S. embargoed or sanctioned countries, governments and persons. Even though we take precautions to prevent our products from being shipped or provided to U.S. sanctions targets, our products and services could be shipped to those targets or provided by our distributors despite such precautions. Any such shipment could have negative consequences, including government investigations, penalties and reputational harm. In addition, various countries regulate the import of certain encryption technology, including through import permitting or licensing requirements, and have enacted laws that could limit our ability to distribute our products or could limit our clients' ability to implement our products in those countries. Changes to our products or changes in export and import regulations may create delays in the introduction and sale of our products in international markets, prevent our clients with international operations from deploying our products or, in some cases, prevent the export or import of our products to certain countries, governments or persons altogether. Any change in export or import regulations, economic sanctions or related laws, shift in the enforcement or scope of existing regulations, or change in the countries, governments, persons or technologies targeted by such regulations, could result in decreased use of our products, or in our decreased ability to export or sell our products to existing or potential clients with international operations. Any decreased use of our products or limitation on our ability to export or sell our products would likely adversely affect our business, financial condition and operating results.

Our investment portfolio is subject to general credit, liquidity, counterparty, market and interest rate risks, any of which could impair the market value of our investments and harm our financial results.

At December 31, 2018, we had $183.6 million in cash and cash equivalents and $204.7 million in short-term and long-term investments in marketable securities, consisting of corporate bonds, money market funds backed by United States Treasury Bills, U.S. treasury securities and agency securities. Although we follow an established investment policy and set of guidelines to manage our investment portfolio, our investments are subject to general credit, liquidity, counterparty, market and interest rate risks, which have been exacerbated by the recent financial and credit crisis, rising bankruptcy filings in the United States and the ongoing debt-ceiling debate.

Because the market value of fixed-rate debt securities may be adversely impacted by a rise in interest rates, our future investment income may fall short of expectations if interest rates rise. In addition, we may suffer losses if we are forced to sell securities that have experienced a decline in market value because of changes in interest rates. Currently, we do not use financial derivatives to hedge our interest rate exposure.

The fair value of our investments may change significantly due to events and conditions in the credit and capital markets. Any investment securities that we hold, or the issuers of such securities, could be subject to review for possible downgrade. Any downgrade in these credit ratings may result in an additional decline in the estimated fair value of our investments. Changes in the various assumptions used to value these securities and any increase in the perceived market risk associated with such investments may also result in a decline in estimated fair value.

In the event of adverse conditions in the credit and capital markets, and to the extent we make future investments, our investment portfolio may be impacted, and we could determine that some or all of our investments experienced an other-than-temporary decline in fair value, requiring impairment, which could adversely impact our financial position and operating results.

We may invest in companies for strategic reasons and may not realize a return on our investments.

In November 2013, we launched a strategic initiative created to invest in, advise and collaborate with promising cloud startups building innovative business applications that support the continued expansion of our market reach. We have made, and from time to time may continue to make, strategic investments in privately-held companies. The privately-held companies in which we may invest are considered inherently risky. The technologies and products these companies have under development are typically in the early stages and may never materialize, which could result in a loss of all or a substantial part of our initial investment in these companies. The evaluation of privately-held companies is based on information that we request from these companies, which is not subject to the same disclosure regulations as U.S. publicly traded companies, and as such, the basis for these evaluations is subject to the timing and accuracy of the data received from these companies.

Risks Related to Tax Issues

We are a multinational organization faced with increasingly complex tax issues in many jurisdictions, and we could be obligated to pay additional taxes in various jurisdictions.

As a multinational organization, we are subject to taxation in several jurisdictions around the world with increasingly complex tax laws, the application of which can be uncertain. The amount of taxes we pay in these jurisdictions could increase substantially as a result of changes in the applicable tax principles, including increased tax rates, new tax laws or revised interpretations of existing tax laws and precedents, which could have a material adverse effect on our liquidity and operating results. In addition, the authorities in these jurisdictions could review our tax returns and impose additional tax, interest and penalties, and the authorities could claim that various withholding requirements apply to us or our subsidiaries or assert that benefits of tax treaties are not available to us or our subsidiaries, any of which could have a material impact on us and our operating results. If we are selected for future examinations that uncover incorrect tax positions, we could be subject to additional taxes, interest and penalties.

Taxing authorities could reallocate our taxable income among our subsidiaries, which could increase our consolidated tax liability.

We conduct operations worldwide through subsidiaries in various tax jurisdictions pursuant to transfer pricing arrangements between our subsidiaries. If two or more affiliated companies are located in different countries, the tax laws or regulations of each country generally will require that transfer prices be the same as those between unrelated companies dealing at arms' length and that contemporaneous documentation is maintained to support the transfer prices. While we believe that we operate in compliance with applicable transfer pricing laws and intend to continue to do so, our transfer pricing procedures are not binding on applicable tax authorities. If tax authorities in any of these countries were to successfully challenge our transfer prices as not reflecting arm's length transactions, they could require us to adjust our transfer prices and thereby reallocate our income to reflect these revised transfer prices, which could result in a higher tax liability to us. In addition, if the country from which the income is reallocated does not agree with the reallocation, both countries could tax the same income, resulting in double taxation. If tax authorities were to allocate income to a higher tax jurisdiction, subject our income to double taxation or assess interest and penalties, it would increase our consolidated tax liability, which could adversely affect our financial condition, operating results and cash flows.

The recently passed comprehensive tax reform bill could adversely affect our business and financial condition.

On December 22, 2017, new legislation was enacted that significantly revises the Internal Revenue Code of 1986, as amended. The newly enacted federal income tax law, among other things, contains significant changes to corporate taxation, including reduction of the corporate tax rate from a top marginal rate of 35% to a flat rate of 21%, limitation of the tax deduction for interest expense to 30% of adjusted earnings (except for certain small businesses), limitations on the deductibility of executive compensation, limitation of the deduction for net operating losses to 80% of current year taxable income and elimination of net operating loss carrybacks, one time taxation of offshore earnings at reduced rates regardless of whether they are repatriated, elimination of U.S. tax on foreign earnings (subject to certain important exceptions), immediate deductions for certain new investments instead of deductions for depreciation expense over time, and modifying or repealing many business deductions and credits. Notwithstanding the reduction in the corporate income tax rate, the overall impact of the new federal tax law is uncertain and our business and financial condition could be adversely affected. In addition, it is uncertain if and to what extent various states will conform to the newly enacted federal tax law. The Act's new international rules, including the Global Intangible Low-Taxed Income, the Foreign Derived Intangible Income and the Base Erosion Anti-Avoidance Tax, are highly complex and may affect our financial condition as additional interpretive guidance is issued. The impact of this tax reform on holders of our common stock is also uncertain and could be adverse. We urge our stockholders to consult with their legal and tax advisors with respect to this legislation and the potential tax consequences of investing in or holding our common stock.

Our ability to use net operating loss carryforwards to reduce future tax payments may be subject to limitations.

We have federal and state net operating loss carryforwards that will begin to expire, if not utilized. These net operating loss carryforwards could expire unused and be unavailable to offset future income tax liabilities. Under the newly enacted federal income tax law, federal net operating losses incurred in 2018 and in future years may be carried forward indefinitely, but the deductibility of such federal net operating losses may be limited. It is uncertain if and to what extent various states will conform to the newly enacted federal tax law. In addition, under Section 382 of the Internal Revenue Code of 1986, as amended, if a corporation undergoes an "ownership change" (generally defined as a greater than 50% change (by value) in its equity ownership over a three year period), the corporation's ability to use its pre-change net operating loss carryforwards and other pre-change tax attributes (such as research tax credits) to offset its post-change income may be limited. We may experience ownership changes in the future and subsequent shifts in our stock ownership. As a result, we may be limited in the portion of net operating loss carryforwards that we can use in the future to offset taxable income for U.S. Federal income tax purposes.

Risks Related to Ownership of Our Common Stock

The trading price of our common stock may be volatile.

The trading price of our common stock has at times been volatile and could continue to be subject to significant fluctuations in response to various factors, some of which are beyond our control. In addition, the stock market in general, and the market for technology companies in particular, has experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of the companies operating in such markets. The market price of our common stock may be similarly volatile, and investors in our common stock may experience a decrease in the value of their shares, including as a result of factors unrelated to our operating performance and prospects. The market price of our common stock could be subject to wide fluctuations in response to a number of factors, including:

- our operating performance and the performance of other similar companies;
- the financial or non-financial metric projections we provide to the public, including the failure of the projections to meet the expectations of securities analysts or investors, and any changes in these projections or our failure to meet or exceed these projections;
- the overall performance of the equity markets;
- developments with respect to intellectual property rights;
- publication of unfavorable research reports about us or our industry or withdrawal of research coverage by securities analysts;
- speculation in the press or investment community;
- the size of our public float;
- natural disasters or terrorist acts;
- actual or perceived data security incidents that we or our service providers may suffer;
- announcements by us or our competitors of significant contracts, new technologies, acquisitions, commercial relationships, joint ventures or capital commitments; and
- global economic, legal and regulatory factors unrelated to our performance.

In addition, in the past, following periods of volatility in the overall market and the market price of a particular company's securities, securities class action litigation has often been initiated against these companies. This litigation, if initiated against us, could result in substantial costs and a diversion of our management's attention and resources.

If securities or industry analysts do not publish research or publish misleading or unfavorable research about our business, the market price of our common stock and trading volume could decline.

The trading market for our common stock depends in part on the research and reports that securities or industry analysts publish about us, our business or our market. If one or more of the analysts who cover us downgrade our common stock or publish incorrect or unfavorable research about our business, the market price of our common stock would likely decline. In addition, if one or more of these analysts cease coverage of our company or fail to publish reports on us regularly, demand for our common stock could decrease, which could cause the market price of our stock or trading volume to decline.

The issuance of additional stock in connection with acquisitions, our stock incentive plans or otherwise will dilute all other stockholdings.

Our certificate of incorporation authorizes us to issue up to 1,000,000,000 shares of common stock and up to 50,000,000 shares of preferred stock with such rights and preferences as may be determined by our board of directors. Subject to compliance with applicable rules and regulations, we may issue all of these shares that are not already outstanding without any action or approval by our stockholders. We intend to continue to evaluate strategic acquisitions in the future. We may pay for such acquisitions, partly or in full, through the issuance of additional equity. Any issuance of shares in connection with our acquisitions, the exercise of stock options, the vesting of restricted stock units or otherwise would dilute the percentage ownership held by existing investors.

Conversion of our convertible notes may dilute the ownership interest of existing stockholders, including holders who had previously converted their notes, or may otherwise depress the price of our common stock.
The conversion of some or all of our convertible notes due 2021, to the extent we deliver shares upon conversion of the 2021 notes, will dilute the ownership interests of existing stockholders. The convertible notes due 2021 and the underlying shares issuable upon conversion of such 2021 notes may be sold pursuant to a resale registration statement on Form S-3 that we filed with the Securities and Exchange Commission on August 7, 2018. Any sales in the public market of the 2021 notes or our common stock issuable upon conversion of the 2021 notes could adversely affect prevailing market prices of our common stock. In addition, the existence of the notes may encourage short selling by market participants because the conversion of the notes could be used to satisfy short positions, or anticipated conversion of the notes into shares of our common stock could depress the price of our common stock.
We do not expect to declare any dividends in the foreseeable future.
We do not anticipate declaring any cash dividends to holders of our common stock in the foreseeable future. Consequently, investors may need to sell all or part of their holdings of our common stock after price appreciation, which may never occur, as the only way to realize any future gains on their investment. Investors seeking cash dividends should not purchase our common stock.
Anti-takeover provisions in our charter documents and Delaware law may delay or prevent an acquisition of our company.
Our certificate of incorporation, our bylaws and Delaware law contain provisions that may have the effect of delaying or preventing a change in control of us or changes in our management. Our certificate of incorporation and our bylaws include provisions that:

- authorize “blank check” preferred stock, which could be issued by the board of directors without stockholder approval and may contain voting, liquidation, dividend and other rights superior to our common stock;
- create a classified board of directors whose members serve staggered three-year terms, until the 2021 annual meeting of stockholders, at which point all directors will be elected for a one-year term;
- specify that special meetings of our stockholders can be called only by our board of directors, the chairperson of the board, the chief executive officer or the president;
- establish an advance notice procedure for stockholder approvals to be brought before an annual meeting of our stockholders, including proposed nominations of persons for election to our board of directors;
- provide that our directors may be removed only for cause until the 2021 annual meeting of stockholders when all directors may be removed either with or without cause;
- provide that vacancies on our board of directors may be filled only by a majority of directors then in office, even though less than a quorum;
- specify that no stockholder is permitted to cumulate votes at any election of directors; and
- require supermajority votes of the holders of our common stock to amend specified provisions of our charter documents.

