BENEFITFOCUS®

All Your Benefits. One Place.®

2018 Annual Report

Included in the 2018 Annual Report:

Form 10-K, as filed with the U.S. Securities and Exchange Commission on February 26, 2019

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

FORM 10-K

(Mark One)

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

For the fiscal year ended 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: 001-36061

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

Delaware	**46-2346314**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**

100 Benefitfocus Way
Charleston, South Carolina 29492
(Address of principal executive offices and zip code)

(843) 849-7476
(Registrant's telephone number, including area code)

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

Title of each class	Name of each exchange of which registered
Common Stock, $0.001 Par Value	Nasdaq Global Market

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

None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☒ No ☐

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ☐ No ☒

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

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

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☒

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

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

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

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

The aggregate market value of the registrant's common stock held by non-affiliates of the registrant on June 30, 2018 (based on the closing sale price of $33.60 on June 29, the last business date of the registrant's most recently completed second fiscal quarter), was approximately $547,962,879. Common stock held by each officer and director and by each person known to the registrant who owned 10% or more of the outstanding common stock have been excluded in that such persons may be deemed to be affiliates. This determination of affiliate status is not necessarily a conclusive determination for other purposes.

The number of shares of the registrant's common stock outstanding as of February 22, 2019 was 32,040,894.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's definitive Proxy Statement for its 2019 Annual Meeting of Stockholders currently scheduled to be held on May 31, 2019 are incorporated by reference into Part III hereof.

[This page intentionally left blank]

Benefitfocus, Inc.

Form 10-K

For Year Ended December 31, 2018

TABLE OF CONTENTS

PART I

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K contains “forward-looking statements” that involve risks and uncertainties, as well as assumptions that, if they never materialize or prove incorrect, could cause our results to differ materially from those expressed or implied by such forward-looking statements. The statements contained in this Annual Report on Form 10-K that are not purely historical are forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (“Securities Act”), and Section 21E of the Securities Exchange Act of 1934, as amended (“Exchange Act”). Such forward-looking statements include any expectation of earnings, revenue or other financial items; any statements of the plans, strategies and objectives of management for future operations; risks associated with acquisitions; factors that may affect our operating results; statements about our ability to establish and maintain intellectual property rights; statements about our ability to retain and hire necessary associates and appropriately staff our operations; statements related to future capital expenditures; statements related to future economic conditions or performance; statements as to industry trends; and other matters that do not relate strictly to historical facts or statements of assumptions underlying any of the foregoing. Forward-looking statements are often identified by the use of words such as, but not limited to, “anticipate,” “believe,” “can,” “continue,” “could,” “estimate,” “expect,” “intend,” “may,” “might,” “will,” “plan,” “project,” “seek,” “should,” “target,” “would,” and similar expressions or variations intended to identify forward-looking statements. These statements are based on the beliefs and assumptions of our management based on information currently available to management. Such forward-looking statements are subject to risks, uncertainties and other important factors that could cause actual results and the timing of certain events to differ materially from future results expressed or implied by such forward-looking statements. Factors that could cause or contribute to such differences include, but are not limited to, those discussed in the section titled “Risk Factors” included in Item 1A of Part I of this Annual Report on Form 10-K, and the risks discussed in our other SEC filings. Furthermore, such forward-looking statements speak only as of the date of this report. Except as required by law, we undertake no obligation to update any forward-looking statements to reflect events or circumstances after the date of such statements.

As used in this report, the terms “Benefitfocus, Inc.,” “Benefitfocus,” “Company,” “company,” “we,” “us,” and “our” mean Benefitfocus, Inc. and its subsidiaries unless the context indicates otherwise.

Item 1. Business.

Overview

Benefitfocus provides a leading cloud-based benefits management platform for consumers, employers, insurance carriers, suppliers and brokers. The Benefitfocus Platform simplifies how organizations and individuals transact benefits. Our employer, carrier and supplier customers rely on our platform to manage, scale and exchange benefits data seamlessly. Our solutions drive value for all participants in our benefits ecosystem.

The Benefitfocus multi-tenant platform has a user-friendly interface designed for consumers to access all of their benefits in one place. Our comprehensive solutions support medical benefit plans and non-medical benefits, such as, dental, life, disability insurance, income protection, digital health and financial wellness. As the number of employer benefits plans has increased, with each plan subject to many different business rules and requirements, demand for the Benefitfocus Platform is growing.

Brokers use our platform to manage employer portfolios. This includes delivering strategic insights that improve their employer clients’ benefit experience and demonstrating greater value through access to a larger set of relevant products for employers, which should bring higher broker commissions and profits.

Employers use our solutions to streamline benefits processes and control costs, keep up with challenging and ever-changing regulatory requirements, and offer a greater variety of benefit options to attract, retain and motivate employees. The Benefitfocus Platform enables our employer customers to simplify the management of complex benefits processes, from sales and enrollment to implementation and ongoing administration. It provides their employees with an engaging, highly intuitive and personalized user interface for selecting and managing all of their benefits via a desktop or mobile device.

Insurance carriers and suppliers use our solutions to more effectively market offerings to consumers, simplify billing, and improve the enrollment process. We also provide a network of approximately 2,200 benefit provider data exchange connections, which facilitates the otherwise highly fragmented interaction among employees, employers, brokers and carriers.

Since our initial public offering, we have described our target market as comprising two separate but related market segments – the employer segment and the insurance carrier segment. Within the employer segment, we sell our technology solutions on an annually recurring or multi-year subscription basis to large employers, which we define as those with more than 1,000 employees. Similarly, in our other market segment, we sell our solutions on a subscription basis to insurance carriers, enabling us to expand our overall footprint in the benefits marketplace by aggregating many key constituents, including consumers, employers, and brokers. We believe our presence in both the employer and insurance carrier segments gives us a strong position at the center of the benefits ecosystem. As of December 31, 2018, we served 1,024 large employer customers, an increase from 141 in 2010, and 57 carrier customers, an increase from 29 in 2010.

In 2018, we expanded our economic model to include a transaction-oriented, marketplace solution, known as BenefitsPlace, that aligns employers, brokers, carriers and suppliers around the needs of consumers on our platform from our employer, carrier and broker connections. In this model, our BenefitsPlace partners sell their voluntary benefit offerings through a holistic, multidimensional marketplace. This marketplace is designed to increase the economic value of the consumer lives on our platform by aligning platform products to consumer needs. In exchange for Benefitfocus delivering consumer access, data-driven analysis and operational efficiencies, BenefitsPlace partners pay us a percentage of the transaction value that is transacted on our platform. BenefitsPlace carrier agreements have terms of two to four years and are typically cancellable upon breach of contract or insolvency. BenefitsPlace supplier contracts have terms of one year or less and are generally cancellable upon breach of contract, failure to cure, bankruptcy and termination for convenience.

Our hybrid software-as-a-service, or SaaS, and repeatable transaction-based model provides us significant visibility into our future operating results, which enhances our ability to manage our business. Our company was founded in 2000, and we currently employ approximately 1,450 associates, or employees.

Industry Background

The administration and distribution of benefits to employees is a mainstay of the U.S. economy. Providing these benefits is costly and complex and requires the exchange of information, application of rules, and transfer of funds among a wide variety of constituents, including consumers, employers, insurance carriers, suppliers, brokers, benefits outsourcers, payroll processors, and financial institutions. The size of the HR benefits administration market and the value of benefits transacted are large. According to IBISWorld calculations, in 2017, the market for HR benefits administration in the United States is expected to grow to over $54 billion. Eastbridge Consulting Group estimates the U.S. in-force premiums were $42 billion in 2017 for employee-paid life, health and disability products sold at the worksite with premiums paid through payroll.

The variety and complexity of medical and non-medical benefits plans continues to grow. The Benefitfocus 2017 annual market research report, *The State of Employee Benefits 2018*, indicates that a higher proportion of benefits offerings are shifting to high-deductible health plans coupled with health savings accounts. This added complexity places greater potential cost burden on employees and creates a greater need for employers to educate employees on becoming more informed healthcare consumers. To help employees cover added cost burdens, employers are increasingly offering a wider range of non-medical benefits plans, such as critical illness, supplemental income, and financial wellness programs, as well as traditional insurance offerings like dental, life and disability. Current point and legacy systems are inadequate to efficiently manage the complexity, regulation, and the involvement of multiple parties. They are also incapable or inadequate in enabling the purchase of non-medical benefits. These factors are driving the need for an enterprise benefits management system to improve operational efficiency along the entire benefits value chain.

Employer Market

Currently, we believe there are over 18,000 entities that employ more than 1,000 individuals in the United States. A significant and growing portion of employers' costs is non-salary benefits, such as health insurance, that they provide to their employees. With healthcare and other premiums increasing, senior executives are prioritizing benefits administration in their organizations and searching for ways to contain costs without sacrificing benefits. In addition, the expense burden continues to shift to employees. Employees' contributions to premiums for health insurance have grown from approximately $318 per employee in 1999 to approximately $1,186 per employee in 2018. Employers recognize the importance of offering a greater variety of non-medical benefits as a means to attract, motivate, and retain employees. They must maintain relationships with multiple insurance carriers and many other benefits providers, placing a substantial administrative burden on their organizations.

Employers' distribution, management, and administration of employee benefits has historically consisted of error-prone, paper-based processes, and a patchwork of customized software tools, which are costly to maintain, often lack necessary functionality, and fail to address the increasing complexity of the benefits marketplace. As benefits offerings become more complex and employees bear more of the cost of those benefits, HR software solutions that streamline information, simplify choices, and engage employees are increasingly in demand. Employees desire tailored, dynamic, and interactive communication of critical benefits information as they become accustomed to receiving personalized content through various consumer applications on a range of devices.

Legacy HR systems were generally designed as extensions of enterprise resource planning, or ERP, systems, built for back-office responsibilities like finance and accounting. As a result, these systems lack functionality and ease-of-use for employees. Many legacy HR systems were not designed to integrate with the broader benefits ecosystem, including brokers, carriers, and wellness providers, or have the ability to transact non-medical benefits. This results in expensive, error-prone, and incomplete experiences for employers and employees. Benefits outsourcers have attempted to compensate for the shortcomings of legacy HR systems, but they have generally lacked adequate technology solutions necessary to keep up with the rapidly evolving benefits landscape. As a result, employees are often not provided with the appropriate functionality and information required to select and manage their benefits effectively.

Modern technology, changing communication patterns, and a constantly evolving benefits ecosystem have impacted the employee-employer relationship. HR executives continue to search for effective strategies to increase efficiency and contain costs, while increasing employee engagement and being an employer of choice. Employers are increasingly interested in SaaS solutions that can help capture and analyze benefits data and provide more choice for their employees to improve productivity and satisfaction. In order to manage the distribution and administration of benefits effectively, employers need an integrated platform, capable of handling all benefits in one place and providing a highly personalized experience for employees.

Insurance Carrier Market

The employee benefits market consists of a myriad of medical insurance carriers and products. According to the U.S. Bureau of Labor Statistics, the single largest benefit provided to employees in the United States is healthcare insurance, often encompassing more than 90% of all insurance benefits spending by employers.