These provisions, alone or together, could delay or prevent hostile takeovers and changes in control or changes in our management.
In addition, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, which limits the ability of stockholders owning in excess of 15% of our outstanding voting stock to merge or combine with us.
Any provision of our certificate of incorporation, our bylaws or Delaware law that has the effect of delaying or deterring a change in control could limit the opportunity for our stockholders to receive a premium for their shares of our common stock, and could also affect the price that some investors are willing to pay for our common stock.

Item 1B. Unresolved Staff Comments
Not applicable.

Item 2. Properties

Our principal offices are located in Santa Monica, California, where we occupy approximately 94,000 square feet of office space under operating leases that expire in January 2024. We have additional established offices in Amsterdam, Netherlands; Auckland, New Zealand; Bangalore, India; Düsseldorf, Germany; Hong Kong; London, United Kingdom; Madrid, Spain; Mumbai, India; Munich, Germany; New York City, United States; Paris, France; Salt Lake City, United States; San Francisco, United States; São Paulo, Brazil; Singapore, Singapore; Stockholm, Sweden; Sunnyvale, United States; Sydney, Australia; Tel Aviv, Israel; and Tokyo, Japan to support our international operations. We believe that our facilities are adequate for our current needs and that suitable additional or substitute space will be available as needed to accommodate planned expansion of our operations.

Item 3. Legal Proceedings

From time to time, we are involved in a variety of claims, suits, investigations and proceedings arising from the ordinary course of our business, including actions with respect to intellectual property claims, breach of contract and tort claims, labor and employment claims, tax and other matters. Although claims, suits, investigations and proceedings are inherently uncertain and their results cannot be predicted with certainty, we believe that the resolution of our current pending matters will not have a material adverse effect on our business, consolidated financial position, results of operations or cash flow. Regardless of the outcome, litigation can have an adverse impact on us because of defense costs, diversion of management resources and other factors. In addition, it is possible that an unfavorable resolution of one or more such proceedings could in the future materially and adversely affect our financial position, results of operations or cash flows in a particular period.

Item 4. Mine Safety Disclosure

Not applicable.

PART II

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

Market Information for Our Common Stock

Our common stock has been traded on the Nasdaq Global Select Market under the symbol “CSOD” since March 17, 2011. Prior to that time, there was no public market for our common stock. The following table sets forth for the periods indicated the high and low closing sale prices for our common stock as reported on the Nasdaq Global Select Market.

	Fiscal 2018		Fiscal 2017	
	High	Low	High	Low
First quarter	$45.66	$35.09	$43.75	$38.36
Second quarter	53.18	38.79	39.51	35.31
Third quarter	58.18	47.97	41.14	33.82
Fourth quarter	55.65	46.17	40.90	34.17

Holders of Record

As of January 31, 2019 there were 19 holders of record of our common stock. Because many of our shares of common stock are held of record by brokers and other institutions on behalf of stockholders, we are unable to estimate the total number of stockholders represented by such record holders.

Dividend Policy

We have never declared or paid, and do not anticipate declaring or paying, any cash dividends on our common stock. Any future determination as to the declaration and payment of dividends will be at the discretion of our board of directors and will depend on then-existing conditions, including our financial condition, operating results, contractual restrictions, capital requirements, business prospects and other factors our board of directors may deem relevant.

STOCK PRICE PERFORMANCE GRAPH

This performance graph shall not be deemed “filed” for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the Exchange Act), or incorporated by reference into any filing of Cornerstone OnDemand, Inc. under the Securities Act of 1933, as amended, or the Exchange Act, except as shall be expressly set forth by specific reference in such filing.

The following graph compares (i) the cumulative total stockholder return on our common stock from December 31, 2013 through December 31, 2018 with (ii) the cumulative total return of the Nasdaq Global Market Index and (iii) the Nasdaq Computer & Data Processing Index over the same period, assuming the investment of $100 in our common stock and in both of the other indices on December 31, 2013 and the reinvestment of all dividends. As discussed above, we have never declared or paid a cash dividend on our common stock and do not anticipate declaring or paying a cash dividend in the foreseeable future.

COMPARISON OF CUMULATIVE TOTAL RETURN OF CORNERSTONE ONDEMAND

	December 31, 2013	December 31, 2014	December 31, 2015	December 31, 2016	December 31, 2017	December 31, 2018
Cornerstone OnDemand	$ 100.00	$ 66.03	$ 64.77	$ 79.37	$ 66.27	$ 94.60
Nasdaq Global Market Index	$ 100.00	$ 106.01	$ 106.00	$ 101.91	$ 127.16	$ 118.96
Nasdaq Computer & Data Processing Index	$ 100.00	$ 119.88	$ 127.36	$ 142.99	$ 198.42	$ 191.11

The comparisons shown in the graph and table above are based upon historical data. We caution that the stock price performance shown in the graph above is not necessarily indicative of, nor is it intended to forecast, the potential future performance of our common stock. See the disclosure in Part I, Item 1A. “Risk Factors.”

Equity Compensation Plan Information

The information required by this item will be included in our Proxy Statement for the 2019 Annual Meeting of Stockholders to be filed with the SEC within 120 days of the fiscal year ended December 31, 2018, and is incorporated herein by reference.

Recent Sales of Unregistered Securities

None.

Issuer Purchases of Equity Securities

The following table summarizes stock repurchases during the year ended December 31, 2018 (in thousands, expect per share amounts):

	Total Number of Shares Repurchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs (1)	Approximate Dollar Value of Shares that May Yet Be Purchased Under the Plan or Programs (1)
January 1-31, 2018	219	$ 36.53	219	$ 69,413
February 1-28, 2018	161	38.93	161	63,138
March 1-31, 2018	44	40.32	44	61,376
April 1-30, 2018	100	39.67	100	57,389
May 1-31, 2018	212	48.46	212	47,113
June 1-30, 2018	131	49.11	131	40,658
July 1-31, 2018	43	47.15	43	38,648
August 1-31, 2018	216	54.78	216	26,818
September 1-30, 2018	41	55.71	41	24,515
October 1-31, 2018	307	51.62	307	8,648
November 1-30, 2018	177	48.81	177	—
December 1-31, 2018	—	—	—	—
	1,651	$ 46.85	1,651	

(1) In November 2017, our board of directors authorized a $100.0 million share repurchase program of our common stock. The share repurchase program was completed as of December 31, 2018.

Item 6. Selected Financial Data

The consolidated statements of operations data for the three years ended December 31, 2018, 2017 and 2016 and the consolidated balance sheet data at December 31, 2018 and 2017, respectively, are derived from, and qualified by reference to, our audited financial statements included elsewhere in this Annual Report on Form 10-K. The consolidated statements of operations data for the two years ended December 31, 2015 and 2014 and the consolidated balance sheet data at December 31, 2016, 2015 and 2014, respectively, are derived from our audited financial statements not included in this Annual Report on Form 10-K.

The selected consolidated financial data below are not necessarily indicative of future performance and should be read in conjunction with Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations" and the consolidated financial statements and related notes thereto included in Item 8 of this Annual Report on Form 10-K.

	Years Ended December 31,				
	2018 *	2017	2016	2015	2014
	(in thousands, except per share data)				
Consolidated statements of operations data:					
Revenue	$537,891	$481,985	$423,124	$339,651	$263,568
Cost of revenue	144,349	142,867	135,752	109,864	77,684
Gross profit	393,542	339,118	287,372	229,787	185,884
Operating expenses:					
Sales and marketing	224,635	240,271	225,781	207,626	163,380
Research and development	76,981	61,975	46,977	40,991	30,618
General and administrative	90,749	84,589	70,956	49,877	41,802
Restructuring	8,946	1,539	—	—	—
Total operating expenses	401,311	388,374	343,714	298,494	235,800
Loss from operations	(7,769)	(49,256)	(56,342)	(68,707)	(49,916)
Other income (expense):					
Interest income (expense) and other income (expense), net	(23,478)	(10,333)	(9,288)	(15,628)	(14,128)
Loss before provision for income taxes	(31,247)	(59,589)	(65,630)	(84,335)	(64,044)
Income tax (provision)	(2,595)	(1,746)	(1,207)	(1,181)	(855)
Net loss	$(33,842)	$(61,335)	$(66,837)	$(85,516)	$(64,899)
Net loss per share, basic and diluted	$(0.58)	$(1.07)	$(1.20)	$(1.58)	$(1.22)
Weighted average common shares outstanding, basic and diluted	58,159	57,262	55,595	54,171	53,267

* See Note 2 for summary of adjustments.

	At December 31,				
	2018 *	2017	2016	2015	2014
	(in thousands)				
Consolidated balance sheet data:					
Cash and cash equivalents	$183,596	$393,576	$83,300	$107,691	$166,557
Short-term and long-term investments	205,982	266,500	259,837	201,088	170,044
Property and equipment, net	77,254	20,817	23,962	27,021	21,424
Working capital, excluding deferred revenue, current portion[1]	485,138	449,874	419,408	334,664	356,553
Total assets	807,156	967,190	623,629	561,545	505,655
Deferred revenue, current and non-current portion	325,801	326,163	282,332	252,139	191,336
Debt, current portion and non-current portion	288,967	533,193	238,432	232,583	225,445
Capital lease obligations, current portion and non-current portion	—	—	—	33	236
Facility financing obligation, current portion and non-current portion	46,100	—	—	—	—
Total stockholders' equity	55,907	22,120	26,963	7,822	35,502

* See Note 2 for summary of adjustments.
1 Working capital is defined as total current assets minus total current liabilities.

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations
The following discussion of our financial condition and results of operations should be read together with the consolidated financial statements and the related notes set forth in Item 8. "Financial Statements and Supplementary Data." The following discussion also contains forward-looking statements that involve a number of risks and uncertainties. See Part I, "Special Note Regarding Forward-Looking Statements" for a discussion of the forward-looking statements contained below and Part I, Item 1A. "Risk Factors" for a discussion of certain risks that could cause our actual results to differ materially from the results anticipated in such forward-looking statements.
Overview
Cornerstone is a leading global provider of learning and human capital management software, delivered as Software-as-a-Service ("SaaS"). We were founded with a passion for empowering people through learning and a conviction that people should be an organization's greatest competitive advantage. We believe that companies thrive when they help their employees to realize their potential. Putting this belief into practice, we offer solutions to help companies strategically manage and continuously develop their talent throughout the entire employee lifecycle. Featuring comprehensive recruiting, personalized learning, development-driven performance management, and holistic HR planning, our human capital management platform is successfully used by more than 3,535 global clients of all sizes, spanning more than 40 million users across 192 countries and 43 languages.
We work with clients across all geographies, verticals and market segments. Our clients include multi-national corporations, large domestic and foreign-based enterprises, mid-market companies, public sector organizations, healthcare providers, higher education institutions, non-profit organizations and small businesses. We sell our platform domestically and internationally through both direct and indirect channels, including direct sales teams throughout North and South America, Europe and Asia-Pacific and distributor relationships with payroll companies, human resource consultancies and global system integrators.
Our enterprise human capital management platform is composed of four product suites:

- Our Recruiting suite helps organizations to attract, hire, and onboard the right employees;
- Our Learning suite provides robust, modern learning management software designed to scale with the organization. Cornerstone Learning comprehensively supports compliance, knowledge sharing, and employee-driven development training to close skills gaps. Our content offering delivers fresh, modern content, fueling employee curiosity and inspiring growth;
- Our Performance suite provides tools to manage goal setting, performance reviews, competency assessments, development plans, continuous feedback, compensation management and succession planning; and

- Our HR suite provides an aggregated view of all employee data with workforce planning, self-service management, and compliance reporting capabilities resulting in more accurate data.