Large, national insurance carriers also offer numerous individual health plans of different types, including health maintenance organizations, preferred provider organizations, point-of-service plans, and high deductible health plans, across the 50 states, as well as life and ancillary benefits plans. Each carrier offers a complex variety of medical insurance and non-medical benefits, encompassing life and ancillary plans, with each plan requiring multiple decisions to address the specific needs of employers and their individual employees. Despite widespread carrier consolidation, numerous disparate systems remain in place, with many large carriers operating on multiple IT systems. Carriers often rely on manual processes and siloed software applications to bridge gaps in legacy administration systems. Even as carriers attempt to modernize and keep up with evolving industry practices and a changing regulatory landscape, they have difficulty connecting with the broader healthcare system.

The effective delivery and management of employee benefits depends on the timely, continuous exchange of accurate data among carriers, their employer customers, and individual members. Legacy benefits management systems often lack important functionality such as web and mobile self-service capabilities and real-time data exchange. Critical carrier processes, including member enrollment, billing, communications, and retail marketing have often been under-optimized or neglected by legacy systems, and carriers have devoted significant internal resources to cover technology gaps. In addition, healthcare reform mandates and the rise of exchanges have increased focus on carriers' retail distribution capabilities, which require additional investment.

Governmental oversight, punctuated with the Patient Protection and Affordable Care Act, or PPACA, has led to an increasingly dynamic regulatory framework under which health benefits are delivered, accessed and maintained. Despite uncertainty regarding the long-term viability of PPACA, we expect digital transformation of healthcare benefits to continue in the form of public and private exchanges – online marketplaces that allow insurance carriers to compete directly for new members. We expect private exchanges will be less rigid, promoting both health and non-health benefits, with substantially fewer rules around the types of benefits offered. As medical insurance carriers continue to bolster their retail distribution capabilities, we believe they will require consolidation of technology solutions to improve operational efficiency and attract additional members through private exchanges.

The Benefitfocus Solutions

We provide a multi-tenant cloud-based benefits management platform for consumers, employers, insurance carriers, suppliers and brokers. The Benefitfocus Platform simplifies how organizations and individuals transact benefits.

We believe our solutions help employers and clients of brokers in the following important ways:

Simplify Benefits Enrollment. Our solutions reduce the complexity of benefits enrollment by integrating all plan information in one place and presenting it to employees in an organized and easy-to-understand manner. Employees shop and enroll using a highly intuitive and engaging consumer-oriented interface.

Purchase non-medical benefits. Our platform includes a holistic, multidimensional marketplace whereby carriers and suppliers sell non-medical products to consumers.

Reduce Cost and Increase ROI. Our solutions automate the benefits management process and reduce the cost associated with clerical errors and covering ineligible employees and dependents. Our solutions also include advanced analytics that enable employers and employees to quickly gather, report, and forecast benefit costs.

Attract, Retain, and Motivate Employees. Our solutions help employers attract, retain, and motivate top talent by delivering benefits information through a highly intuitive and engaging user interface. We believe that when employees understand the value of their benefits, they are more likely to be satisfied with and engaged in their jobs.

Streamline HR Processes. Our solutions eliminate the time-consuming and labor-intensive, often paper-based, processes associated with managing employee benefits plans, making HR professionals more efficient. Employers and HR professionals can efficiently enroll users or update information, and communicate or make changes to plans in real-time.

Integrate Seamlessly with Related Systems. Our solutions can be easily and securely integrated with a variety of related systems, including carrier membership and billing, payroll and HR, banking, and other third-party administration. We provide a network of approximately 2,200 benefit provider data exchange connections through industry standards interfaces that are configurable to accommodate a variety of needs. Our open architecture further extends our functionality by allowing third parties to develop and offer apps and services on our platform.

We believe our solutions help insurance carriers and suppliers in the following important ways:

Bolster Retail Distribution Capabilities Through Marketplaces. Our solutions help carriers and suppliers respond to an evolving marketplace in which retail distribution capabilities are increasingly important to attracting and retaining new members. Our platform offers carriers a lower cost direct sales channel to employer groups and individuals. We offer the ability to sell both healthcare and non-healthcare benefit products in an online shopping environment that serves as an alternative to government-sponsored public exchanges.

Attract and Maintain Membership. Our solutions allow carriers to maximize sales capacity and efficiency by communicating directly with their employer customers and individual members.

Reduce Administrative Costs. The Benefitfocus Platform allows carriers to consolidate IT systems, automate and simplify various aspects of the benefits administration process, such as enrollment, plan changes, eligibility updates, and billing, from one centralized location.

Facilitate Real-Time Data Exchange. Our solutions simplify interactions and data exchange, and foster collaboration among carriers, suppliers, brokers employers and consumers. This allows carriers to rapidly tailor and offer new benefits packages.

Our Growth Strategy

We believe BenefitsPlace can transform how employers, brokers and carriers deliver value for employees and their families. With more than 40 industry-leading products offered by the industry’s marquee brands, employers can now seamlessly package a rich benefits offering that addresses health, wealth and lifestyle needs.

We intend to strengthen our position as a leading cloud-based benefits management platform for buyers and sellers, working closely with brokers as partner in the ecosystem. Key elements of our growth strategy include the following:

Expand our Customer Base. We believe that our current customer base represents a small fraction of our targeted users that could benefit from our subscription solutions. In order to reach new customers in our existing markets, we are aggressively investing in our sales and marketing resources and our channel marketing strategy, including in ways intended to expand existing relationships and foster organic growth opportunities through brokers.

Further Develop our Partner Ecosystem. We believe we have a large opportunity to efficiently grow our customer base through our partners. To increase the number of consumers on our platform, we have established strong relationships with key participants in the benefits market, including Mercer Health & Benefits, LLC (“Mercer”), SAP and SuccessFactors. We have also eliminated previous friction and improved our outreach to key constituents within the benefits industry, like brokers. One such example is the introduction of our Premier Broker program in 2018.

Deepen our Relationships with our Existing Customer Base. We are deepening our employer relationships by continuing to provide a unified platform with a growing list of additional solutions to manage increasingly complex benefits processes and simplify the distribution and administration of employee benefits. We are expanding our carrier relationships through both the upsell of additional software products, increased adoption across our carriers’ member populations and providing access to our multidimensional marketplace.

Extend our Suite of Applications and Continue our Technology Leadership. We are extending the number, range, and functionality of our benefits solutions. We have also extended the functionality of our products through mobile solutions. We intend to continue our collaboration with customers and partners, so we can respond quickly to evolving market needs with innovative capabilities that support our leadership position.

Facilitate the purchase of non-medical benefits. We believe that our current BenefitsPlace portfolio of products represents a fraction of the number and variety of products that we expect will be offered on our multidimensional marketplace. We also believe we have a significant opportunity to drive higher employer placement of BenefitsPlace products and increase consumer engagement in purchasing BenefitsPlace products throughout an entire calendar year.

Target New Markets. We believe substantial demand for our solutions exists in markets and geographies beyond our current focus. We intend to leverage opportunities we believe will arise from the complexities of changing government regulation and increased enrollment impacting both Medicare and Medicaid. We also plan to grow our sales capability internationally by expanding our direct sales force and collaborating with strategic partners in new, international locations.

Selectively Pursue Strategic Acquisitions and Investments. We might pursue acquisitions of, or investments in, complementary businesses and technologies that align with our overall growth strategy. We believe that a selective acquisition and investment strategy could enable us to gain new customers, accelerate our expansion into new markets, and enhance our product capabilities.

The Benefitfocus Portfolio of Products

BenefitsPlace is our transaction-oriented, marketplace solution, connecting employers, brokers, insurance carriers, suppliers and consumers on a single platform. BenefitsPlace includes access to a variety of leading voluntary benefit products that support income protection, digital health, and financial well-being. BenefitsPlace partners provide products that fit into three distinct categories:

- *Health.* Products in the health category improve access to affordable, high-quality care and may act as a supplement to the traditional employer-funded health and welfare benefits. Partner-provided products in this category include consumer-directed healthcare accounts, long-term care insurance, prescription drug discount programs, services to help population health and wellness services and enrollment, and guidance services for free state health insurance plans.
- *Wealth.* Products in the wealth category provide options for consumers to protect their income in case of a medical emergency, manage their finances and decrease risk to financial debt. Partner products provided in this category include accident, hospital indemnity and critical illness insurance, short-term and long-term disability, financial wellness services, student loan services, and retirement and savings accounts such as IRA, 401(k), 529 and personal loan services.
- *Lifestyle.* Products in the lifestyle category provide options that address the individual needs of consumers to improve the quality of their day-to-day life. Partner products provided in this category include identity theft protection, virtual college counseling assistance, pet insurance and savings plans, and same-day delivery services for grocery and household items.

BenefitsPlace adds value to all participants that participate on the platform.

- Insurance carriers and specialty providers join BenefitsPlace as BenefitsPlace sellers. Sellers must meet a standard set of integration, quality, security, and financial standards to participate in BenefitsPlace. This ensures products are composed of marquee, industry-leading products. Sellers can expand their distribution channels and grow their reach to consumers.
- Brokers work with BenefitsPlace advisors to understand the types of products available through the Benefitfocus Marketplace. With the use of data-driven insights, brokers have greater visibility into the status of their customers and participation levels of BenefitsPlace products, thereby helping activate their customers' benefits strategy.
- Employers can design a strategic benefits portfolio, without the traditional constraints of administration and integration inefficiencies. BenefitsPlace products include pre-built integrations, seller-provided content and communication materials, and a consistent set of system configurations and settings within Benefitfocus Marketplace.
- Consumers gain access to BenefitsPlace products through our carrier and employer subscription-based enrollment products, eEnrollment and Benefitfocus Marketplace. With an insight-driven, guided consumer retail experience that includes decision-support tools, educational information, and mobile access, consumers can select the best products for their individual needs all year long.

Products for Insurance Carriers

- *eEnrollment* provides a single, privately labeled platform for carriers to automate enrollment across all segments of their commercial group business. It includes benefits administration tools for brokers employers, supports complex business rules, such as eligibility and rating criteria and provides operational efficiency by transmitting eligibility and enrollment data to carrier membership systems. eEnrollment also offers consumers a retail-like benefit enrollment experience with decision support tools, educational videos and content libraries that help consumers make informed benefit elections year round.
- *eBilling* is an electronic invoice presentment and payment solution, or EIPP, privately labeled for carriers. It consolidates invoices from multiple insurance products so employers and individuals receive one invoice that can be viewed and paid electronically. eBilling automates the synchronization of billing and membership data to improve the accuracy of billing processes and provides options to simplify bill payment, such as scheduled one-time and/or recurring payments.
- *eExchange* is a solution that bridges the integration gap between carrier and employer systems, allowing a seamless exchange of data between the two. Our customers use eExchange to consume eligibility and enrollment data from multiple, third-party systems, convert data from one format to another, and manage the flow of employee data between carriers and employers.
- *eSales* gives carriers and brokers tools to organize and proactively manage accounts, track leads, generate quotes, and create proposals for multiple products. eSales allows carriers to define their own market segments and configure them with unique workflows and business rules. It also enables greater data accuracy by automatically incorporating updated products, options and pricing for the most current rates and quotes. Carriers purchase eSales to increase productivity in their sales force.
- *Core & Advanced Analytics* is our data analytics solution for use by carriers and their self-insured employer customers. Core & Advanced Analytics is a privately-labeled analytics solution that helps carriers and their self-insured employers identify cost drivers, recognize trends, and predict future risks and costs. Additional analytical capabilities help create “what-if” scenarios to model different variables, such as co-pay, deductibles, benefits, inflation, and member populations.

Products for Employers

- *Benefitfocus Marketplace* is a cloud-based benefits management portal that streamlines online enrollment, employee communication, and benefits administration. Benefitfocus Marketplace presents employees with all of the plans their employers offer with access to animated videos, educational benefits information and live chat sessions as they explore their benefit options. As employees shop for the plans that best fit their individual needs, a virtual shopping cart keeps a running tally of the employees’ out-of-pocket costs. The Benefitfocus Marketplace is available on a desktop, tablet or mobile phone.
- *Core & Advanced Analytics* is our data analytics solution that helps employers make more informed, data-driven decisions about their benefits offerings. This product aggregates benefit cost and claims data from relevant sources and allows customers to analyze, forecast, and monitor costs. Core & Advanced Analytics enables employers and their advisors to identify cost drivers, recognize trends, and predict future risks and costs. Additional analytical capabilities create “what-if” scenarios to model different variables, such as co-pays, deductibles, benefits, inflation, and member populations.
- *ACA Management & Reporting* is our solution that helps employers manage ACA compliance by consolidating and automating IRS reporting. Additionally, Benefitfocus is an approved transmitter, allowing us to electronically file required ACA compliance documents with the Internal Revenue Service on behalf of our customers.
- *Consolidated Billing & Payment* is a comprehensive application that synchronizes enrollment and billing information to streamline the monthly billing process, automate adjustments and increase accuracy of payments. Consolidated Billing & Payment gives employers the ability to automate or schedule single-invoice payments to all of their benefit providers. Employers can drill down by employee to see coverage level and plan, or focus in by vendor, benefit type or internal cost control center to gain more insight into cost drivers.

- *Consumer-Directed Healthcare Accounts* is our solution designed to provide employers and their employees with a seamless enrollment and account management experience for their health savings accounts, or HSAs, or similar medical payment products within Benefitfocus Marketplace.
- *COBRA Administration* is our solution for employers that simplifies management of COBRA, or the Consolidated Omnibus Budget Reconciliation Act, benefits. COBRA Administration automates required communication, enrollment, fulfillment and payment processing within Benefitfocus Marketplace.

Products for Brokers

Brokers use the Benefitfocus Platform to manage the portfolios of their employer clients. This includes delivering strategic insights that improve their employer clients' benefit experience and demonstrating greater value through access to a larger set of relevant products for employers.

- *Advanced Analytics* aggregates benefit cost and claims data from relevant sources, identifies cost drivers, recognizes trends, and predicts future risks and costs. Additional analytical capabilities create "what-if" scenarios to model different variables, such as co-pays, deductibles, benefits, inflation, and member populations. Brokers purchase Advanced Analytics to facilitate the design of better informed, data-driven benefit strategies for their customers.
- *BenefitsPlace* includes consultative support for brokers through BenefitsPlace advisors. This helps brokers understand the types of products available and optimize their customers' Benefitfocus Marketplace experience. With the use of data-driven insights, brokers have greater visibility into the status of their customers and participation levels of BenefitsPlace product participation, thereby helping activate their customers' benefits strategy.
- *Premier Broker Program* is designed to foster a collaborative, mutually beneficial partnership with the broker community to accelerate their growth and deliver world-class support to our mutual customers. Premier brokers can take advantage of sales and marketing support, discounts for new clients and exclusive rewards such as:
    - High-touch sales and marketing support with a collaborative team of sales and technology advisors, as well as priority access to marketing materials including Benefitfocus' State of Employee Benefits research, thought leadership content and product promotions;
    - On-demand client success metrics through our One Place 365 Broker Support Portal, an interactive dashboard that provides comprehensive insight into implementations, renewals and ongoing projects for all broker clients using Benefitfocus technology; and
    - Networking opportunities and local Benefitfocus Community events. Brokers receive discounted attendance to One Place, our annual user conference, and are invited to our platform sellers conference.

Professional Services and Customer Support

- *Implementation Services*. We provide implementation services to our customers in order to help ensure seamless deployment and effective utilization of our solutions. Our carrier and employer implementation teams and third-party system integrators in our Benefitfocus Implementation Program follow an end-to-end approach from project planning to customer training and technical support.
- *Benefits Service Center*. We provide employers with expanded support services where our benefits specialists help customers' employees understand benefit offerings, navigate the enrollment process, and find answers to frequently asked HR questions. Our Benefits Service Center acts as an extension of our customers' benefits team and provides employees with personalized, guided support. Additional services, such as fulfillment, dependent verification, and HR administration, are available to meet unique organizational needs.

Customers

Our customers include employers of all sizes across a variety of industries and some of the nation's largest insurance carriers and aggregators. The following is a list of some of our significant employer and carrier customers.

Employer Customers	Carrier Customers
American Eagle Outfitters Inc.	American Family Life Assurance Company of Columbus
Amerigas Propane, Inc.	American Heritage Life Insurance Company
Brookdale Senior Living Inc.	BlueChoice HealthPlan of South Carolina, Inc.
California Institute of Technology	Blue Cross of Idaho Health Service, Inc.
Carolinas HealthCare System	Blue Cross and Blue Shield of Kansas City
Fender Musical Instruments Corporation	Blue Cross and Blue Shield of South Carolina, Inc.
Hard Rock Café International (USA), Inc.	CIGNA
Rush University Medical Center	Transamerica Corporation
SAP America Inc.	Wellmark, Inc.
University of Alabama – Birmingham	
Zions Bancorporation	

BenefitsPlace sellers include some the nation's leading insurance carriers and suppliers to help protect consumers health, wealth and lifestyle. The following is a list of some of our significant carrier and supplier sellers.

Aetna	InfoArmor
Aflac	MetLife
Allstate Benefits	SoFi
BrightDime	The Hartford
CIGNA	Transamerica Corporation

During the years ended December 31, 2018, 2017 and 2016, one customer accounted for 13%, 11% and 12% of total revenue. No other customer accounted for more than 10% of our total revenue.

Sales and Marketing

We sell our software solutions through our direct sales organization. Our direct sales team comprises employer-focused and carrier-focused field sales professionals who are organized primarily by geography and account size.

We generate customer leads, accelerate sales opportunities and build brand awareness through our marketing programs and strategic relationships. Our marketing programs target HR, benefits, and finance executives, technology professionals, key brokers, and senior business leaders. Our principal marketing programs include:

- use of our website to provide application and company information, as well as learning opportunities for potential customers;
- sales development representatives who respond to incoming leads through digital and advertising programs and convert them into new sales opportunities;
- participation in, and sponsorship of, user conferences, executive events, trade shows and industry events, including our annual user and partner conference, One Place, and our annual platform sellers conference;
- integrated marketing campaigns, including direct email, online web advertising, blogs, webinars and industry reports, including State of Employee Benefits; and
- public relations, analyst relations and social media initiatives.

We also sell our software solutions through strategic partners including Mercer and SAP SE.

Technology Infrastructure and Operations

As an enterprise cloud software vendor, we have always deployed our solutions using a SaaS model. Our customers access our software via application integrations, web browsers, and/or mobile devices, rather than by installing software on their premises. Through our multi-tenant architecture, our customers access a single software instance with multiple possible configurations enabled by our metadata-driven framework. The multi-tenant approach provides significant operating economies through aligned, shared computational services and processes as it helps us to reduce our fixed cost base and minimize unused capacity on our hardware. In addition, our software architecture gives us an advantage over legacy system vendors, who may be using a less flexible architecture that would require significant time and labor expense to address varied capability needs.

We host our applications and serve all of our customers from two redundant, co-located, private cloud data centers in separate locations. We rely on third-party vendors to operate these data centers, which are designed to host mission-critical computer systems and have industry-standard measures in place to minimize service interruptions. Our technical operations staff manages the technology stacks supporting the Benefitfocus Platform and uses automated monitoring tools throughout our system to detect unusual events or malfunctions that could interfere with our customers' or partners' use of the Benefitfocus Platform. We monitor application health by verifying that all applications, interfaces and supporting middleware are operational. If our monitoring detects anomalous situations, our dedicated network operations staff respond immediately to diagnose the situation, communicate status, and resolve the matter. We take the security of our data, systems and operations very seriously, and minimize risk at every level of technology selection through software architecture, systems administration, and operational controls and procedures.

Compliance and Certifications

We obtain third-party examinations of our controls relating to security and data privacy. Certain examinations are conducted under Statement on Standards for Attestation Engagements, or SSAE, No. 16 (Reporting on Controls at a Service Organization). In particular, we obtain Service Organization Controls, or SOC, reports known as SOC 1 Type II and SOC 2 Type II audits that test the design and operating effectiveness of controls over a period of time. An independent auditor conducts these examinations annually and addresses, among other areas, our physical and environmental safeguards for production data centers, data availability and procedures covering integrity, change management, and logical security.

On an annual basis, we complete an internal audit of compliance against the Payment Card Industry Data Security Standards, or PCI-DSS, applicable to Level 1 service providers. These standards focus on application and network security controls for companies that transmit and store credit card data on behalf of clients. Benefitfocus meets PCI compliance requirements as a Level 1 service provider and submits its Report on Compliance and Attestation of Compliance documenting this assessment to the four major credit card brands annually.

In addition to PCI-DDS, Benefitfocus meets all applicable security requirements required by the National Automated Clearinghouse Association, or NACHA, for third-party service providers, as well as all requirements for Covered Entities as required by HIPAA. We validate both NACHA and HIPAA compliance annually through internal audits.

Competition

While we do not believe any single competitor offers similarly expansive benefits administration solutions, we face competition from various sources, many of which have greater resources than us. We have historically described our competition in our two market segments, carrier and employer. In 2018, we made a strategic shift to include a transaction-based model with the introduction of BenefitsPlace. We believe that sources of competition are similar to those that we faced prior to the shift, which include:

- ERP software companies, including Oracle (PeopleSoft), Infor (Lawson) and Workday each offering a cloud-based benefits administration software solution;
- HR outsourcing companies, such as Willis Towers Watson;

- payroll service providers, such as ADP who expanded their core payroll services to include some form of cloud-based benefits administration services; and
- insurance carriers that have invested in internally developed benefit management solutions;
- member services companies, including those providing web-based subscriber enrollment and claims adjudication services, such as Trizetto (acquired by Cognizant) and DST Health Solutions;
- brokers and consultants who have influence over benefits offerings; and
- various niche software vendors.

We believe that competition for benefits administration solutions is based primarily on the following factors:

- capability for customization through configuration, integration, security, scalability, and reliability of applications;
- competitive and understandable pricing;
- breadth and depth of application functionality;
- access to broad offering of non-medical benefits;
- size of customer base and level of user adoption;
- extensive data exchange network;
- cloud-based delivery model;
- dynamic communication capabilities with contextual media, animation, and acknowledgement tools;
- ability to integrate with legacy enterprise infrastructures and third-party applications;
- domain expertise in benefits and healthcare consumerism;
- extensive base of rules and event-driven benefit eligibility and enrollment;
- accessible on any browser or mobile device;
- modern and adaptive technology platform;
- clearly defined implementation timeline;
- customer-branding and styling;
- data exchange standardization; and
- ability to innovate and respond to customer and legislative needs rapidly.