Our goal is to empower people, organizations and communities to realize their potential with a comprehensive human capital management platform that is built to last. Our growth strategy since inception has been deliberate and focused on long-term success. This has allowed us to weather periods of economic turmoil and significant changes in the markets we serve without experiencing business contraction. We plan to continue with the same systematic approach in the future. Key elements of our strategy include:

Continue to Innovate and Extend Our Technological Leadership. We believe we have developed over the last twenty years a deep understanding of the human capital management challenges our clients face. We continually collaborate with our clients to build extensive functionality that addresses their specific needs and requests. We plan to continue to leverage our expertise in human capital management and client relationships to develop new products, features and functionality that will enhance our platform and expand our addressable market. We plan to continue our policy of implementing best practices across our organization, expanding our technical operations and investing in our network infrastructure and service capabilities in order to support continued future growth.

Retain and Expand Business with Existing Clients. We believe our existing installed base of clients offers a substantial opportunity for growth.

- Focus on Client Success, Retention and Growth. We believe focusing on our clients’ success will lead to our own success. We have developed a Client Success Framework that governs our operating model. Since 2002, we have averaged annual gross dollar retention rates of approximately 95%. We strive to maintain our strong retention rates by continuing to provide our clients with high levels of service, support and increasing functionality.
- Sell Additional Products to Existing Clients. We believe there is a significant growth opportunity in selling additional functionality to our existing clients. Many clients have added functionality subsequent to their initial deployments as they recognize the benefits of our unified platform. As a result, approximately 71% of our clients today utilize two or more products and approximately 41% utilize three or more products. With our expanding product portfolio functionality, we believe significant upsell opportunity remains within our existing client base.

Focus on Growing Recurring Revenue. Beginning in 2018, we focused our go-to-market capabilities on driving recurring revenue growth. We believe our primary growth drivers are as follows:

- Invest in Direct Sales in North America. We believe that the market for human capital management is large and remains significantly underpenetrated. In particular, Recruiting and Content provides an opportunity to increase our recurring sales to both new and existing clients. Additionally, the Small and Medium-sized Business (SMB) market represent a very large and underpenetrated opportunity.
- Significantly Grow Our International Operation. We believe a substantial opportunity exists to continue to grow sales of our platform internationally. We intend to grow our Europe, Middle-East and Africa ("EMEA") and Asia-Pacific and Japan ("APJ") operations. As of December 31, 2018, we had 827 clients in EMEA and 198 clients in APJ.
- Grow Our Cornerstone Content Anytime Sales. We believe there is a significant market opportunity for developing employees throughout their careers with modern, fresh e-learning content. Our Content Anytime subscription offering provides access to industry leading content which we believe will increase user engagement on our platform. Our content partners for Content Anytime include industry leaders as well as regional, functional and vertically-focused online training providers. In addition, we have agreements with providers of specific competency models for use by our clients directly in our human capital management platform. We intend to enter into additional license agreements to continue providing the best content available for our clients.
- Expand the Ecosystem. During 2018, we migrated a sizable portion of our implementation services to our partners. We have also expanded in recent years our relationships with various third-party consulting firms to deliver the successful implementation of our platform and to optimize our clients’ use of our platform during the terms of their engagements. Our partner strategy and experience includes certifications and curricula developed to ensure successful delivery by our partners and continued high client satisfaction. We believe we have a significant opportunity to leverage these third-parties interested in building or expanding their businesses to increase our market penetration.

Increase Operating Income and Free Cash Flow. In November 2017, we announced a strategic plan designed to better position us for long-term growth and increase shareholder value. We believe managing our operating costs while making smart investments in scaling our middle and back-office operations to support recurring revenue growth is critical to our long-term success. We intend to focus on operational excellence initiatives that drive increases in operating income and free cash flow.
Acquisitions. We may acquire or invest in additional businesses, products or technologies that we believe will complement or expand our platform, enhance our technical capabilities or otherwise offer growth opportunities. Most recently, in November 2018, we acquired Grovo Learning, Inc., a leading provider of Microlearning® content, and in September 2018, we acquired Workpop Inc., a web and mobile solution for candidates and hiring managers in service-based industries. We completed these transactions to support our strategic initiatives to enhance the Recruiting and Content areas of our platform.
Metrics
We regularly review a number of metrics, including the following key metrics, to evaluate our business, measure our performance, identify trends affecting our business, formulate financial projections and make strategic decisions.

- Revenue. We generally recognize subscription revenue over the contract period, and as a result of our revenue recognition policy and the seasonality of when we enter into new client agreements, revenue from client agreements signed in the current period may not be fully reflected in the current period.
- Subscription revenue. Revenue from subscriptions to our human capital management platform and related support sold on a recurring basis.
- Annual recurring revenue. In order to assess our business performance with a metric that reflects a subscription-based business model, we track annual recurring revenue, which is another financial metric we define as the annualized recurring value of all active contracts at the end of a reporting period.
- Unlevered free cash flow. We define unlevered free cash flow, a non-GAAP financial measure, as cash provided by operating activities minus capital expenditures and capitalized software costs plus cash paid for interest. We present this metric because it is a liquidity measure that provides useful information to management and investors about the amount of cash generated by our business that can be used for strategic opportunities, including investing in our business and strengthening our balance sheet.
- Annual dollar retention rate. We define annual dollar retention rate as the implied monthly recurring revenue under client agreements at the end of a fiscal year, divided by the implied monthly recurring revenue, for that same client base, at the beginning of the fiscal year and includes incremental sales up to but not exceeding the original renewal amount to the existing client base. This ratio does not reflect implied monthly recurring revenue for new clients added between the end of the prior fiscal year and the end of the current fiscal year. We define implied monthly recurring revenue as the total amount of minimum recurring revenue to which we have a contractual right under each of our client agreements over the entire term of the agreement, but excluding non-recurring support, consulting and maintenance fees, divided by the number of months in the term of the agreement. Implied monthly recurring revenue is substantially comprised of subscriptions to our enterprise human capital management platform. This ratio excludes the implied monthly recurring revenue from clients of our Cornerstone for Salesforce, Cornerstone PiiQ, Grovo Learning, Inc. and Workpop Inc. products. We believe that our annual dollar retention rate is an important metric to measure the long-term value of client agreements and our ability to retain our clients.
- Constant currency results. We present constant currency information, a non-GAAP financial measure, to provide a framework for assessing how our underlying business performed excluding the effect of foreign currency fluctuations. Due to our legal and operating structure, our international revenues are favorably impacted as the U.S. dollar weakens relative to the British pound and euro, and unfavorably impacted as the U.S. dollar strengthens relative to the British pound and euro. We believe the presentation of results on a constant currency basis in addition to reported results helps improve the ability to understand our performance because they exclude the effects of foreign currency volatility that are not indicative of our core operating results. To present this information, current period results for entities reporting in British pounds and euros are translated into U.S. dollars at the prior period exchange rates as opposed to the actual exchange rates in effect for the current period. These results should be considered in addition to, not as a substitute for, results reported in accordance with GAAP. Results on a constant currency basis, as we present

them, may not be comparable to similarly titled measures used by other companies and are not a measure of performance presented in accordance with GAAP.

• Number of clients. We believe that our ability to expand our client base is an indicator of our market penetration and the growth of our business as we continue to invest in our direct sales teams and distributors. Our client count includes contracted clients for our enterprise human capital management platform as of the end of the period and excludes clients of our Cornerstone for Salesforce, PiiQ, Grovo Learning, Inc. and Workpop Inc. products. In 2018, our number of clients grew 9%.

Key Components of Our Results of Operations

Sources of Revenue and Revenue Recognition

Our platform is designed to enable organizations to meet the challenges they face in maximizing the productivity of their human capital. We generate revenue from the following sources:

• Subscriptions to Our Products and Other Offerings on a Recurring Basis. Clients pay subscription fees for access to our enterprise human capital management platform, other products and support on a recurring basis. Fees are based on a number of factors, including the number of products purchased, which may include e-learning content, and the number of users having access to a product. We generally recognize revenue from subscriptions ratably over the term of the agreements beginning on the date the subscription service is made available to the client. Subscription agreements are typically three years, billed annually in advance, and non-cancelable, with payment due within 30 days of the invoice date.

• Professional Services and Other. We offer our clients and implementation partners assistance in implementing our products and optimizing their use. Professional services include application configuration, system integration, business process re-engineering, change management and training services. Services are generally billed upfront on a fixed fee basis and to a lesser degree on a time-and-material basis. These services are generally purchased as part of a subscription arrangement and are typically performed within the first several months of the arrangement. Clients may also purchase professional services at any other time. We generally recognize revenue from fixed fee professional services contracts as services are performed based on the proportion performed to date relative to the total expected services to be performed. Revenue associated with time-and-material contracts are recorded as such time and materials are incurred.

Our client agreements generally include both subscriptions to access our products and related professional services. Our agreements generally do not contain any cancellation or refund provisions other than in the event of our default.

Cost of Revenue

Cost of revenue consists primarily of costs related to hosting our products and delivery of professional services, and includes the following:

• personnel and related expenses, including stock-based compensation;
• expenses for network-related infrastructure and IT support;
• delivery of contracted professional services and on-going client support;
• payments to external service providers contracted to perform implementation services;
• depreciation of data centers and amortization of capitalized software costs and developed technology software license rights; and
• content and licensing fees and referral fees.

In addition, we allocate a portion of overhead, such as rent, IT costs, depreciation and amortization and employee benefits costs, to cost of revenue based on headcount. The costs associated with providing professional services are significantly higher, as a percentage of revenue, than the costs associated with providing access to our products due to the labor costs to provide the consulting services. We expect gross margin to increase over time as we optimize the efficiency of our operations, continue to scale our business and deemphasize the sale of professional services.

Operating Expenses

Our operating expenses are as follows:

- Sales and Marketing. Sales and marketing expenses consist primarily of personnel and related expenses for our sales and marketing staff, including salaries, benefits, bonuses, stock-based compensation and commissions; costs of marketing and promotional events, corporate communications, online marketing, product marketing and other brand-building activities; and allocated overhead.

During the third quarter of 2018, we completed certain aspects of our strategic transformation plan to position us for long-term growth. The completion of this transformation phase resulted in the reallocation of certain resources. The primary reallocation resulted in some sales and marketing headcount that were moved to research and development activities to better align the organization with their job functions. On a go-forward basis, this will have the impact of reducing sales and marketing and increasing research and development, as a percentage of revenue, by approximately 4%. The same impact would be approximately 3% excluding stock-based compensation expense.

We intend to continue to invest in sales and marketing strategically to expand our business both domestically and internationally. We expect over time sales and marketing expenses, as a percentage of revenue, to decrease.

- Research and Development. Research and development expenses consist primarily of personnel and related expenses for our research and development staff, including salaries, benefits, bonuses and stock-based compensation; the cost of certain third-party service providers; and allocated overhead. Research and development costs, other than software development costs qualifying for capitalization, are expensed as incurred.

As described above, during the third quarter of 2018, we reallocated certain resources from sales and marketing to research and development.

We have focused our research and development efforts on continuously improving our products. We believe that our research and development activities are efficient because we benefit from maintaining a single software code base for each of our products. We expect research and development expenses to increase proportionately with our business.

- General and Administrative. General and administrative expenses consist primarily of personnel and related expenses for administrative, legal, finance and human resource staff, including salaries, benefits, bonuses and stock-based compensation; professional fees; insurance premiums; other corporate expenses; and allocated overhead. Over time we expect our general and administrative expenses to decrease as a percentage of revenue.
- Restructuring. Restructuring consists of stock-based compensation, payroll-related costs, such as severance, outplacement costs and continuing healthcare coverage, associated with employee terminations.