We believe that we compete effectively based upon all of these criteria, and that we are likely to continue to retain a high percentage of our customers from year to year. Nonetheless, we believe that the increasing acceptance of automated solutions in the healthcare marketplace and the adoption of more sophisticated technology and continuing legislative reform will result in increased competition, including potentially from large software companies with greater resources than ours. Other companies might develop superior or more economical service offerings that our customers could find more attractive than our offerings. Moreover, the regulatory landscape might shift in a direction that is more strategically advantageous to competitors.

Research and Development

Our ability to compete depends, in large part, on our continuous commitment to rapidly introduce new applications, technologies, features, and functionality. We deliver multiple software releases per year, updating the Benefitfocus Platform to leverage advances in cloud computing, mobile applications, and data management. Our research and development team is responsible for the design and development of our applications. We follow state-of-the-art practices in software development using modern programming languages, data storage systems, and other tools. We use both commercial and open source products, following a “best tool for the job” philosophy in product selection. Our software has a multi-tiered architecture that ensures flexibility to add or modify features quickly in response to changing market dynamics, customer needs, or regulatory requirements.

Our research and development expenses were $47.9 million, $49.5 million and $56.6 million for the years December 31, 2018, 2017 and 2016, respectively.

Intellectual Property

We rely on a combination of patent, trade secret, copyright, and trademark laws, license agreements, confidentiality procedures, confidentiality and nondisclosure agreements, and technical measures to protect the intellectual property used in our business. We generally enter into confidentiality and nondisclosure agreements with our associates, consultants, vendors, and customers. We also seek to control access to and distribution of our software, documentation, and other proprietary information.

We use numerous trademarks for our products and services, and “Benefitfocus”, “HR InTouch”, “HR InTouch Marketplace”, “All Your Benefits. One Place.”, and “All Your Benefits. In Your Pocket.” are registered marks of Benefitfocus in the United States. Through claimed common law trademark protection, we also protect other Benefitfocus marks which identify our services, such as Benefitfocus eEnrollment, Benefitfocus eBilling, Benefitfocus eExchange, and Benefitfocus eSales, and we have reserved numerous domain names, including “benefitfocus.com”. We also have registered trademarks and pending trademark applications in foreign jurisdictions such as Australia, Canada, India, Israel, Ireland, New Zealand, South Africa, and the United Kingdom.

We have been granted eight U.S. patents (utility patents) and have two U.S. patent applications (all for utility patents) pending. Our patents provide protections up to 2034. We also have three Chinese, two Japanese, Australian, Taiwanese, and Hong Kong, and one Canadian patents and a number of pending patent applications.

We also rely on certain intellectual property rights that we license from third parties. Although we believe that alternative technologies are generally available to replace such licenses, these third-party technologies may not continue to be available to us on commercially reasonable terms.

Although we rely on intellectual property rights, including trade secrets, patents, copyrights, and trademarks, as well as contractual protections to establish and protect our proprietary rights, we believe that factors such as the technological and creative skills of our personnel, creation of new modules, features and functionality, and frequent enhancements to our applications are more essential to establishing and maintaining our technology leadership position.

The steps we have taken to protect our copyrights, trademarks, and other intellectual property may not be adequate, and the potential exists that third parties could infringe, misappropriate, or misuse our intellectual property. If this were to occur, it could harm our reputation and adversely affect our competitive position or operations. In addition, laws of other jurisdictions may not protect our intellectual property and proprietary rights from unauthorized use or disclosure in the same manner as the United States. The risk of unauthorized use of our proprietary and intellectual property rights may increase as our company expands outside of the United States.

Government Regulation

Introduction

The employee benefits industry is required to comply with extensive and complex U.S. laws and regulations at the federal and state levels. Although many regulatory and governmental requirements do not directly apply to our business, our customers are required to comply with a variety of U.S. laws, and we may be impacted by these laws as a result of our contractual obligations. For many of these laws, there is little history of regulatory or judicial interpretation upon which to rely.

Requirements of PPACA

Our business could be affected by changes in healthcare spending. PPACA and subsequent laws and regulations regarding the market for healthcare services have changed how healthcare services are covered, delivered, and reimbursed. PPACA, as enacted, expanded coverage of uninsured individuals by requiring states to expand Medicaid coverage significantly and to establish health insurance exchanges to facilitate the purchase of health insurance policies by individuals and small employers. The law also provided subsidies to states to create non-Medicaid plans for certain low-income residents. The requirement for states to expand Medicaid was subsequently repealed, and insurers have experienced mixed results providing services through the exchanges, leading many to exit this market. Increased volatility following the repeal of the individual mandate in late 2017 has led to additional uncertainty in the insurance market.

A significant goal of PPACA and subsequent reform efforts has been to move away from fee for service payments and toward capitated payments to make providers more accountable for the cost and quality of care provided. While many of the provisions of PPACA will not be directly applicable to us, PPACA, as currently implemented, might affect the business of many of our customers. Carriers and large employers might experience changes in the numbers of individuals they insure as a result of Medicaid expansion and the creation of state and national exchanges, though it is unclear how many states will decline to implement the Medicaid expansion or adopt state-specific exchanges.

Following the creation of the Medicare Shared Savings Program, Medicare and many commercial third party payors began implementing accountable care models in which groups of providers known as Accountable Care Organizations ("ACO") assume some amount of risk for the cost of care provided to groups of individuals. Also, CMS continues to test demonstration programs to bundle acute care and post–acute care reimbursement to hold providers accountable for costs across a broader continuum of care. These reimbursement methodologies and similar programs are likely to continue and expand, both in public and commercial health plans, and will likely impact the business of our customers.

As has been the case since 2010, the long-term viability of PPACA remains in doubt, and we expect that the current Congress and White House will continue to seek ways to modify, repeal, or otherwise invalidate all, or certain provisions of PPACA. For instance, on January 20, 2017, President Trump issued an executive order stating that the U.S. federal government's policy is to seek the prompt repeal of PPACA, and directing the heads of all executive departments and agencies to minimize the economic and regulatory burdens of PPACA to the maximum extent permitted by law. Also, the December 2017 revisions to the tax code eliminated PPACA's individual mandate, which could serve as a basis for continued challenges to the constitutionality of the law and cause further disruption to the insurance markets. Should Congress or the courts modify, repeal, or otherwise invalidate PPACA or any parts of its provisions, the business of our customers could be substantially affected.

Requirements Regarding the Confidentiality, Privacy and Security of Personal Information

HIPAA and Other Privacy and Security Requirements. Numerous U.S. federal and state laws and regulations apply to the privacy and security of personal health information. In particular, regulations promulgated pursuant to the Health Insurance Portability and Accountability Act of 1996, or HIPAA, establish privacy and security standards that limit the use and disclosure of protected health information and require the implementation of administrative, physical and technical safeguards to ensure the confidentiality, integrity, availability, and privacy of protected health information. Health plans, healthcare clearinghouses and most healthcare providers are considered "Covered Entities" subject to HIPAA.

With respect to our operations as a healthcare clearinghouse, we are directly subject to the Privacy Rule and the Security Rule. In addition, our carrier customers, or payors, are considered to be Covered

Entities and are required to enter into written agreements with us, known as Business Associate Agreements, under which we are considered to be a Business Associate and that require us to safeguard protected health information and restrict how we may use and disclose such information. The Privacy Rule extensively regulates the use and disclosure of protected health information by Covered Entities and their Business Associates. For example, the Privacy Rule permits Covered Entities and their Business Associates to use and disclose protected health information for treatment and to process claims for payment, but other uses and disclosures, such as marketing communications, require written authorization from the individual or must meet an exception specified under the Privacy Rule. The Privacy Rule also provides patients with rights related to understanding and controlling how their health information is used and disclosed. To the extent permitted by the Privacy Rule and our contracts with our customers, we may use and disclose protected health information to perform our services and for other limited purposes, such as creating de-identified information. Determining whether data has been sufficiently de-identified to comply with the Privacy Rule and our contractual obligations may require complex factual and statistical analyses and may be subject to interpretation. The Security Rule requires Covered Entities and their Business Associates to implement and maintain administrative, physical and technical safeguards to protect the security of protected health information that is electronically transmitted or electronically stored.

If we are unable to properly protect the privacy and security of health information entrusted to us, we could be found to have breached our contracts with our customers. Further, if we fail to comply with the Privacy Rule, Security Rule, or Breach Notification Rule while acting as a Covered Entity or Business Associate, we could face civil penalties of up to $57,051 per violation and a maximum civil penalty of $1,711,533 in a calendar year for violations of the same requirement, in addition to criminal penalties. Recently, the U.S. Department of Health and Human Services Office for Civil Rights, which enforces HIPAA, appears to have increased its enforcement activities. Additionally, state attorneys general may bring civil actions seeking either injunctions or damages in response to violations of HIPAA that threaten the privacy of state residents.

There are additional privacy and data security legal regimes at the federal and state level. For example, the Federal Trade Commission, or FTC, regularly brings privacy and data enforcement actions under Section 5 of the Federal Trade Commission Act, alleging that certain activities constitute unfair or deceptive trade practices. The states have similar laws that prohibit unfair or deceptive trade practices. There are also state data security laws and state laws that regulate the use and disclosure of health information, among others. Further, by regulation, the FTC’s Red Flags Rule requires some financial institutions and creditors, which may include some of our customers, to implement identity theft prevention programs to detect, prevent and mitigate identity theft in connection with customer accounts. We may be required to apply additional resources to our existing processes to assist our affected customers in complying with this rule.

We have implemented and maintain physical, technical and administrative safeguards, including written policies and procedures, intended to protect all personal data, including protected health information, and have processes in place to assist us in complying with all applicable laws and regulations regarding the protection of this data and properly responding to any data breaches or incidents.

Data Breach Notification Laws. There are numerous federal and state laws that generally require notice to affected individuals, regulators, and sometimes the media or credit reporting agencies in the event of a data breach impacting personal information. For example, at the federal level, the HIPAA Breach Notification Rule mandates notification of breaches affecting protected health information to affected individuals and regulators under conditions set forth in the Rule. Covered Entities must report breaches of unsecured protected health information to affected individuals without unreasonable delay, but not to exceed 60 days of discovery of the breach by a Covered Entity or its agents. Notification must also be made to HHS and, in certain circumstances involving large breaches, to the media. Business Associates must report breaches of unsecured protected health information to Covered Entities within 60 days of discovery of the breach by the Business Associate or its agents. All states, the District of Columbia, Guam, Puerto Rico, and the Virgin Islands have enacted data breach notification laws. While some of these breach notification laws contain an exception for entities subject to HIPAA, other laws do not, and may impose notification obligations in addition to, or inconsistent with, the HIPAA Breach Notification Rule when a data breach implicates protected health information.

HIPAA Administrative Simplification

HIPAA also mandated a package of interlocking administrative simplification rules to establish standards and requirements for the electronic transmission of certain healthcare claims and payment transactions. These regulations are intended to encourage electronic commerce in the healthcare industry and apply directly to Covered Entities. Some of our businesses, including our healthcare clearinghouse operations, are considered Covered Entities under HIPAA and its implementing regulations.

Transaction Standards. The standard transaction regulations established under HIPAA, or Transaction Standards, mandate certain format and data content standards for the most common electronic healthcare transactions, using technical standards promulgated by recognized standards publishing organizations. These transactions include healthcare claims, enrollment, payment and eligibility. The Transaction Standards are applicable to that portion of our business involving the processing of healthcare transactions among payors, providers, patients and other healthcare industry constituents. Failure to comply with the Transaction Standards may subject us to civil and potentially criminal penalties and breach of contract claims. The Centers for Medicare and Medicaid Services, or CMS, is responsible for enforcing the Transaction Standards.

Payors who are unable to exchange data in the required standard formats can achieve Transaction Standards compliance by contracting with a clearinghouse to translate between standard and non-standard formats. As a result, use of a clearinghouse has allowed numerous payors to establish compliance with the Transaction Standards independently and at different times, reducing transition costs and risks. In addition, the standardization of formats and data standards envisioned by the Transaction Standards has only partially occurred. However, PPACA requires HHS to establish operating rules to promote uniformity in the implementation of each standardized electronic transaction. We cannot provide assurance regarding how the CMS will enforce the Transaction Standards. We have modified our systems and processes to implement the Transaction Standards and we continue to work with payors, healthcare information system vendors and other healthcare constituents to maintain our implementation of the Transaction Standards.

Health Plan and Other Entity Identifiers. HHS has promulgated regulations implementing the establishment of a unique health plan identifier, or HPID. Similar to a provider's national provider identifier, the HPID provides an identification system for health plans to use for electronic transactions. HHS has also promulgated regulations implementing another entity identifier, or OEID, that serves as an identifier for entities that are not health plans, health care providers or individuals. These other entities, which include third-party administrators, transaction vendors, and clearinghouses, are not required to obtain an OEID, but they could obtain and use one if they needed to be identified in standardized transactions. The implementation of the enforcement of the HPID and OEID process has been indefinitely delayed by HHS, and if implemented its impact on our business is unclear at this time.

Financial Services Related Laws and Rules

Financial services and electronic payment processing services are subject to numerous laws, regulations and industry standards, some of which might impact our operations and subject us, our vendors and our customers to liability as a result of the payment distribution and processing solutions we offer. Although we do not act as a bank, we offer solutions that involve banks, or vendors who contract with banks and other regulated providers of financial services. As a result, we might be impacted by banking and financial services industry laws, regulations and industry standards, such as licensing requirements, solvency standards, requirements to maintain the privacy and security of nonpublic personal financial information and Federal Deposit Insurance Corporation deposit insurance limits. In addition, our patient billing and payment distribution and processing solutions might be impacted by payment card association operating rules, certification requirements and rules governing electronic funds transfers. If we fail to comply with applicable payment processing rules or requirements, we might be subject to fines and changes in transaction fees and may lose our ability to process credit and debit card transactions or facilitate other types of billing and payment solutions. Moreover, payment transactions processed using the Automated Clearing House Network, or ACH, are subject to network operating rules promulgated by the National Automated Clearing House Association and to various federal laws regarding such operations, including laws pertaining to electronic funds transfers, and these rules and laws might impact our billing and payment solutions. Further, our solutions might impact the ability of our payor customers to comply with state prompt payment laws. These laws require payors to pay healthcare claims meeting the statutory or regulatory definition of a “clean claim” within a specified time frame.

Banking Regulation

The Goldman Sachs Group, affiliates of which owned approximately 11.8% of the voting and economic interest in our business as of December 31, 2018, is regulated as a bank holding company and a financial holding company under the Bank Holding Company Act of 1956, as amended, or the BHC Act. Due to the size of its voting and economic interest, we are deemed to be controlled by The Goldman Sachs Group and are therefore considered to be a non-bank “subsidiary” of The Goldman Sachs Group under the BHC Act. As a result, although we do not engage in banking operations, we are subject to regulation, supervision, examination and potential enforcement action by the Board of Governors of the Federal Reserve System, or the Federal Reserve, and to most banking laws, regulations and orders that apply to The Goldman Sachs Group. In addition, certain restrictions applicable to Goldman Sachs under the BHC Act apply to the Company as well, and we may be subject to regulatory oversight and examination because we are a technology service provider to regulated financial institutions. The bank regulatory framework is intended primarily to protect the safety and soundness of depository institutions, the federal deposit insurance system, and depositors rather than our stockholders. Because of The Goldman Sachs Group’s status as a bank holding company and a financial holding company, we have agreed to certain covenants for the benefit of The Goldman Sachs Group that are intended to facilitate its compliance with the BHC Act.

In addition, the Volcker Rule, which was part of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, or the Dodd-Frank Act, in relevant part, restricts banking entities from proprietary trading (subject to certain exemptions) and from acquiring or retaining any equity, partnership or other interests in, or sponsoring, a private equity fund, subject to satisfying certain conditions, and from engaging in certain transactions with funds. In 2017, President Trump issued an executive order directing the review of existing financial regulations. In May 2018, Congress passed the Economic Growth, Regulatory Relief and Consumer Protection Act. This legislation provides regulatory relief for certain financial institutions. These and other legislative and regulatory initiatives could change the regulation or operations of the financial services industry.

Under the current legislation, we will continue to be deemed to be controlled by The Goldman Sachs Group for purposes of the BHC Act and, therefore, we will continue to be subject to regulation by the Federal Reserve and to the BHC Act, as well as certain other banking laws, regulations and orders that apply to The Goldman Sachs Group. We will remain subject to this regulatory regime until The Goldman Sachs Group is no longer deemed to control us for bank regulatory purposes, which we do not generally have the ability to control and which will not occur until The Goldman Sachs Group has significantly reduced its voting and economic interest in us. We cannot predict the ownership level at which the Federal Reserve would consider us no longer controlled by The Goldman Sachs Group, but it could be less than 10%.

The Goldman Sachs Group and its subsidiaries, including Benefitfocus, generally may conduct only activities that are authorized for a bank holding company or a “financial holding company” under the BHC Act. The scope of services we may provide to our customers is limited under the BHC Act to those which are (i) financial in nature or incidental to financial activities (including data processing services such as those that we provide with our software solutions) or (ii) complementary to a financial activity and which do not pose a substantial risk to the safety and soundness of depository institutions or the financial system generally. We believe that our current and anticipated business activities are permitted under the BHC Act.

Any failure of The Goldman Sachs Group to maintain its status as a financial holding company could result in substantial limitations on our activities and our growth. In particular, our permissible activities could be further restricted to only those that constitute banking or activities closely related to banking. The Goldman Sachs Group’s loss of its financial holding company status could be caused by several factors, including any failure by The Goldman Sachs Group’s bank subsidiaries to remain sufficiently capitalized, by any examination downgrade of one of The Goldman Sachs Group’s bank subsidiaries, or by any failure of one of The Goldman Sachs Group’s bank subsidiaries to maintain a satisfactory rating under the Community Reinvestment Act. In addition, The Goldman Sachs Group is required to remain “well capitalized” and “well managed” to maintain its status as a financial holding company. We have no ability to prevent such occurrences from happening.

The Federal Reserve has broad enforcement authority over us, including the power to prohibit us from conducting any activity that, in the Federal Reserve's opinion, is unauthorized or constitutes an unsafe or unsound practice in conducting our business. The Federal Reserve may approve, deny or refuse to act upon applications or notices for The Goldman Sachs Group and its subsidiaries to conduct new activities, acquire or divest businesses or assets, or reconfigure existing operations. The Federal Reserve may also impose substantial fines and other penalties for violations of applicable banking laws, regulations and orders. We do not believe that any of our current or anticipated business activities will require Federal Reserve approval.

There are limits on the ability of The Goldman Sachs Group's bank subsidiaries to extend credit to or conduct other transactions with us. In general, any loans to us from a bank subsidiary of The Goldman Sachs Group must be on market terms and secured by designated amounts of specified collateral and are limited to 10% of the lending bank's capital stock and surplus. The Dodd-Frank Act places certain additional restrictions on transactions between us and The Goldman Sachs Group, which we do not believe are material to us.

Corporate Information

We were incorporated in June 2000 as Benefitfocus.com, Inc., a South Carolina corporation. In September 2013, we reincorporated in Delaware as Benefitfocus, Inc. Our principal executive offices are located at 100 Benefitfocus Way, Charleston, South Carolina 29492, and our phone number is (843) 849-7476. Our website address is www.benefitfocus.com. The information on, or that can be accessed through, our website is not part of this report. We currently employ approximately 1,450 associates.

Available Information

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) or 15(d) of the Exchange Act, are available free of charge on our website at www.benefitfocus.com as soon as reasonably practicable after electronically filing or furnishing such material to the Securities and Exchange Commission. The Securities and Exchange Commission maintains a website (www.sec.gov) that includes our reports, proxy statements and other information.

Executive Officers

The following table sets forth information concerning our executive officers as of February 26, 2019:

Name	Age	Position
Raymond A. August	57	President and Chief Executive Officer
Mason R. Holland, Jr.	54	Executive Chairman, Director
Jonathon E. Dussault	45	Chief Financial Officer, Treasurer
James P. Restivo	58	Chief Technology Officer

Raymond A. August—President and Chief Executive Officer

Ray August has been our President and Chief Executive Officer since January 2018 and a director since April 2018. Prior to that, Mr. August served as our Chief Operating Officer since August 2014 and was promoted to the title of President and Chief Operating Officer in March 2015. Prior to joining Benefitfocus, Mr. August served as the General Manager of the Financial Services Group of Computer Sciences Corp. (now DXC Technology Co. (NYSE: DXC)), or CSC, since October 2012. From March 2008 to September 2012, he served as President of CSC Financial Services Group. Since July 2013 he has served as a member of the Executive Advisory council for Arthur Ventures Private Equity Fund. Mr. August earned a B.S. in Accounting and Management Science from the University of South Carolina and is a Certified Public Accountant.

Mason R. Holland, Jr.—Executive Chairman of the Board

Mason Holland, one of our founders, has been our Executive Chairman and a member of the board of directors since our founding in June 2000. Mr. Holland is responsible for the coordination of strategic partnerships with industry leaders and client relations. Mr. Holland founded American Pensions, Inc. in 1988, serving as its Chairman and President from 1988 to 2003. Mr. Holland also has established and operated a number of other business entities throughout his 30 plus year career, including a real estate development firm established in 1989 and still operational and a jet aircraft manufacturer for which he served as lead investor, chief executive officer and board chairman from 2009 to 2014. Mr. Holland attended Old Dominion University in Norfolk, Virginia.

Jonathon E. Dussault—Chief Financial Officer

Jonathon Dussault has been our Chief Financial Officer since August 2017. He also serves as our Treasurer. Prior to that, since July 2014, Mr. Dussault served as Senior Vice President and Senior Finance Officer of WEX Health, Inc. (formerly Evolution1, Inc.), a leading provider of health savings account cloud-based technology and payment solutions for the healthcare industry and a subsidiary of global payments processing company, WEX Inc. (NYSE: WEX). Prior to that, beginning in April 2003, Mr. Dussault served in multiple roles at Evolution1, most recently as Chief Financial Officer, from December 2011 until its acquisition by WEX. From April 2003 to July 2010, Mr. Dussault also was Vice President of Corporate Development at Women's Health USA, Inc. and, prior to that, was responsible for financial planning and analysis at Open Solutions, Inc. Mr. Dussault began his career at Arthur Andersen LLP. He holds a B.S. in accounting from Babson College and earned his CPA certification in Massachusetts.