Other Income (Expense)

- Interest Income. Interest income consists primarily of interest income from investment securities partially offset by amortization of investment premiums. We expect interest income to vary depending on the level of our investments in marketable securities, which include corporate bonds, agency bonds, U.S. treasury securities and commercial paper.
- Interest Expense. Interest expense consists primarily of interest expense from our convertible notes, accretion of debt discount and amortization of debt issuance costs.
- Other, Net. Other, net consists of income and expense associated with fluctuations in foreign currency exchange rates, fair value adjustments to strategic investments and other non-operating expenses. We expect other income (expense) to vary depending on the movement in foreign currency exchange rates and the related impact on our foreign exchange gain (loss).

Income Tax (Provision) Benefit

On a consolidated basis, we have incurred operating losses and have recorded a full valuation allowance against our United States, United Kingdom, New Zealand, Hong Kong and Brazil deferred tax assets for all periods to date and, accordingly, have not recorded a (provision) benefit for income taxes for any of the periods presented other than a (provision) benefit for certain foreign and state income taxes. Certain foreign subsidiaries and branches provide intercompany services and are compensated on a cost-plus basis, and therefore, have incurred liabilities for foreign income taxes in their respective jurisdictions.

Results of Operations

The following table sets forth our results of operations for each of the periods indicated (in thousands). The period-to-period comparison of financial results is not necessarily indicative of future results. The adoption of Accounting Standards Update No. 2014-09, Revenue from Contracts with Customers, as amended ("ASC 606") had an inconsequential impact on the comparability of our financial results for the years ended December 31, 2018, 2017 and 2016.

	Year Ended December 31,		
	2018 *	2017	2016
Revenue	$537,891	$481,985	$423,124
Cost of revenue	144,349	142,867	135,752
Gross profit	393,542	339,118	287,372
Operating expenses:			
Sales and marketing	224,635	240,271	225,781
Research and development	76,981	61,975	46,977
General and administrative	90,749	84,589	70,956
Restructuring	8,946	1,539	—
Total operating expenses	401,311	388,374	343,714
Loss from operations	(7,769)	(49,256)	(56,342)
Other income (expense):			
Interest income	7,796	2,951	1,702
Interest expense	(28,176)	(14,762)	(12,924)
Other, net	(3,098)	1,478	1,934
Other income (expense), net	(23,478)	(10,333)	(9,288)
Loss before income tax provision	(31,247)	(59,589)	(65,630)
Income tax provision	(2,595)	(1,746)	(1,207)
Net loss	$(33,842)	$(61,335)	$(66,837)

* See Note 2 for summary of adjustments in relation to the adoption of ASC 606.

The following table sets forth our results of operations as a percentage of total revenue for each of the periods indicated.

	Year Ended December 31,		
	2018 *	2017	2016
Revenue	100.0 %	100.0 %	100.0 %
Cost of revenue	26.8 %	29.6 %	32.1 %
Gross profit	73.2 %	70.4 %	67.9 %
Operating expenses:			
Sales and marketing	41.8 %	49.9 %	53.4 %
Research and development	14.3 %	12.9 %	11.1 %
General and administrative	16.9 %	17.6 %	16.8 %
Restructuring	1.7 %	0.3 %	— %
Total operating expenses	74.6 %	80.6 %	81.2 %
Loss from operations	(1.4)%	(10.2)%	(13.3)%
Other income (expense):			
Interest income	1.4 %	0.6 %	0.4 %
Interest expense	(5.2)%	(3.1)%	(3.1)%
Other, net	(0.6)%	0.3 %	0.5 %
Loss before income tax provision	(5.8)%	(12.4)%	(15.5)%
Income tax provision	(0.5)%	(0.4)%	(0.3)%
Net loss	(6.3)%	(12.7)%	(15.8)%

* See Note 2 for summary of adjustments in relation to the adoption of ASC 606.

Metrics

The following table sets forth our key metrics that we use to evaluate our business, measure our performance, identify trends affecting our business, formulate financial projections and make strategic decisions:

	At or For Year Ended December 31,		
	2018 *	2017	2016
Revenue (in thousands)	$537,891	$481,985	$423,124
Subscription revenue (in thousands)	$473,052	$396,764	$339,756
Annual recurring revenue (in thousands)	$510,000	$439,000	n/a
Unlevered free cash flow (in thousands)	$63,471	$43,680	$16,411
Annual dollar retention rate	92.8 %	93.5 %	95.1 %
Number of clients	3,535	3,250	2,918

* See Note 2 for summary of adjustments in relation to the adoption of ASC 606.

Revenue increased $55.9 million, or 12%, in 2018 when compared to 2017. Revenue growth on a constant currency basis increased 10% in 2018 when compared to 2017. Revenue increased $58.9 million, or 14%, in 2017 when compared to 2016. Revenue growth on a constant currency basis increased 15% in 2017 when compared to 2016.

The rate at which total revenue increased year over year declined in 2018, from 14% in 2017 to 12% in 2018. Our growth rate can depend on a variety of factors, such as new clients, the size, volume and complexity of our agreements with our customers, foreign currency movements, our ability to work with our customers to implement and deliver our products, our ability to upsell and renew our existing customers, the success of our alliance and partnership arrangements and the expansion of our business through emerging markets. The decline in the growth rate of total revenue was driven by our strategic plan to transition away from one-time professional services and recommit our efforts to grow recurring revenue and unlevered free cash flows.

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The following table sets forth our sources of revenue for each of the periods indicated (dollars in thousands):

	At or For Year Ended December 31,		
	2018 *	2017	2016
Subscription revenue	$473,052	$396,764	$339,756
Percentage of subscription revenue to total revenue	87.9 %	82.3 %	80.3 %
Professional services revenue	$64,839	$85,221	$83,368
Percentage of professional services to total revenue	12.1 %	17.7 %	19.7 %
	$537,891	$481,985	$423,124

* See Note 2 for summary of adjustments in relation to the adoption of ASC 606.

Subscription revenue increased by $76.3 million, or 19%, in 2018 when compared to 2017. Subscription revenue growth on a constant currency basis increased 20% in 2018 when compared to 2017. The increase was attributable to new business, which includes new clients, upsells, cross-sells and renewals from existing clients.

Professional services revenue decreased by $20.4 million, or 24%, in 2018 when compared to 2017. The decrease of professional services revenue is attributable to the continued execution of our strategic initiative announced in the fourth quarter of 2017, to sharpen our focus on recurring revenue growth and migrate much of our implementation services to our global partners.

Subscription revenue increased by $57.0 million, or 17%, in 2017 when compared to 2016. The increase was attributable to new business, which included new clients, upsells and renewals from existing clients. Professional services revenue increased by $1.9 million, or 2%, in 2017 when compared to 2016.

Revenue by geography is generally based on the address of the customer as defined in our master subscription agreement with each customer. The following table sets forth our revenue by geographic area for each of the periods indicated (dollars in thousands):

	At or For Year Ended December 31,		
	2018 *	2017	2016
Revenue for United States	$343,206	$313,729	$284,657
Percentage of total revenue for United States	63.8 %	65.1 %	67.3 %
Revenue for all other countries	$194,685	$168,256	$138,467
Percentage of total revenue for all other countries	36.2 %	34.9 %	32.7 %
	$537,891	$481,985	$423,124

* See Note 2 for summary of adjustments in relation to the adoption of ASC 606.

Annual recurring revenue for the year ended December 31, 2018 was $510.0 million. In order to assess our business performance with a metric that reflects our transition to an even more subscription-based (or recurring revenue) business model, we track annual recurring revenue, which is a non-GAAP financial measure we define as the annualized recurring value of all active contracts at the end of a reporting period. Management believes this metric is useful to investors, in evaluating our ongoing operational performance and trends, and in comparing our financial measures with other companies in the same industry. However, it is important to note that other companies, including companies in our industry, may calculate annual recurring revenue differently or not at all, which may reduce its usefulness as a comparative measure.

Unlevered free cash flow for the year ended December 31, 2018 was $63.5 million, resulting in an unlevered free cash flow margin of 11.8% as compared to unlevered free cash flow of $43.7 million and unlevered free cash flow margin of 9.1% for year ended December 31, 2017.

Cost of Revenue, Gross Profit and Gross Margin

	Year Ended December 31,		
	2018 *	2017	2016
	(dollars in thousands)		
Cost of revenue	$144,349	$142,867	$135,752
Gross profit	$393,542	$339,118	$287,372
Gross margin	73.2 %	70.4 %	67.9 %

* See Note 2 for summary of adjustments in relation to the adoption of ASC 606.
Cost of revenue increased $1.5 million, or 1%, in 2018 as compared to 2017. The increase in cost of revenue was primarily due to $6.0 million in increased capitalized software amortization and $4.5 million in increased content costs. These increased costs were partially offset by $6.6 million in decreased amortization of acquired intangible assets and $2.9 million in external implementation service costs. These costs were incurred to service our existing clients and support our continued growth. The improvement in gross margin was primarily due to a higher mix of subscription revenue, which carries a higher gross margin.
Cost of revenue increased $7.1 million, or 5%, in 2017 as compared to 2016. The increase in cost of revenue was primarily due to $4.4 million in increased amortization of capitalized software, $1.9 million in increased employee-related costs due to higher headcount and $1.9 million in increased third-party content costs. These increased costs were offset by $2.2 million in decreased costs related to outsourced consulting services. These costs were incurred to service our existing clients and support our continued growth. The improvement in gross margin was primarily due to a higher mix of subscription revenue, which carries a higher gross margin.
Aside from the improvement in gross margin from the higher mix of subscription revenue, we expect gross margin to increase over time as we optimize the efficiency of our operations and continue to scale our business.
Sales and Marketing

	Year Ended December 31,		
	2018 *	2017	2016
	(dollars in thousands)		
Sales and marketing	$224,635	$240,271	$225,781
Percent of revenue	41.8 %	49.9 %	53.3 %

* See Note 2 for summary of adjustments in relation to the adoption of ASC 606.
Sales and marketing expenses decreased $15.6 million, or 7%, in 2018 as compared to 2017. As a percentage of revenue, sales and marketing expense decreased by approximately eight percentage points, primarily resulting from a combination of increased cost efficiency, reduction in headcount as part of our planned restructuring and leverage realized from changes to our sales commission plans, as we continued our efforts to strategically scale our sales teams and improve their productivity.
Sales and marketing expenses increased $14.6 million, or 6%, in 2017 as compared to 2016. As a percentage of revenue, sales and marketing expense decreased by approximately three percentage points, primarily resulting from a combination of increased cost efficiency and leverage realized from changes to our sales commission plans, as we continued our efforts to strategically scale our sales teams and improve their productivity.
As described above, during the third quarter of 2018, we reallocated certain resources from sales and marketing to research and development. We assess our investments in new and existing markets strategically, and we believe we have gained leverage through our operational excellence initiatives. We expect over time sales and marketing expense, as a percentage of revenue, to continue to decrease as we gain efficiency throughout the various sales teams.

Research and Development

	Year Ended December 31,		
	2018	2017	2016
	(dollars in thousands)		
Research and development	$76,981	$61,975	$46,977
Percent of revenue	14.3 %	12.9 %	11.1 %

Research and development expenses increased $15.0 million, or 24%, in 2018 as compared to 2017. The increase was principally due to an increase in research and development headcount to maintain and improve the functionality of our products. As a result, we incurred increased employee-related costs of $12.1 million.

Research and development expenses increased $15.0 million, or 32%, in 2017 as compared to 2016. The increase was principally due to an increase in research and development headcount to maintain and improve the functionality of our products. As a result, we incurred increased employee-related costs of $10.4 million. In addition, we determined that previously capitalized software costs were impaired resulting in the write-off of $1.3 million.

We continue to develop and release new products and new features within existing products and, as a result, we expect research and development expense to increase proportionately with revenue. Additionally, as described above, during the third quarter of 2018, we reallocated certain resources from sales and marketing to research and development.

We capitalize a portion of our software development costs related to the development and enhancements of our products, which are then amortized to cost of revenue. The timing of our capitalizable development and enhancement projects may affect the amount of development costs expensed in any given period. We capitalized $31.6 million, $24.3 million and $20.9 million of software development costs and amortized $23.5 million, $17.6 million and $13.2 million in 2018, 2017 and 2016, respectively.