James P. Restivo—Chief Technology Officer

James Restivo has been our Chief Technology Officer since January 2016. Prior to joining Benefitfocus, Mr. Restivo served as Vice President, Chief Technology Officer of Dodge Data & Analytics LLC beginning in February 2015. From December 2012 to September 2014, Mr. Restivo served as Vice President, Chief Technology Officer of Smarter Workforce at International Business Machines Corporation, or IBM (NYSE: IBM). Prior to that, beginning in October 2006, Mr. Restivo served as Chief Technology Officer of Kenexa Corporation where he managed global public Human Capital Management R&D, SaaS operations and information security before the company was purchased by IBM. Mr. Restivo received a B.S. in computer science, applied mathematics and statistics from Stony Brook University and an M.S. from the Massachusetts Institute of Technology in computer science.

As of December 31, 2018, we had approximately 1,450 full-time associates. None of our associates is represented by a labor union, and we consider our current relations with our associates to be good.

Item 1A. RISK FACTORS.

Investing in our common stock involves a high degree of risk. You should consider carefully the risks and uncertainties described below, together with all of the other information in this Annual Report on Form 10-K, including the consolidated financial statements and the related notes, before deciding to invest in shares of our common stock. If any of the following risks were to materialize, our business, financial condition, results of operations, and future growth prospects could be materially and adversely affected. In that event, the market price of our common stock could decline and you could lose part or all of your investment in our common stock.

Risks Related to Our Business

We have had a history of losses, and we might not be able to achieve or sustain profitability.

We experienced net losses of $52.6 million, $50.3 million, and $40.3 million, for the years ended December 31, 2018, 2017, and 2016, respectively. We cannot predict if we will achieve sustained profitability in the near future or at all. We expect to make significant future expenditures to develop and expand our business. In addition, as a public company, we incur significant legal, accounting, and other expenses that we would not incur as a private company. These expenditures make it harder for us to achieve and maintain future profitability. Our recent growth in revenue and number of customers might not be sustainable, and we might not achieve sufficient revenue to achieve or maintain profitability. We could incur significant losses in the future for a number of reasons, including the other risks described in this Annual Report on Form 10-K, and we may encounter unforeseen expenses, difficulties, complications and delays and other unknown events. Accordingly, we might not be able to achieve or maintain profitability and we may incur significant losses for the foreseeable future.

Our quarterly operating results have fluctuated in the past and might continue to fluctuate, causing the value of our common stock to decline substantially.

Our quarterly operating results might fluctuate due to a variety of factors, many of which are outside of our control. As a result, comparing our operating results on a period-to-period basis might not be meaningful. You should not rely on our past results as indicative of our future performance. Moreover, our stock price might be based on expectations of future performance that are unrealistic or that we might not meet and, if our revenue or operating results fall below the expectations of investors or securities analysts, the price of our common stock could decline substantially. For example, on August 4, 2017, the first trading day after we publicly announced our operating results for the second quarter ended June 30, 2017, our stock price dropped $7.10 per share, or approximately 20.5%, to $27.50.

Our operating results have varied in the past. In addition to other risk factors listed in this section, some of the important factors that may cause fluctuations in our quarterly operating results include:

- our ability to hire and retain qualified personnel, including the rate of expansion of our sales force;
- the extent to which our products and services achieve or maintain market acceptance, including through brokers;
- changes in the regulatory environment related to benefits and healthcare;
- our ability to introduce new products and services and enhancements to our existing products and services on a timely basis;
- new competitors and the introduction of enhanced products and services from competitors;
- the financial condition of our current and potential customers;
- changes in customer budgets and procurement policies;
- the amount and timing of our investment in research and development activities;
- technical difficulties with our products or interruptions in our services;
- regulatory compliance costs;

- the timing, size, and integration success of potential future acquisitions; and
- unforeseen legal expenses, including litigation and settlement costs.

In addition, a significant portion of our operating expense is relatively fixed in nature, and planned expenditures are based in part on expectations regarding future revenue. Accordingly, unexpected revenue shortfalls might decrease our gross margins and could cause significant changes in our operating results from quarter to quarter. If this occurs, the trading price of our common stock could fall substantially, either suddenly or over time.

Changes in and interpretations of accounting principles regarding revenue recognition and accounting for leases and their implementation could have an adverse impact on our reported financial results.

We prepare our financial statements in accordance with GAAP. These rules are subject to interpretation by the SEC and various bodies formed to interpret and create appropriate accounting principles. Changes in these rules or their interpretation could have a negative impact on our reported financial results and may retroactively affect previously reported transactions. For example, in May 2014, FASB, issued an accounting standards update on revenue recognition, which supersedes nearly all existing revenue recognition guidance under GAAP. The new standard was effective for us beginning January 1, 2018. Compared to amounts previously reported, the adoption of the new revenue recognition guidance decreased our revenue and increased our net loss in 2017 and, for 2016, increased revenue and increased our net loss. The effects of the new accounting standard are described in Note 2 to our consolidated financial statements appearing elsewhere in this Annual Report on Form 10-K.

In addition, in February 2016, FASB issued an accounting standards update on leases, requiring lessees, among other things, to recognize lease assets and lease liabilities on the balance sheet for those leases classified as operating leases under previous authoritative guidance. This update, which will be effective beginning January 1, 2019, also introduces new disclosure requirements for leasing arrangements. We are continuing to evaluate the effect of adoption of this update on our consolidated financial statements, however we expect operating expenses to increase and interest expense to decrease as the result of changes to the accounting treatment of our build-to-suit lease.

Implementation of these new standards, and any future accounting pronouncements, implementation guidelines, or interpretations, could have an adverse impact on our reported financial results, require that we make significant changes to our systems, processes and controls, or the way we conduct our business. In addition, we are expending considerable effort and resources implementing both of these accounting updates, which in and of itself could have negative impact on our results of operations.

Because we recognize revenue and expense relating to monthly subscriptions and professional services over varying periods, downturns or upturns in sales are not immediately reflected in full in our operating results.

As a SaaS company, under Topic 606, we recognize our subscription revenue monthly for the term of our contracts and therefore a shortfall in demand for our software solutions and professional services or a decline in new or renewed contracts in any one quarter might not significantly reduce our revenue for that quarter, but could negatively affect our revenue in future quarters. Accordingly, the effect of significant downturns in new or renewed sales of our products and services might not be reflected in full in our results of operations until future periods.

Our revenue recognition model also makes it difficult for us to rapidly increase our revenue through additional sales in any period, because revenue from new customers has to be recognized over the applicable term of the contracts or the estimated expected life of the customer relationship period.

We depend on our senior management team, and the loss of one or more key associates or an inability to attract and retain highly skilled associates could adversely affect our business.

Our success depends largely upon the continued services of our key executive officers and other associates. We also rely on our leadership team in the areas of research and development, marketing, services, finance, and general and administrative functions, and on mission-critical individual contributors in sales and research and development. From time to time, there may be changes in our executive management team resulting from the hiring or departure of executives, which could disrupt our business. For example: in 2017, we hired a new Chief Financial Officer and an Executive Vice President of Global Sales; effective January 1, 2018, our Chief Executive Officer became Senior Advisor for Innovation, but remained on our Board of Directors, and our Chief Operating Officer became our Chief Executive Officer; in March 2018, our Senior Advisor for Innovation resigned from employment and our Board, effective April 1, 2018, for personal reasons; and in July 2018, we hired an Executive Vice President, Global Operations. The loss of one or more of our executive officers or key associates could have a serious adverse effect on our business.

To continue to execute our growth strategy, we also must attract and retain highly skilled personnel. Competition is intense for sales people and for engineers with high levels of experience in designing and developing software and Internet-related services. We might not be successful in maintaining our unique culture and continuing to attract and retain qualified personnel. We have from time to time in the past experienced, and we expect to continue to experience in the future, difficulty in hiring and retaining highly skilled personnel with appropriate qualifications. The pool of qualified personnel with SaaS experience and/or experience working with the benefits market is limited overall and specifically in Charleston, South Carolina, where our principal office is located. In addition, many of the companies with which we compete for experienced personnel have greater resources than we have and are located in geographic areas, like Silicon Valley, that may attract more qualified technology workers.

In addition, in making employment decisions, particularly in the Internet and high-technology industries, job candidates often consider the value of the equity awards they are to receive in connection with their employment. Volatility in the price of our stock might, therefore, adversely affect our ability to attract or retain highly skilled personnel. Furthermore, the requirement to expense certain stock awards might discourage us from granting the size or type of stock awards that job candidates require to join our company. If we fail to attract new personnel or fail to retain and motivate our current personnel, our business and future growth prospects could be severely harmed.

We operate in a highly competitive industry, and if we are not able to compete effectively, our business and operating results will be harmed.

The benefits management software market is highly competitive and is likely to attract increased competition, which could make it hard for us to succeed. Small, specialized providers continue to become more sophisticated and effective. In addition, large, well-financed, and technologically sophisticated software companies might focus more on our market. The size and financial strength of these entities is increasing as a result of continued consolidation in both the IT and healthcare industries. We expect large integrated software companies to become more active in our market, both through acquisitions and internal investment. In addition, insurance carriers may seek to bring certain of their benefits software solutions in-house, whether through acquisitions or internal investment. For example, Aetna, a customer of ours, owns bswift, a provider of insurance exchange technology solutions and benefits administration technology solutions and services. If Aetna were to decide to use bswift's solution in place of any portion of the solutions we currently provide to them, then our business and operating results could be materially and adversely affected. As costs fall and technology improves, increased market saturation might change the competitive landscape in favor of our competitors.

Some of our current large competitors have greater name recognition, longer operating histories, and significantly greater resources than we do. As a result, our competitors might be able to respond more quickly and effectively than we can to new or changing opportunities, technologies, standards, or customer requirements. In addition, current and potential competitors have established, and might in the future establish, cooperative relationships with vendors of complementary products, technologies, or services to increase the availability of their products in the marketplace. Accordingly, new competitors or alliances might emerge that have greater market share, a larger customer base, more widely adopted proprietary technologies, greater marketing expertise, greater financial resources, and larger sales forces than we have, which could put us at a competitive disadvantage. Further, in light of these advantages, even if our products and services are more effective than those of our competitors, current or potential customers might accept competitive offerings in lieu of purchasing our offerings. Increased competition is likely to result in pricing pressures, which could negatively impact our sales, profitability, or market share. In addition to new niche vendors, who offer standalone products and services, we face competition from existing enterprise vendors, including those currently focused on software solutions that have information systems in place with potential customers in our target market. These existing enterprise vendors might promise products or services that offer ease of integration with existing systems and which leverage existing vendor relationships. In addition, large insurance carriers often have internal technology staffs and proprietary software for benefits management, making them less likely to buy our solutions.

The market for our products and services is immature and volatile, and if it does not develop or if it develops more slowly than we expect, the growth of our business will be harmed.

The cloud-based benefits management software market is relatively new and unproven, and it is uncertain whether it will achieve and sustain high levels of demand and market acceptance. Our success will depend to a substantial extent on the willingness of employers, carriers, consumers and brokers to increase their use of benefits management software. Many employers and carriers have invested substantial personnel and financial resources to integrate internally developed solutions or traditional enterprise software into their businesses for benefits management, and therefore might be reluctant or unwilling to migrate to our cloud-based solutions, including BenefitsPlace. Furthermore, some businesses might be reluctant to use cloud-based solutions because they have concerns about the security of their data and the reliability of the technology delivery model associated with these solutions. If employers, carriers, consumers and brokers do not perceive the benefits of our solutions, then our market might not develop at all, or it might develop more slowly than we expect, either of which could significantly adversely affect our operating results. In addition, we might make errors in predicting and reacting to relevant business trends, which could harm our business. If any of these risks occur, it could materially adversely affect our business, financial condition or results of operations.