General and Administrative

	Year Ended December 31,		
	2018	2017	2016
	(dollars in thousands)		
General and administrative	$90,749	$84,589	$70,956
Percent of revenue	16.9 %	17.6 %	16.8 %

General and administrative expenses increased $6.2 million, or 7%, in 2018 as compared to 2017. The increase was primarily due $4.0 million of increased professional and consulting expenses. The increase was also driven by higher costs to support our growing business and incremental spend to support our operational excellence initiatives, which we expect to result in future margin improvements.

General and administrative expenses increased $13.6 million, or 19%, in 2017 as compared to 2016. The increase was largely driven by higher costs to support our growing business and incremental spend to support our operational excellence initiatives, which we expect to result in future margin improvements. We incurred increased employee-related costs of $9.8 million as a result of increased headcount and stock-based compensation awards.

We expect over time our general and administrative expense to decrease as a percentage of revenue as we continue our cost containment measures.

Restructuring

	Year Ended December 31,		
	2018	2017	2016
	(dollars in thousands)		
Restructuring	$8,946	$1,539	$ —
Percent of revenue	1.7 %	0.3 %	—%

Restructuring expenses increased $7.4 million, or 481%, in 2018 as compared to 2017. The increase was primarily due to increased payroll-related costs, such as severance, outplacement costs and continuing healthcare coverage for terminated employees, associated with the planned restructuring which was completed in the third quarter of 2018.

Other Income (Expense)

	Year Ended December 31,		
	2018	2017	2016
	(in thousands)		
Interest income	$7,796	$2,951	$1,702
Interest expense	(28,176)	(14,762)	(12,924)
Other, net	(3,098)	1,478	1,934
Other income (expense), net	$(23,478)	$(10,333)	$(9,288)

Interest income in 2018 increased by $4.8 million due to the increase in interest income earned on investment securities and money market portfolio.

Interest expense in 2018 increased $13.4 million due to an increase in interest expense for our convertible notes. Refer to the section titled “Liquidity and Capital Resources” below for additional information on the convertible notes.

Other, net primarily comprises foreign exchange gains and losses related to transactions denominated in foreign currencies and foreign exchange gains and losses related to our intercompany loans and certain cash accounts. Foreign exchange gains and losses for the years ended December 31, 2018, 2017 and 2016, respectively, were primarily driven by fluctuations in the euro and U.S. dollar in relation to the British pound.

Income Tax Provision

	Year Ended December 31,		
	2018	2017	2016
	(in thousands)		
Income tax provision	$(2,595)	$(1,746)	$(1,207)

For each of the years presented, we have recorded a full valuation allowance against our United States, United Kingdom, New Zealand, Hong Kong and Brazil net deferred tax assets and therefore have not recorded a provision or benefit for income taxes for any of the years presented, other than provisions for certain foreign and state current income taxes. We expect the provision to increase over time as the business grows and we become more profitable.

Liquidity and Capital Resources

At December 31, 2018, our principal sources of liquidity were $183.6 million of cash and cash equivalents, investments in marketable securities of $204.7 million and $125.3 million of accounts receivable, net.

In December 2017, we issued $300.0 million principal amount of 5.75% senior convertible notes due July 1, 2021 (the “2021 Notes”) for a purchase price equal to 98% of the principal amount, to certain entities affiliated with Silver Lake and LinkedIn. Holders of the 2021 Notes may convert their 2021 Notes at any time prior to the close of business on the scheduled trading day immediately preceding the maturity date. We utilized the proceeds in part to repay the $253.0 million of 1.5% convertible notes which matured on July 1, 2018 (the “2018 Notes”) and were paid on July 2, 2018. The 2018 Notes are no longer outstanding.

In September 2018, we used approximately $18.2 million of cash in connection with our acquisition of Workpop Inc and in November 2018, we used approximately $22.9 million of cash in connection with our acquisition of Grovo Learning, Inc. With the acquisition of Grovo, we recorded a facility financing obligation of $46.1 million associated with the build-to-suit asset recorded on our consolidated balance sheets.

We intend to use our cash for general corporate purposes, potential future acquisitions or other transactions. Depending on certain growth opportunities, we may choose to accelerate investments in sales and marketing, research and development, technology and services, which may require the use of proceeds for such additional expansion and expenditures. Based on our current level of operations and anticipated growth, we believe our future cash flows from operating activities and existing cash and cash equivalents will provide adequate funds for our ongoing operations and general corporate purposes for at least the next 12 months. Our future capital requirements will depend on many factors, including our rate of revenue growth and collections, the level of our sales and marketing efforts, the timing and extent of spending to support product development efforts and expansion into new territories, the timing of introductions of new services and enhancements to existing services, the timing of general and administrative expenses as we grow our administrative infrastructure and the continuing market acceptance of our products. To the extent that existing cash and cash from operations are not sufficient to fund our future activities, we may need to raise additional funds. In addition, we may enter into agreements or letters of intent with respect to potential investments in, or acquisitions of, complementary businesses, services or technologies in the future, which could also require us to seek additional financing or utilize our cash resources.

The following table sets forth a summary of our cash flows for the periods indicated (in thousands):

	Year Ended December 31,		
	2018	2017	2016
Net cash provided by operating activities	$90,253	$67,510	$35,252
Net cash used in investing activities	(20,876)	(36,666)	(81,638)
Net cash (used in) provided by financing activities	(278,016)	276,852	23,515

Our cash flows from operating activities are significantly influenced by our growth, ability to maintain our contractual billing and collection terms, and our investments in headcount and infrastructure to support anticipated growth. Given the seasonality and continued growth of our business, our cash flows from operations will vary from period to period. Cash provided by operating activities was $90.3 million in 2018, compared to $67.5 million in 2017. The increase in operating cash flow was primarily due to improved profitability, improved collections and other working capital changes in 2018 when compared to 2017.

Our primary investing activities have consisted of investments in marketable securities to maximize return on excess cash, capital expenditures to develop our capitalized software as well as to purchase software, computer equipment, leasehold improvements and furniture and fixtures in support of expanding our infrastructure and workforce.

Cash used in investing activities was $20.9 million in 2018, compared to $36.7 million in 2017. The net decrease in cash used in investing activities was primarily due to the decrease in purchases of marketable securities in 2018. This was offset by the decrease in maturities of marketable securities and cash used to complete the Workpop, Inc. and Grovo Learning, Inc. acquisitions in 2018.

Cash used in financing activities was $278.0 million in 2018, compared to $276.9 million of cash provided by financing activities in 2017. The decrease in cash provided by financing cash activities was primarily due to the repayment of the 2018 Notes as well as additional repurchases under the share purchase program. The cash provided by financing activities in 2017 was primarily composed of proceeds from the 2021 Notes.

Share Repurchase Program

In November 2017, our board of directors authorized a $100.0 million share repurchase program of our common stock. We repurchased all shares authorized under the share repurchase program as of December 31, 2018.

The following is a summary of our stock repurchases under our $100.0 million share repurchase program as of December 31, 2018 (in thousands, except per share information):

Period	# of Shares Repurchased	Average Price per Share	Total Expenditures
November 8, 2017 - December 31, 2017	635	$ 35.55	$ 22,599
January 1, 2018 - March 31, 2018	423	$ 37.84	16,024
April 1, 2018 - June 30, 2018	444	$ 46.66	20,718
July 1, 2018 - September 30, 2018	300	$ 53.82	16,143
October 1, 2018 - December 31, 2018	484	$ 50.59	24,516
Subtotal	2,286	$ 43.71	$ 100,000

Contractual Obligations

Our principal commitments consist of obligations for outstanding debt, leases for our office space, contractual commitments for professional service projects and third-party consulting firms. The following table summarizes our contractual obligations at December 31, 2018 (in thousands):

		Payments Due by Period			
	Total	Less than 1 Year	1-3 Years	3-5 Years	More than 5 Years
Long-term debt obligations including interest	$351,750	$17,250	$334,500	$—	$—
Operating lease obligations (1)	87,509	11,576	28,439	29,533	17,961
Software subscription and other contractual obligations	29,450	17,834	8,802	2,814	—
	$468,709	$46,660	$371,741	$32,347	$17,961

(1) The table above includes future minimum lease payments for the Company's facility financing obligation as follows: less than 1 Year: $4.8 million; 1-3 Years: $9.8 million; 3-5 Years: $10.6 million; More than 5 Years: $16.4 million.

Off-Balance Sheet Arrangements

As part of our ongoing business, we do not have any relationships with other entities or financial partnerships, such as entities often referred to as structured finance or special purpose entities, that have been established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes. We are therefore 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 Estimates

Our consolidated financial statements and the related notes included elsewhere in this Annual Report on Form 10-K are 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, liabilities, revenue, costs and expenses, provision for income taxes and related disclosures. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances. Changes in accounting estimates are reasonably likely to occur from period to period. Accordingly, actual results could differ significantly from the estimates made by our management. We evaluate our estimates and assumptions on an ongoing basis. To the extent that there are material differences between these estimates and actual results, our future financial statement presentation, financial condition, results of operations and cash flows will be affected.

We believe that the following critical accounting policies involve a greater degree of judgment or complexity than our other accounting policies. Accordingly, these are the policies we believe are the most critical to aid in fully understanding and evaluating our consolidated financial condition and results of operations.

Revenue Recognition and Deferred Revenue

We recognize revenue from contracts with customers based on the following five steps:

1) Identification of the contract, or contracts, with a customer
2) Identification of all performance obligations in the contract
3) Determination of the transaction price
4) Allocation of the transaction price to the performance obligations in the contract
5) Recognition of revenue as we satisfy a performance obligation

We identify enforceable contracts with a customer when the agreement is signed. We account for individual performance obligations separately if they are distinct. The transaction price is generally based on fixed fees stated in the contract. We exclude from the transaction price any amounts relating to taxes from product sales which are collected from customers and remitted to governmental authorities. If the contract contains a single performance obligation, the entire transaction price is allocated to the single performance obligation. Contracts that contain multiple performance obligations require an allocation of the transaction price to each performance obligation based on a relative standalone selling price basis. We are not able to directly observe a standalone selling price for each performance obligation, as the performance obligations are sold separately and within a sufficiently narrow price range only infrequently, and because we have determined that there are no third-party offerings reasonably comparable to our products. Accordingly, total contract values are allocated to subscriptions to the products and professional services based on the standalone selling price (“SSP”). The determination of SSP requires us to make certain estimates and judgments. We consider numerous factors, including the nature and complexity of the performance obligations themselves; the geography, market conditions and competitive landscape for the sale; internal costs; and pricing and discounting practices. We update our estimates of SSP on an ongoing basis through internal periodic reviews and as events or circumstances may require. Revenue is recognized at the time the related performance obligation is satisfied by transferring a promised service to a customer. We satisfy performance obligations over time.

In a limited number of cases, the client’s intended use of a product requires contractually specified enhancements to its underlying features and functionality. In some of these cases, revenue is recognized as a combined single performance obligation on a straight-line basis from the point at which access to the enhanced product(s) have been provided, through the remaining term of the agreement. In other cases where the enhancement is not contractually specified by the customer for its initial use, revenue is recognized separately for the enhancement and the product as a second distinct performance obligation. In such cases where a second performance obligation exists, the enhancement revenue is recognized based on a SSP allocation on a straight-line basis once access to the enhancement has been provided, through the remaining term of the agreement.

For arrangements in which we resell third-party e-learning training content to clients, revenue is recognized in accordance with accounting guidance as to when to report gross revenue as a principal or report net revenue as an agent. We typically recognize third-party content revenue at the gross amount invoiced to clients as (i) we are primarily responsible for hosting the content on our platform for the term of the agreement, (ii) we control the content before access is provided to the customer, and (iii) we typically have discretion to establish the price charged.

We record amounts that have been invoiced to our clients in accounts receivable and in either deferred revenue or revenue depending on whether the revenue recognition criteria described above have been met. Deferred revenue that will be recognized during the succeeding twelve-month period from the respective balance sheet date is recorded as current deferred revenue and the remaining portion is recorded as noncurrent.

Sales Commission

We defer commissions paid to our sales force and related payroll taxes as these amounts are incremental costs of obtaining a contract with a customer and are recoverable from future revenue due to the non-cancelable client agreements that gave rise to the commissions. Commissions for initial contracts are deferred on the consolidated balance sheets and amortized on a straight-line basis over a period of benefit that has been determined to be six years. We took into consideration technology and other factors in estimating the benefit period. Sales commissions for renewal contracts are deferred and amortized on a straight-line basis over the related contract renewal period. Amortization expense is included in sales and marketing expenses in the accompanying condensed statements of operations. We generally commence payment of commissions within 45 to 75 days after execution of client agreements.

Stock-based Compensation

We account for stock-based awards granted to employees and directors by recording compensation expense based on the awards' estimated fair values. We grant stock options and restricted stock units that vest over time based on the continuing employment of the employee, as well as restricted stock units that vest based on meeting certain performance targets. We expect that our expense related to stock-based compensation will increase proportionally with the growth in the business.

We estimate the fair value of our restricted stock units based on the closing price of our common stock as of the date of grant. We estimate the fair value of our stock options as of the date of grant using the Black-Scholes option-pricing model. Determining the fair value of stock options under this model requires judgment, including estimating (i) the value per share of our common stock, (ii) volatility, (iii) the term of the awards, (iv) the dividend yield and (v) the risk-free interest rate. The assumptions used in calculating the fair value of stock-based awards represent our best estimates, based on management's judgment and subjective future expectations. These estimates involve inherent uncertainties. If any of the assumptions used in the model change significantly, stock-based compensation recorded for future awards may differ materially from that recorded for awards granted previously.

Beginning in 2017, we began estimating expected volatility based solely on our historical volatility as a public company. In previous years, we estimated this using the average volatility of similar publicly traded companies as sufficient trading history of our stock was not available. For purposes of determining the expected term of the awards in the absence of sufficient historical data relating to stock option exercises for our company, we apply a simplified approach in which the expected term of an award is presumed to be the mid-point between the vesting date and the expiration date of the award. The risk-free interest rate for periods within the expected life of an award, as applicable, is based on the United States Treasury yield curve in effect during the period the award was granted. Our estimated dividend yield is zero, as we have not declared dividends in the past and do not currently intend to declare dividends in the foreseeable future.

The following information represents the weighted average of the assumptions used in the Black-Scholes option-pricing model for stock options granted within each of the last three years:

	For the Years Ended December 31,			
	2018	2017	2016	
Risk-free interest rate	n/a	n/a	1.4	%
Expected term (in years)	n/a	n/a	5.8	
Estimated dividend yield	n/a	n/a	—	%
Estimated volatility	n/a	n/a	48.8	%

Once we have determined the estimated fair value of our stock-based awards, we recognize the portion of that value that corresponds to the portion of the award that is ultimately expected to vest, taking estimated forfeitures into account. This amount is recognized as an expense over the vesting period of the award using the straight-line method for awards which contain only service conditions, and using the graded vesting method based upon the probability of the performance condition being met for awards which contain performance conditions. We estimate forfeitures based upon our historical experience and, for each period, we review the estimated forfeiture rate and make changes as factors affecting the forfeiture rate calculations and assumptions change.

In addition, we have issued performance-based restricted stock units that vest based upon continued service through the vesting term and achievement of certain market conditions and performance goals, and others that vest based upon continued service through the vesting term and achievement of certain market conditions or performance goals, established by the board of directors, for a predetermined period. The fair value of the performance-based awards containing a market condition are determined using a Monte-Carlo simulation model that factors in the probability of the award vesting. The fair value of the performance-based awards containing only a service and performance condition are determined based upon the closing price of our common stock on the date of the grant. For performance-based awards, the fair value is not determined until all of the terms and conditions of the award are established.

As of December 31, 2018, we had approximately $0.6 million of unrecognized employee related stock-based compensation, net of estimated forfeitures, relating to stock options that we expect to recognize over a weighted-average period of approximately 0.7 years. Unrecognized compensation expense related to unvested restricted stock units was $127.8 million at December 31, 2018, which is expected to be recognized as expense over the weighted-average period of 2.9 years. Additionally, during 2018, 2017, 2016 and 2014, we granted certain performance-based restricted stock units. There was $18.4 million unrecognized compensation expense related to performance-based restricted stock units at December 31, 2018. The amount of compensation cost relating to performance awards may change in future periods to the extent that another target level becomes probable of achievement.

Stock-based compensation expense is expected to increase in 2019 compared to 2018 as a result of our existing unrecognized stock-based compensation and as we issue additional stock-based awards to continue to attract and retain employees.

Capitalized Software Costs

We capitalize the costs associated with software developed or obtained for internal use, including costs incurred in connection with the development of our products, when the preliminary project stage is completed, management has decided to make the project a part of a future offering and the software will be used to perform the function intended. These capitalized costs include external direct costs of materials and services consumed in developing or obtaining internal-use software, personnel and related expenses for employees who are directly associated with, and who devote time to, internal-use software projects and, when material, interest costs incurred during the development. Capitalization of these costs ceases once the project is substantially complete and the software is ready for its intended purpose. Costs incurred for upgrades and enhancements to our products are also capitalized. Post-configuration training and maintenance costs are expensed as incurred. Capitalized software costs are amortized to cost of revenue using the straight-line method over the estimated useful life of the software of typically three years, commencing when the software is ready for its intended use.

Business Combinations

The results of businesses acquired in a business combination are included in our consolidated financial statements from the date of the acquisition. Purchase accounting results in assets and liabilities of an acquired business being recorded at their estimated fair values on the acquisition date. Any excess consideration over the fair value of assets acquired and liabilities assumed is recognized as goodwill.

We perform valuations of assets acquired and liabilities assumed for an acquisition and allocate the purchase price to its respective net tangible and intangible assets. Determining the fair value of assets acquired and liabilities assumed requires management to use significant judgment and estimates including the selection of valuation methodologies, estimates of future revenue and cash flows, discount rates and selection of comparable companies. We engage the assistance of valuation specialists in concluding on fair value measurements in connection with determining fair values of assets acquired and liabilities assumed in a business combination.

Income Taxes

We use the liability method of accounting for income taxes. Under the liability method, deferred taxes are determined based on the temporary differences between the financial statement and tax bases of assets and liabilities, using tax rates expected to be in effect during the years in which the bases differences are expected to reverse. We record a valuation allowance when it is more likely than not that some of our net deferred tax assets will not be realized. In determining the need for valuation allowances, we consider our projected future taxable income and future reversals of existing taxable temporary differences. We have recorded a full valuation allowance to reduce our United States, United Kingdom, New Zealand, Hong Kong and Brazil net deferred tax assets to zero, because we have determined that it is not more likely than not that any of our United States, United Kingdom, New Zealand, Hong Kong and Brazil net deferred tax assets will be realized. If in the future we determine that we will be able to realize any of our United States, United Kingdom, New Zealand, Hong Kong and Brazil net deferred tax assets, we will make an adjustment to the allowance, which would increase our income in the period that the determination is made. Certain of our foreign subsidiaries and branches provide intercompany services and are compensated on a cost-plus basis, and therefore, have incurred liabilities for foreign income taxes in their respective jurisdictions.

We have assessed our income tax positions and recorded tax benefits for all years subject to examination, based upon our evaluation of the facts, circumstances and information available at each period end. For those tax positions where we have determined there is a greater than 50% likelihood that a tax benefit will be sustained, we have recorded the largest amount of tax benefit that may potentially be realized upon ultimate settlement with a taxing authority that has full knowledge of all relevant information. For those income tax positions where we have determined there is a less than 50% likelihood that a tax benefit will be sustained, no tax benefit has been recognized in our consolidated financial statements.

Recent Accounting Pronouncements

For additional information regarding recent accounting pronouncements adopted and under evaluation, refer to Note 2 of the Notes to Consolidated Financial Statements included in this Annual Report on Form 10-K.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

We have operations in the United States and internationally, and we are exposed to market risks in the ordinary course of our business. These risks primarily include interest rate, foreign exchange, inflation and counterparty risks, as well as risks relating to changes in the general economic conditions in the countries where we conduct business. To reduce certain of these risks, we monitor the financial condition of our large clients and limit credit exposure by principally collecting in advance and setting credit limits as we deem appropriate. In addition, our investment strategy has been to invest in financial instruments, including corporate bonds, U.S. treasury securities, agency securities, commercial paper and money market funds backed by United States Treasury Bills within the guidelines established under our investment policy. We also make strategic investments in privately-held companies in the development stage. To date, we have not used derivative instruments to mitigate the impact of our market risk exposures. We have also not used, nor do we intend to use, derivatives for trading or speculative purposes.

Interest Rate Risk

At December 31, 2018, we had cash and cash equivalents of $183.6 million and investments of $204.7 million, which primarily consisted of corporate bonds, U.S. treasury securities, agency securities, commercial paper, money market funds backed by United States Treasury Bills and other debt securities. The carrying amount of our cash equivalents reasonably approximates fair value due to the short maturities of these instruments.

The primary objectives of our investment activities are the preservation of capital, the fulfillment of liquidity needs and the fiduciary control of cash and investments. We do not enter into investments for trading or speculative purposes. Our investments are exposed to market risk due to fluctuations in interest rates, which may affect the fair market value of our investments. An increase of 50 basis points in interest rates would have resulted in a $(0.1) million reduction on the fair market value of our portfolio as of December 31, 2018. We therefore do not expect our operating results or cash flows to be materially affected by a sudden change in market interest rates.

We do not believe our cash equivalents, corporate bonds, U.S. treasury securities, agency securities and commercial paper have significant risk of default or illiquidity. While we believe these cash investments do not contain excessive risk, we cannot provide assurance that in the future our investments will not be subject to adverse changes in market value. In addition, we maintain significant amounts of cash and cash equivalents at one or more financial institutions that are in excess of federally insured limits. We cannot provide assurance that we will not experience losses on these deposits.

Foreign Currency Risk

We have foreign currency risks related to our revenue and operating expenses denominated in currencies other than the U.S. dollar, primarily euros and British pounds. To a lesser extent, we also have revenue denominated in Australian dollars, Brazilian reals, Canadian dollars, Chinese yuan, Hong Kong dollars, Indian rupees, Japanese yen, Mexican pesos, New Zealand dollars, Singapore dollars, South African rand, Swedish kronor, Swiss francs and other foreign currencies, and operating expenses denominated in Australian dollars, Brazilian reals, Canadian dollars, Hong Kong dollars, Indian rupees, Israeli shekels, Japanese yen, Mexican pesos, New Zealand dollars, Singapore dollars, Swedish kronor, and Swiss francs. Increases and decreases in our foreign-denominated revenue from movements in foreign exchange rates are often partially offset by the corresponding decreases or increases in our foreign-denominated operating expenses. Due to our legal structure, revenue and operating expenses denominated in currencies other than the U.S. dollar primarily flow through subsidiaries with functional currencies of the British pound and euro. Our other income (expense) is also impacted by the remeasurement of U.S. dollar denominated intercompany loans, cash accounts held by our overseas subsidiaries, accounts receivable denominated in foreign currencies and accounts payable denominated in foreign currencies.

As our international operations grow, our risks associated with fluctuation in currency rates will become greater, and we will continue to reassess our approach to managing this risk. In addition, currency fluctuations or a weakening U.S. dollar can increase the costs of our international expansion. To date, we have not entered into any foreign currency hedging contracts although we may do so in the future. The effect of an immediate 10% adverse change in foreign exchange rates on foreign-denominated accounts at December 31, 2018, including our intercompany loans with our subsidiaries, would result in a foreign currency loss of approximately $7.5 million.

Inflation Risk

We do not believe that inflation has had a material effect on our business, financial condition or results of operations. Nonetheless, if our costs were to become subject to significant inflationary pressures, we may not be able to fully offset such higher costs through price increases. Our inability or failure to do so could harm our business, financial condition and results of operations.