The SaaS pricing model is evolving and our failure to manage its evolution and demand could lead to lower than expected revenue and profit.

We derive most of our revenue growth from subscription offerings and, specifically, SaaS offerings. This business model depends heavily on achieving economies of scale because the initial upfront investment is costly and the associated revenue is recognized on a ratable basis. If we fail to achieve appropriate economies of scale or if we fail to manage or anticipate the evolution and demand of the SaaS pricing model, then our business and operating results could be adversely affected.

If we do not continue to innovate and provide products and services that are useful to consumers, employers, insurance carriers, and brokers and provide high quality support services, we might not remain competitive, and our revenue and operating results could suffer.

Our success depends in part on providing products and services that consumers, employers, insurance carriers, and brokers will use to manage benefits. We must continue to invest significant resources in research and development in order to enhance our existing products and services and introduce new high quality products and services that customers will want. If we are unable to predict user preferences or industry changes, or if we are unable to modify our products and services on a timely basis, we might lose customers. Our operating results would also suffer if our innovations are not responsive to the needs of our customers, are not appropriately timed with market opportunity, or are not effectively brought to market. As technology continues to develop, our competitors might be able to offer results that are, or that are perceived to be, substantially similar to or better than those generated by us. This would force us to compete on additional product and service attributes and to expend significant resources in order to remain competitive.

In addition, we may experience difficulties with software development, industry standards, design, or marketing that could delay or prevent our development, introduction, or implementation of new solutions and enhancements. The introduction of new solutions by competitors, the emergence of new industry standards, or the development of entirely new technologies to replace existing offerings could render our existing or future solutions obsolete.

Our success also depends on providing high quality support services to resolve any issues related to our products and services. High quality education and customer support is important for the successful marketing and sale of our products and services and for the renewal of existing customers. If we do not help our customers quickly resolve issues and provide effective ongoing support, our ability to sell additional products and services to existing customers would suffer and our reputation with existing or potential customers would be harmed.

If we are unable to retain our existing customers, our revenue and results of operations would be adversely affected.

We sell our products and services pursuant to agreements that are generally one year for employers and three to five years for carriers. While our employer contracts generally automatically renew on an annual basis, our carrier customers have no obligation to renew their contracts after their contract period expires, and these contracts might not be renewed on the same or on more profitable terms if at all. Additionally, some of our carrier customers are able to terminate their respective contracts without cause or for convenience, although generally our carrier contracts are only cancellable by the carrier in an instance of our uncured breach. As a result, our ability to grow depends in part on the continuance and renewal of our carrier contracts. We may not be able to accurately predict future trends in customer renewals, and our customers' renewal rates may decline or fluctuate because of several factors, including their level of satisfaction or dissatisfaction with our services, the cost of our services, the cost of services offered by our competitors, consolidations or reductions in our customers' spending levels. If our carrier customers terminate or do not renew their contracts for our services, renew on less favorable terms, or do not purchase additional functionality or products, our revenue may grow more slowly than expected or decline, and our profitability and gross margins may be harmed.

A significant amount of our revenue is derived from our largest customers, and any reduction in revenue from any of these customers would reduce our revenue and net income.

Our ten largest customers by revenue accounted for approximately 42%, 42% and 43% of our consolidated revenue in each of 2018, 2017 and 2016, respectively. Our largest customer by revenue accounted for approximately 13%, 11% and 12% of our revenue in 2018, 2017 and 2016, respectively. In addition, one customer represented 12% of our accounts receivable at December 31, 2017. If any of our large customers or strategic partners decides not to renew its contracts with us, or to renew on less favorable terms, our business, revenues, reputation, and our ability to obtain new customers could be materially and adversely affected.

Failure to adequately and effectively expand our direct sales force will impede our growth.

We believe that our future growth will depend on the development of our direct sales force and its ability to obtain new customers and to manage our existing customer base. Identifying and recruiting qualified personnel and training them in the use of our software requires significant time, expense, and attention. It can take six months or longer before a new sales representative is fully trained and productive. Our business may be adversely affected if our efforts to expand and train our direct sales force do not generate a corresponding increase in revenues. For example, reduction of our sales force in 2016 negatively impacted sales, and as a result, revenue going forward. In particular, if we are unable to hire and develop sufficient numbers of productive direct sales personnel or if new direct sales personnel are unable to achieve desired productivity levels in a reasonable period of time, sales of our products and services will suffer and our growth will be impeded.

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

In order to grow our business, we anticipate that we will continue to depend on our relationships with third parties including resellers such as Mercer Health and Benefits LLC, or Mercer, and SAP SE, and other referral sources such as brokers, consultants, specialty benefits providers, insurance carriers, technology and content providers, and third-party system integrators. Identifying partners, negotiating and documenting relationships with them, and developing referral sources requires significant time and resources. Our expanded relationship with and February 2015 sale of stock to Mercer increases our reliance on it and related risks, including Mercer's competitors being less likely to do business with us. Our competitors might be effective in providing incentives to third parties to favor their products or services or to prevent or reduce subscriptions to our products and services. In addition, acquisitions of our partners by our competitors could result in a decrease in the number of our current and potential customers, as our partners may no longer facilitate the adoption of our applications by potential customers. If we are unsuccessful in establishing or maintaining our relationships with third parties, our ability to compete in the marketplace or to grow our revenue could be impaired and our operating results may suffer. Even if we are successful, we cannot assure you that these relationships will result in increased customer use of our applications or increased revenue.

If the number of individuals covered by our employer and carrier customers decreases or the number of products or services to which our employer and carrier customers subscribe or their employees purchase decreases, our revenue will decrease.

Under most of our customer contracts, we base our fees on the number of individuals to whom our customers provide benefits and the number of products or services subscribed to by our customers or purchased by their employees. Many factors may lead to a decrease in the number of individuals covered by our customers and the number of products or services subscribed to by our customers, including:

- failure of our customers to adopt or maintain effective business practices;
- changes in the nature or operations of our customers;
- government regulations; and
- increased competition or other changes in the benefits marketplace.

If the number of individuals covered by our customers or the number of products or services subscribed to by our customers decreases for any reason, our revenue will likely decrease.

Failure to manage our continued growth effectively could increase our expenses, decrease our revenue, and prevent us from implementing our business strategy.

We have been experiencing continued growth, which could put a strain on our business. To manage this and our anticipated future growth effectively, we must continue to maintain and enhance our IT infrastructure, financial and accounting systems, and controls. We also must attract, train, and retain a significant number of qualified sales and marketing personnel, customer support personnel, professional services personnel, software engineers, technical personnel, and management personnel. Failure to effectively manage our growth could lead us to over-invest or under-invest in development and operations, result in weaknesses in our infrastructure, systems, or controls, give rise to operational mistakes, losses, loss of productivity or business opportunities, and result in loss of employees and reduced productivity of remaining employees. Our growth could require significant capital expenditures and might divert financial resources from other projects such as the development of new products and services. If our management is unable to effectively manage our growth, our expenses might increase more than expected, our revenue could decline or might grow more slowly than expected, and we might be unable to implement our business strategy. The quality of our products and services might suffer, which could negatively affect our reputation and harm our ability to retain and attract customers.

Economic uncertainties or downturns in the general economy or the industries in which our customers operate could disproportionately affect the demand for our solutions and negatively impact our results of operations.

General worldwide economic conditions have experienced significant downturns in the past, and market volatility and uncertainty remain widespread, including as a result of statements and actions of the current U.S. presidential administration. All of this makes it extremely difficult for our customers and us to accurately forecast and plan future business activities. In addition, these conditions could cause our customers or prospective customers to decrease headcount, benefits, or HR budgets, which could decrease corporate spending on our products and services, resulting in delayed and lengthened sales cycles, a decrease in new customer acquisition, and/or loss of customers. Furthermore, during challenging economic times, our customers may have difficulty gaining timely access to sufficient credit or obtaining credit on reasonable terms, which could impair their ability to make timely payments to us and adversely affect our revenue. If that were to occur, our financial results could be harmed. Further, challenging economic conditions might impair the ability of our customers to pay for the products and services they already have purchased from us and, as a result, our write-offs of accounts receivable could increase. We cannot predict the timing, strength, or duration of any economic slowdown or recovery. If the condition of the general economy or markets in which we operate worsens, our business could be harmed.

If we fail to maintain awareness of our brand cost-effectively, our business might suffer.

We believe that maintaining awareness of our brand in a cost-effective manner is critical to continuing the widespread acceptance of our existing solutions and is an important element in attracting new customers. 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. Our efforts to build, maintain and market changes to our brand nationally 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 incur in maintaining our brand. If we fail to successfully maintain our brand, or incur substantial expenses in an unsuccessful attempt to maintain our brand, we may fail to attract enough new customers or retain our existing customers to the extent necessary to realize a sufficient return on our brand-building efforts, and our business could suffer.

We might not be able to utilize a significant portion of our net operating loss or other tax credit carryforwards, which could adversely affect our profitability.

As of December 31, 2018, we had federal and state net operating loss carryforwards due to prior period losses, which if not utilized will begin to expire in 2019 for federal and state purposes. We also have South Carolina jobs tax credit and headquarters tax credit carryforwards, which if not utilized will begin to expire in 2020. These tax credit carryforwards could expire unused and be unavailable to offset future income tax liabilities, which could adversely affect our profitability.

In addition, under Section 382 of the Internal Revenue Code of 1986, as amended, or the Code, our ability to utilize net operating loss carryforwards or other tax attributes in any taxable year may be limited if we experience an “ownership change”. A Section 382 “ownership change” generally occurs if one or more stockholders or groups of stockholders who own at least 5% of our stock increase their ownership by more than 50 percentage points over their lowest ownership percentage within a rolling three-year period. Similar rules might apply under state tax laws. Future issuances of our stock could cause an “ownership change”. It is possible that an ownership change, or any future ownership change, could have a material effect on the use of our net operating loss carryforwards or other tax attributes, which could adversely affect our profitability.

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

Our success depends in part on our ability to enforce our intellectual property and other proprietary rights. We rely on a combination of trademark, trade secret, copyright, patent, and unfair competition laws, as well as license and access agreements and other contractual provisions, to protect our intellectual property and other proprietary rights. In addition, we attempt to protect our intellectual property and proprietary information by requiring employees and consultants to enter into confidentiality, noncompetition, and assignment of inventions agreements. Our attempts to protect our intellectual property might be challenged by others or invalidated through administrative process or litigation. While we have a number of patents granted in the United States. and other jurisdictions including China, Japan, Australia, Taiwan, Hong Kong and Canada, as well as a number of applications pending, we might not be able to obtain meaningful patent protection for our software. In addition, if any patents are issued in the future, they might not provide us with any competitive advantages, or might be successfully challenged by third parties. Agreement terms that address non-competition are difficult to enforce in many jurisdictions and might not be enforceable in certain cases. To the extent that our intellectual property and other proprietary rights are not adequately protected, third parties might gain access to our proprietary information, develop and market products or services similar to ours, or use trademarks similar to ours, each of which could materially harm our business. Existing U.S. federal and state intellectual property laws offer only limited protection. Moreover, the laws of other countries in which we might in the future conduct operations or contract for services might afford little or no effective protection of our intellectual property. The failure to adequately protect our intellectual property and other proprietary rights could materially harm our business.