Counterparty Risk

Our consolidated financial statements are subject to counterparty credit risk, which we consider as part of the overall fair value measurement. We attempt to mitigate this risk through credit monitoring procedures.

Item 8. Financial Statements and Supplementary Data

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of Cornerstone OnDemand, Inc.

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of Cornerstone OnDemand, Inc. and its subsidiaries (the “Company”) as of December 31, 2018 and 2017, and the related consolidated statements of operations, comprehensive loss, stockholders’ equity and cash flows for each of the three years in the period ended December 31, 2018, 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, 2018, 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, 2018 and 2017, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2018 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, 2018, 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 revenues from contracts with customers and the manner in which it accounts for sales commissions in 2018.

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 appear 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.

/s/ PricewaterhouseCoopers LLP
Los Angeles, California
February 26, 2019

We have served as the Company’s auditor since 2001.

CORNERSTONE ONDEMAND, INC.
CONSOLIDATED BALANCE SHEETS
(In thousands, except par values)

	December 31, 2018	December 31, 2017
Assets		
Cash and cash equivalents	$183,596	$393,576
Short-term investments	204,732	169,551
Accounts receivable, net	125,300	154,428
Deferred commissions, current portion	24,467	42,806
Prepaid expenses and other current assets	34,940	21,754
Total current assets	573,035	782,115
Capitalized software development costs, net	45,416	37,431
Deferred commissions, net of current portion	45,444	—
Property and equipment, net	77,254	20,817
Long-term investments	1,250	96,949
Intangible assets, net	13,867	—
Goodwill	47,453	25,894
Other assets, net	3,437	3,984
Total Assets	$807,156	$967,190
Liabilities and Stockholders’ Equity		
Liabilities:		
Accounts payable	$11,921	$17,637
Accrued expenses	68,331	57,528
Deferred revenue, current portion	312,526	311,997
Convertible notes, net	—	248,025
Other liabilities	7,645	9,051
Total current liabilities	400,423	644,238
Convertible notes, net	288,967	285,168
Other liabilities, non-current	2,484	1,498
Deferred revenue, net of current portion	13,275	14,166
Facility financing obligation	46,100	—
Total liabilities	751,249	945,070
Commitments and contingencies (Note 16)		
Stockholders’ Equity:		
Common stock, $0.0001 par value; 1,000,000 shares authorized, 58,886 and 57,512 shares issued and outstanding at December 31, 2018 and 2017, respectively	6	6
Additional paid-in capital	585,387	536,951
Accumulated deficit	(529,962)	(515,054)
Accumulated other comprehensive income	476	217
Total stockholders’ equity	55,907	22,120
Total Liabilities and Stockholders’ Equity	$807,156	$967,190

The accompanying Notes to Consolidated Financial Statements are an integral part of these statements.

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CORNERSTONE ONDEMAND, INC.
CONSOLIDATED STATEMENTS OF OPERATIONS
(In thousands, except per share data)

	Years Ended December 31, 2018	2017	2016
Revenue	$537,891	$481,985	$423,124
Cost of revenue	144,349	142,867	135,752
Gross profit	393,542	339,118	287,372
Operating expenses:			
Sales and marketing	224,635	240,271	225,781
Research and development	76,981	61,975	46,977
General and administrative	90,749	84,589	70,956
Restructuring	8,946	1,539	—
Total operating expenses	401,311	388,374	343,714
Loss from operations	(7,769)	(49,256)	(56,342)
Other income (expense):			
Interest income	7,796	2,951	1,702
Interest expense	(28,176)	(14,762)	(12,924)
Other, net	(3,098)	1,478	1,934
Other income (expense), net	(23,478)	(10,333)	(9,288)
Loss before income tax provision	(31,247)	(59,589)	(65,630)
Income tax provision	(2,595)	(1,746)	(1,207)
Net loss	$(33,842)	$(61,335)	$(66,837)
Net loss per share, basic and diluted	$(0.58)	$(1.07)	$(1.20)
Weighted average common shares outstanding, basic and diluted	58,159	57,262	55,595

The accompanying Notes to Consolidated Financial Statements are an integral part of these statements.

CORNERSTONE ONDEMAND, INC.
CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS
(In thousands)

	Years Ended December 31,		
	2018	2017	2016
Net loss	$(33,842)	$(61,335)	$(66,837)
Other comprehensive income, net of tax:			
Foreign currency translation adjustment	(210)	(3,795)	3,748
Net change in unrealized gains (losses) on investments	469	(434)	88
Other comprehensive income (loss), net of tax	259	(4,229)	3,836
Total comprehensive loss	$(33,583)	$(65,564)	$(63,001)

The accompanying Notes to Consolidated Financial Statements are an integral part of these statements.

CORNERSTONE ONDEMAND, INC.
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(In thousands)

	Common Stock Shares	Par Value	Additional Paid-In Capital (Deficit)	Accumulated Deficit	Accumulated Other Comprehensive Income (Loss)	Total
Balance as of December 31, 2015	54,704	$ 5	$394,089	$(386,882)	$ 610	$7,822
Issuance of common stock upon the exercise of options	978	1	18,904	—	—	18,905
Vesting of restricted stock units	699	—	—	—	—	—
Shares issued under employee stock purchase plan	135	—	4,286	—	—	4,286
Stock-based compensation	—	—	58,951	—	—	58,951
Net loss	—	—	—	(66,837)	—	(66,837)
Other comprehensive income, net of tax	—	—	—	—	3,836	3,836
Balance as of December 31, 2016	56,516	$ 6	$476,230	$(453,719)	$ 4,446	$26,963
Issuance of common stock upon the exercise of options	414	—	6,777	—	—	6,777
Vesting of restricted stock units	1,035	—	—	—	—	—
Shares issued under employee stock purchase plan	182	—	5,621	—	—	5,621
Repurchase of common stock	(635)	—	(22,599)			(22,599)
Stock-based compensation	—	—	70,922	—	—	70,922
Net loss	—	—	—	(61,335)	—	(61,335)
Other comprehensive loss, net of tax	—	—	—	—	(4,229)	(4,229)
Balance as of December 31, 2017	57,512	$ 6	$536,951	$(515,054)	$ 217	$22,120
Issuance of common stock upon the exercise of options	1,474	—	47,816	—	—	47,816
Vesting of restricted stock units	1,370	—	—	—	—	—
Shares issued under employee stock purchase plan	181	—	6,422	—	—	6,422
Repurchase of common stock	(1,651)	—	(77,401)	—	—	(77,401)
Stock-based compensation	—	—	71,599	—	—	71,599
Cumulative effect of accounting change	—	—	—	18,934	—	18,934
Net loss	—	—	—	(33,842)	—	(33,842)
Other comprehensive income, net of tax	—	—	—	—	259	259
Balance as of December 31, 2018	58,886	$ 6	$585,387	$(529,962)	$ 476	$55,907

The accompanying Notes to Consolidated Financial Statements are an integral part of these statements.

CORNERSTONE ONDEMAND, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(In thousands)

	Years Ended December 31,		
	2018	2017	2016
Cash flows from operating activities:			
Net loss	$(33,842)	$(61,335)	$(66,837)
Adjustments to reconcile net loss to net cash provided by operating activities:			
Depreciation and amortization	35,260	35,377	32,392
Accretion of debt discount and amortization of debt issuance costs	8,929	9,833	9,130
Purchased investment premium, net of amortization	(160)	1,135	240
Net foreign currency gain	(440)	(2,461)	(7)
Stock-based compensation expense	66,557	65,924	54,699
Write-off of capitalized software	—	1,339	—
Deferred income taxes	123	52	(736)
Changes in operating assets and liabilities:			
Accounts receivable	27,199	(14,317)	(38,092)
Deferred commissions	(15,316)	(5,249)	(2,543)
Prepaid expenses and other assets	(11,443)	(2,704)	(3,623)
Accounts payable	(5,496)	(6,820)	5,939
Accrued expenses	9,291	8,530	3,727
Deferred revenue	10,803	35,829	43,379
Other liabilities	(1,212)	2,377	(2,416)
Net cash provided by operating activities	90,253	67,510	35,252
Cash flows from investing activities:			
Purchases of investments	(125,109)	(323,413)	(210,534)
Maturities of investments	185,733	314,418	151,533
Capital expenditures	(14,895)	(7,100)	(6,228)
Capitalized software costs	(25,515)	(20,571)	(16,409)
Cash paid for acquisition, net of cash acquired	(41,090)	—	—
Net cash used in investing activities	(20,876)	(36,666)	(81,638)
Cash flows from financing activities:			
Payments of debt issuance costs and proceeds from convertible notes	(152)	285,077	—
Repayment of debt	(253,000)	—	—
Principal payments under capital lease obligations	—	—	(33)
Proceeds from employee stock plans	54,402	12,509	23,548
Repurchases of common stock	(79,266)	(20,734)	—
Net cash (used in) provided by financing activities	(278,016)	276,852	23,515
Effect of exchange rate changes on cash and cash equivalents	(1,341)	2,580	(1,520)
Net (decrease) increase in cash and cash equivalents	(209,980)	310,276	(24,391)
Cash and cash equivalents at beginning of period	393,576	83,300	107,691
Cash and cash equivalents at end of period	$183,596	$393,576	$83,300
Supplemental cash flow information:			
Cash paid for interest	$13,628	$3,841	$3,796
Cash paid for income taxes	1,859	2,243	2,334
Proceeds from employee stock plans received in advance of stock issuance	642	575	489
Non-cash investing and financing activities:			
Assets acquired under capital leases and other financing arrangements	$47,070	$3,467	$—

Capitalized assets financed by accounts payable and accrued expenses	1,566	1,829	2,080
Capitalized stock-based compensation	5,042	4,998	4,252
Deferred debt issuance costs included in accrued expenses	—	152	—
Unsettled share repurchase in other liabilities	—	1,866	—

The accompanying Notes to Consolidated Financial Statements are an integral part of these statements.

CORNERSTONE ONDEMAND, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. ORGANIZATION

Company Overview

Cornerstone OnDemand, Inc. (“Cornerstone” or the “Company”) was incorporated on May 24, 1999 in the state of Delaware and began its principal operations in November 1999.

The Company is a leading global provider of learning and human capital management software, delivered as Software-as-a-Service (“SaaS”). The Company helps organizations around the globe recruit, train and manage their employees. It is one of the world’s largest cloud computing companies. The Company's human capital management platform combines the world’s leading unified talent management solutions with state-of-the-art analytics and HR administration solutions to enable organizations to manage the entire employee lifecycle. Its focus on continuous learning and development helps organizations to empower employees to realize their potential and drive success.

The Company works with clients across all geographies, verticals and market segments. Its Recruiting, Learning, Performance and HR Administration suites help with sourcing, recruiting and onboarding new hires; managing training and development requirements; nurturing knowledge sharing and collaboration among employees; goal setting reviews, competency management and continuous feedback; linking compensation to performance; identifying development plans based on performance gaps; streamlining employee data management, self-service and compliance reporting; and then utilizing state-of-the-art analytics capabilities to make smarter, more-informed decisions using data from across the platform for talent mobility, engagement and development so that HR and leadership can focus on strategic initiatives to help their organization succeed.

The Company’s management has determined that the Company operates in one segment as it only reports financial information on an aggregate and consolidated basis to the Company’s chief executive officer, who is the Company’s chief operating decision maker.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation and Principles of Consolidation

The accompanying consolidated financial statements are presented in accordance with accounting standards generally accepted in the United States of America (“GAAP”), and include the accounts of Cornerstone OnDemand, Inc. and its wholly owned subsidiaries. All significant inter-company transactions and balances have been eliminated in consolidation.

Use of Estimates

The preparation of consolidated financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenue and expenses during the reporting period. Actual results could differ from those estimates.

On an on-going basis, management evaluates its estimates, including among others those related to: (i) the realization of tax assets and estimates of tax liabilities and reserves, (ii) the recognition and disclosure of contingent liabilities, (iii) the evaluation of revenue recognition criteria, including the determination of standalone value and estimates of the selling price of multiple-deliverables in the Company’s revenue arrangements, (iv) fair values of investments in marketable securities and strategic investments carried at fair value, (v) the fair values of acquired assets and assumed liabilities in business combinations, (vi) the useful lives of property and equipment, capitalized software and intangible assets, (vii) impairment of long-lived assets, (viii) the period of amortization of the commission payments to record to expense and (ix) determination of the number of shares that are probable of vesting for performance-based restricted stock unit awards. These estimates are based on historical data and experience, as well as various other factors that management believes to be 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.

The Company engages third-party valuation specialists to assist with the allocation of the purchase price in business combinations. Such estimates required the selection of appropriate valuation methodologies and models and significant judgment in evaluating ranges of assumptions and financial inputs.

Business Combinations

The results of businesses acquired in a business combination are included in the Company's consolidated financial statements from the date of the acquisition. Purchase accounting results in assets and liabilities of an acquired business being recorded at their estimated fair values on the acquisition date. Any excess consideration over the fair value of assets acquired and liabilities assumed is recognized as goodwill.

The Company performs valuations of assets acquired and liabilities assumed for an acquisition and allocates the purchase price to its respective net tangible and intangible assets. The Company engages the assistance of valuation specialists in concluding on fair value measurements in connection with determining fair values of assets acquired and liabilities assumed in a business combination.

Revenue Recognition

Effective January 1, 2018, the Company adopted the guidance under Topic 606 on a modified retrospective approach. All balances reported prior to this date are presented under Topic 605. Refer to the discussion under Recently Adopted Accounting Pronouncements below to understand the impacts of adopting Topic 606 on our financial statements.

The Company derives its revenue from the following sources:

Subscriptions to the Company's products and other offerings on a recurring basis

Clients pay subscription fees for access to the Company's enterprise human capital management platform, other products and support on a recurring basis. Fees are based on a number of factors, including the number of products purchased, which may include e-learning content, and the number of users having access to a product. The Company generally recognizes revenue from subscriptions ratably over the term of the agreements beginning on the date the subscription service is made available to the client. Subscription agreements are typically three years, billed annually in advance, and non-cancelable, with payment due within 30 days of the invoice date.

Professional services and other

The Company offers its clients and implementation partners assistance in implementing its products and optimizing their use. Professional services include application configuration, system integration, business process re-engineering, change management and training services. Services are generally billed up-front on a fixed fee basis and to a lesser degree on a time-and-material basis. These services are generally purchased as part of a subscription arrangement and are typically performed within the first several months of the arrangement. Clients may also purchase professional services at any other time. The Company generally recognizes revenue from fixed fee professional services contracts as services are performed based on the proportion performed to date relative to the total expected services to be performed. Revenue associated with time-and-material contracts are recorded as such time-and-materials are incurred.

The Company recognizes revenue from contracts with customers based on the following five steps:

1) Identification of the contract, or contracts, with a customer
2) Identification of all performance obligations in the contract
3) Determination of the transaction price
4) Allocation of the transaction price to the performance obligations in the contract
5) Recognition of revenue as the Company satisfies a performance obligation

The Company identifies enforceable contracts with a customer when the agreement is signed. The Company accounts for individual performance obligations separately if they are distinct. The transaction price is generally based on fixed fees stated in the contract. The Company excludes from the transaction price any amounts relating to taxes from product sales which are collected from customers and remitted to governmental authorities. If the contract contains a single performance obligation, the entire transaction price is allocated to the single performance obligation. Contracts that contain multiple performance obligations require an allocation of the transaction price to each performance obligation based on a relative standalone selling price basis. The Company is not able to directly observe a standalone selling price for its performance obligations, as the performance obligations are sold separately and within a sufficiently narrow price range only infrequently, and because management has determined that there are no third-party offerings reasonably comparable to the Company’s products. Accordingly, total contract values are allocated to subscriptions to the products and professional services based on the standalone selling price (“SSP”). The determination of SSP requires the Company to make certain estimates and judgments. The Company considers numerous factors, including the nature and complexity of the performance obligations themselves; the geography, market conditions and competitive landscape for the sale; internal costs; and pricing and discounting practices. The Company updates its estimates of SSP on an ongoing basis through internal periodic reviews and as events or circumstances may require. Revenue is recognized at the time the related performance obligation is satisfied by transferring a promised service to a customer. The Company satisfies performance obligations over time.

In a limited number of cases, the client’s intended use of a product requires contractually specified enhancements to its underlying features and functionality. In some of these cases, revenue is recognized as a combined single performance obligation on a straight-line basis from the point at which access to the enhanced product(s) have been provided, through the remaining term of the agreement. In other cases where the enhancement is not contractually specified by the customer for its initial use, revenue is recognized separately for the enhancement and the product as a second distinct performance obligation. In such cases where a second performance obligation exists, the enhancement revenue is recognized based on a SSP allocation on a straight-line basis once access to the enhancement has been provided, through the remaining term of the agreement.

For arrangements in which the Company resells third-party e-learning training content to clients, revenue is recognized in accordance with accounting guidance as to when to report gross revenue as a principal or report net revenue as an agent. The Company typically recognizes third-party content revenue at the gross amount invoiced to clients as (i) the Company is primarily responsible for hosting the content on the Company's platform for the term of the agreement, (ii) the Company controls the content before access is provided to the customer, and (iii) the Company typically has discretion to establish the price charged.

Deferred Revenue

The Company records amounts that have been invoiced to its clients in accounts receivable and in either deferred revenue or revenue depending on whether the revenue recognition criteria described above have been met. Deferred revenue that will be recognized during the succeeding twelve-month period from the respective balance sheet date is recorded as current deferred revenue and the remaining portion is recorded as noncurrent. The decrease in the deferred revenue balance for the year ended December 31, 2018 is primarily driven by $301.6 million of revenue recognized that were included in the deferred revenue balances as of January 1, 2018 offset by invoices billed in advance of satisfying performance obligations in accordance with contract payment terms.

Transaction Price Allocated to Remaining Performance Obligations

As of December 31, 2018, approximately $876.0 million of revenue is expected to be recognized from remaining performance obligations. This amount mainly comprises subscription revenue, with less than 10% attributable to professional services and other revenue. The Company expects to recognize revenue on approximately two thirds of these remaining performance obligations over the next 18 months, with the balance recognized thereafter.

The estimated revenues from the remaining performance obligations do not include uncommitted contract amounts such as (i) amounts which are cancelable by the client without any significant penalty, (ii) future billings for time-and-material contracts, and (iii) amounts associated with optional renewal periods.

Sales Commission

The Company defers commissions paid to its sales force and related payroll taxes as these amounts are incremental costs of obtaining a contract with a customer and are recoverable from future revenue due to the non-cancelable client agreements that gave rise to the commissions. Commissions for initial contracts are deferred on the consolidated balance sheets and amortized on a straight-line basis over a period of benefit that has been determined to be six years. The Company took into consideration technology and other factors in estimating the benefit period. Sales commissions for renewal contracts are deferred and amortized on a straight-line basis over the related contract renewal period. Amortization expense is included in sales and marketing expenses in the accompanying consolidated statements of operations. The Company generally commences payment of commissions within 45 to 75 days after execution of client agreements.

During the years ended December 31, 2018, 2017 and 2016, the Company deferred $65.3 million, $48.2 million and $33.3 million, respectively, of commissions on the consolidated balance sheets. During the years ended December 31, 2018, 2017 and 2016, the Company recognized $37.9 million, $41.7 million and $33.0 million in commissions expense to sales and marketing expense, respectively. As of December 31, 2018 and 2017, deferred commissions on the Company's consolidated balance sheets totaled $69.9 million and $42.8 million, respectively.

Impact of New Standard on Financial Statement Line Items

The following tables summarize the effect of the adoption of Topic 606 on the Company's select line items, included in the consolidated condensed financial statements as of and for the year ended December 31, 2018, as if the previous accounting was in effect (in thousands).

	December 31, 2018		
Consolidated Condensed Balance Sheet	As Reported (ASC 606)	Impacts of Adoption	Without Adoption (ASC 605)
Assets			
Deferred commissions, current portion	$24,467	$30,624	$55,091
Deferred commissions, non-current	45,444	(45,444)	—
Liabilities			
Accrued expenses	68,331	(1,697)	66,634
Deferred revenue, current portion	312,526	6,751	319,277
Stockholders' Equity			
Accumulated deficit	(529,962)	(19,874)	(549,836)

	Year Ended December 31, 2018		
Consolidated Condensed Statement of Operations	As Reported (ASC 606)	Impacts of Adoption	Without Adoption (ASC 605)
Revenue	$537,891	$ (696)	$537,195
Operating expenses:			
Sales and marketing	224,635	(992)	223,643
Net loss	(33,842)	296	(33,546)
Net loss per share, basic and diluted	(0.58)		(0.58)
Weighted average common shares outstanding, basic and diluted	58,159		58,159

The adoption of Topic 606 had no impact to net cash provided by or used in operating, investing or financing activities in the Company's consolidated statements of cash flows for the year ended December 31, 2018.

Cost of Revenue

Cost of revenue consists primarily of costs related to hosting our products and delivery of professional services, and includes the following:

- personnel and related expenses, including stock-based compensation;
- expenses for network-related infrastructure and IT support;
- delivery of contracted professional services and on-going client support staff;
- payments to external service providers contracted to perform implementation services;
- depreciation of data centers and amortization of capitalized software costs, developed technology software license rights, content and licensing fees and referral fees.

In addition, the Company allocates a portion of overhead, such as rent, IT costs, depreciation and amortization and employee benefits costs, to cost of revenue based on headcount. Costs associated with providing professional services are recognized as incurred when the services are performed. Out-of-pocket travel costs related to the delivery of professional services are typically reimbursed by the client and are accounted for as both revenue and cost of revenue in the period in which the cost is incurred.

Research and Development

Research and development expenses consist primarily of personnel and related expenses for the Company's research and development staff, including salaries, benefits, bonuses and stock-based compensation; the cost of certain third-party service providers; and allocated overhead. Research and development expenses, other than software development costs qualifying for capitalization, are expensed as incurred.

Advertising

Advertising expenses for 2018, 2017 and 2016 were $7.1 million, $9.0 million and $6.6 million, respectively, and are expensed as incurred and is recorded within Sales and Marketing in the accompanying consolidated statements of operations.

Stock-Based Compensation

The Company accounts for stock-based awards granted to employees and directors by recording compensation expense based on the awards' estimated fair values. The Company grants stock options and restricted stock units that vest over time based on the continuing employment of the employee, as well as restricted stock units that vest based on meeting certain performance targets.

The Company estimates the fair value of its restricted stock units based on the closing price of its common stock as of the date of grant. The Company estimates the fair value of its stock options as of the date of grant using the Black-Scholes option-pricing model. Determining the fair value of stock options under this model requires judgment, including estimating (i) the value per share of the Company's common stock, (ii) volatility, (iii) the term of the awards, (iv) the dividend yield and (v) the risk-free interest rate. The assumptions used in calculating the fair value of stock based awards represent the Company's best estimates, based on management's judgment and subjective future expectations. These estimates involve inherent uncertainties. If any of the assumptions used in the model change significantly, stock-based compensation recorded for future awards may differ materially from that recorded for awards granted previously.

Beginning in 2017, the Company began estimating expected volatility based solely on its historical volatility as a public company. In previous years, the Company estimated this using the average volatility of similar publicly traded companies as sufficient trading history of the Company's stock was not available. For purposes of determining the expected term of the awards in the absence of sufficient historical data relating to stock option exercises for the Company, it applies a simplified approach in which the expected term of an award is presumed to be the mid-point between the vesting date and the expiration date of the award. The risk-free interest rate for periods within the expected life of an award, as applicable, is based on the United States Treasury yield curve in effect during the period the award was granted. The estimated dividend yield is zero, as the Company has not declared dividends in the past and does not currently intend to declare dividends in the foreseeable future.

The following information represents the weighted average of the assumptions used in the Black-Scholes option-pricing model for stock options granted during each of the last three years:

For the Years Ended December 31,		
2018	2017	2016