In addition, if we resort to legal proceedings to enforce our intellectual property rights or to determine the validity and scope of the intellectual property or other proprietary rights of others, the proceedings could be burdensome and expensive, even if we were to prevail. Any litigation that is necessary in the future could result in substantial costs and diversion of resources and could have a material adverse effect on our business, operating results or financial condition.

We might be sued by third parties for alleged infringement of their proprietary rights.

The software and Internet industries are characterized by the existence of a large number of patents, trademarks, and copyrights and by frequent litigation based on allegations of infringement or other violations of intellectual property rights. We have received in the past, and might receive in the future, communications from third parties claiming that we have infringed the intellectual property rights of others. Our technologies might not be able to withstand any third-party claims or rights against their use. Any intellectual property claims, with or without merit, could be time-consuming and expensive to resolve, divert management attention from executing our business plan, and require us to pay monetary damages or enter into royalty or licensing agreements. In addition, many of our contracts contain warranties with respect to intellectual property rights, and most require us to indemnify our clients for third-party intellectual property infringement claims, which would increase the cost to us of an adverse ruling on such a claim.

Moreover, any settlement or adverse judgment resulting from such a claim could require us to pay substantial amounts of money or obtain a license to continue to use the software or information that is the subject of the claim, or otherwise restrict or prohibit our use of it. We might not be able to obtain a license on commercially reasonable terms, if at all, from third parties asserting an infringement claim; we might not be able to develop alternative technology on a timely basis, if at all; and we might not be able to obtain a license to use a suitable alternative technology to permit us to continue offering, and our clients to continue using, our affected services. Accordingly, an adverse determination could prevent us from offering our services to others.

Any future litigation against us could be costly and time-consuming to defend.

We may become subject, from time to time, to legal proceedings and claims that arise in the ordinary course of business such as claims brought by our clients in connection with commercial disputes, employment claims made by our current or former associates, or purported securities class actions. Litigation might result in substantial costs and may divert management's attention and resources, which might seriously harm our business, overall financial condition, and operating results. Insurance might not cover such claims, might not provide sufficient payments to cover all the costs to resolve one or more such claims, and might not continue to be available on terms acceptable to us. A claim brought against us that is uninsured or underinsured could result in unanticipated costs, thereby reducing our operating results and leading analysts or potential investors to reduce their expectations of our performance, which could reduce the trading price of our stock.

Acquisitions could prove difficult to integrate, disrupt our business, dilute stockholder value, and adversely affect our operating results and the value of our common stock.

As part of our business strategy, we might acquire, enter into joint ventures with, or make investments in complementary companies, services, and technologies in the future. For example, in February 2019, we acquired certain assets of Connecture, Inc. We spent considerable time, effort, and money pursuing this acquisition, our first in years, and need now to successfully integrate it into our business. Acquisitions and investments involve numerous risks, including:

- difficulties in identifying and acquiring products, technologies or businesses that will help our business;
- difficulties in integrating operations, technologies, services and personnel;
- diversion of financial and managerial resources from existing operations;
- risk of entering new markets in which we have little to no experience; and
- delays in customer purchases due to uncertainty and the inability to maintain relationships with customers of the acquired businesses.

If we fail to properly evaluate acquisitions or investments, we might not achieve the anticipated benefits of any such acquisitions, we might incur costs in excess of what we anticipate, and management resources and attention might be diverted from other necessary or valuable activities.

Future sales to customers outside the United States or with international operations might expose us to risks inherent in international sales which, if realized, could adversely affect our business.

An element of our growth strategy is to expand internationally. Operating in international markets requires significant resources and management attention and will subject us to regulatory, economic, and political risks that are different from those in the United States. Because of our limited experience with international operations, our international expansion efforts might not be successful in creating demand for our products and services outside of the United States or in effectively selling our solutions in the international markets we enter. In addition, we will face risks in doing business internationally that could adversely affect our business, including:

- unstable regional political and economic conditions, such as those caused by statements and actions by the current U.S. presidential administration and the U.K. exit from the European Union;
- the need to localize and adapt our solutions for specific countries, including translation into foreign languages and associated expenses;
- data privacy laws which require that customer data be stored and processed in a designated territory;

- difficulties in staffing and managing foreign operations;
- different pricing environments, longer sales cycles and longer accounts receivable payment cycles and collections issues;
- new and different sources of competition;
- weaker protection for intellectual property and other legal rights than in the United States and practical difficulties in enforcing intellectual property and other rights outside of the United States;
- laws and business practices favoring local competitors;
- compliance challenges related to the complexity of multiple, conflicting and changing governmental laws and regulations, including employment, tax, privacy, and data protection laws and regulations;
- increased financial accounting and reporting burdens and complexities;
- restrictions on the transfer of funds; and
- adverse tax consequences.

If we denominate our international contracts in local currencies, fluctuations in the value of the U.S. dollar and foreign currencies might impact our operating results when translated into U.S. dollars.

If we are required to collect sales and use taxes in additional jurisdictions, we might be subject to liability for past sales and our future sales may decrease.

We might lose sales or incur significant expenses if states successfully impose broader guidelines on state sales and use taxes. A successful assertion by one or more states requiring us to collect sales or other taxes on the licensing of our software or sale of our services could result in substantial tax liabilities for past transactions and otherwise harm our business. In addition, each state has different rules and regulations governing sales and use taxes, and these rules and regulations are subject to varying interpretations that change over time. We review these rules and regulations periodically and, when we believe we are subject to sales and use taxes in a particular state, voluntarily engage state tax authorities in order to determine how to comply with their rules and regulations. We cannot assure you that we will not be subject to sales and use taxes or related penalties for past sales in states where we currently believe no such taxes are required.

Vendors of services, like us, are typically held responsible by taxing authorities for the collection and payment of any applicable sales and similar taxes. If one or more taxing authorities determines that taxes should have, but have not, been paid with respect to our services, we might be liable for past taxes in addition to taxes going forward. Liability for past taxes might also include substantial interest and penalty charges. Our customer contracts typically provide that our customers must pay all applicable sales and similar taxes. Nevertheless, our customers might be reluctant to pay back taxes and might refuse responsibility for interest or penalties associated with those taxes. If we are required to collect and pay back taxes and the associated interest and penalties, and if our clients fail or refuse to reimburse us for all or a portion of these amounts, we will incur unplanned expenses that may be substantial. Moreover, imposition of such taxes on us going forward will effectively increase the cost of our software and services to our customers and might adversely affect our ability to retain existing customers or to gain new customers in the areas in which such taxes are imposed.

Risks Related to Our Products and Services Offerings

If our security measures are breached or fail, and unauthorized persons gain access to customers' and consumers' data, our products and services might be perceived as not being secure, customers and consumers might curtail or stop using our products and services, and we might incur significant liabilities.

Our products and services involve the storage and transmission of customers' and consumers' confidential information, which may include sensitive individually identifiable information that is subject to stringent legal and regulatory obligations. Because of the sensitivity of this information, security features of our software are very important. If our security measures are breached or fail and/or are bypassed as a result of third-party action, inadvertent disclosures through technological or human error (including employee error), malfeasance, hacking, ransomware, social engineering (including phishing schemes), computer viruses, malware, or otherwise, someone might be able to acquire or obtain unauthorized access to our customers' confidential information and/or patient data or other personal information. As a result, our reputation could be damaged, our business might suffer, information might be lost, and we could face damages for contract breach, penalties for violation of applicable laws or regulations, costly litigation or government investigations, and significant costs for remediation and remediation efforts to prevent future occurrences.

In addition, we rely on various third parties, including employers' HR departments, carriers, and other third-party service providers and consumers themselves, as users of our system for key activities to protect and promote the security of our systems and the data and information accessible within them, such as administration of enrollment, consumer status changes, claims, and billing. Our customers might authorize or enable third parties to access their information and data that is stored on our systems. Because we do not control such access, we cannot ensure the complete integrity or security of such data in our systems. On occasion, people have failed to adhere to appropriate data security practices. For example, employers sometimes have failed to terminate the login/password of former employees, or permitted current employees to share login/passwords. When we become aware of such security incidents, we work with employers to terminate inappropriate access and provide additional instruction in order to avoid the reoccurrence of such problems. Although to date these security incidents have not resulted in claims against us or in material harm to our business, failures to perform these activities might result in claims against us, which could expose us to significant expense, legal liability, and harm to our reputation, which might result in loss of business.

Because techniques used to obtain unauthorized access or to sabotage systems change frequently and often are not recognized until launched against a target, we might not be able to anticipate these techniques or to implement adequate preventive measures. If an actual or perceived breach of our security, or the security of third parties that we rely on, occurs, the market perception of the effectiveness of our security measures could be harmed and we could lose sales and customers. Any significant violations of data privacy or security laws could result in the loss of business, litigation and regulatory investigations and penalties or settlements that could damage our reputation and adversely impact our results of operations and financial condition. In addition, our customers might authorize or enable third parties to access their information and data that is stored on our systems. Because we do not control such access, we cannot ensure the complete integrity or security of such data in our systems.

Failure by our customers to obtain proper permissions and waivers might result in claims against us or may limit or prevent our use of data, which could harm our business.

We require our customers to provide necessary notices and to obtain necessary permissions and waivers for use and disclosure of information on the Benefitfocus Platform, and we require contractual assurances from them that they have done so and will do so. If, however, despite these requirements and contractual obligations, our customers do not obtain necessary permissions and waivers, then our use and disclosure of information that we receive from them or on their behalf might be limited or prohibited by state or federal privacy laws or other laws. This could impair our functions, processes and databases that reflect, contain, or are based upon such data and might prevent use of such data. In addition, this could interfere with, or prevent creation or use of, rules, analyses, or other data-driven activities that benefit us and our business. Moreover, we might be subject to claims or liability for use or disclosure of information by reason of lack of valid notices, agreements, permissions or waivers. These claims or liabilities could subject us to unexpected costs and adversely affect our operating results.

Our proprietary software might not operate properly, which could damage our reputation, give rise to claims against us, or divert application of our resources from other purposes, any of which could harm our business and operating results.

Proprietary software development is time-consuming, expensive, and complex. Unforeseen difficulties can arise. We might encounter technical obstacles, and it is possible that we discover problems that prevent our proprietary applications from operating properly. If they do not function reliably or fail to achieve customer expectations in terms of performance, customers could assert liability claims against us and/or attempt to cancel their contracts with us. This could damage our reputation and impair our ability to attract or maintain customers.

Moreover, benefits management software as complex as ours has in the past contained, and may in the future contain, or develop, undetected defects or errors. Material performance problems or defects in our products and services might arise in the future. Errors might result from the interface of our services with legacy systems and data, which we did not develop and the function of which is outside of our control. Defects or errors might arise in our existing or new software or service processes. Because changes in employer, carrier, and legal requirements and practices relating to benefits are frequent, we are continuously discovering defects and errors in our software and service processes compared against these requirements and practices. Undiscovered vulnerabilities could expose our software to unscrupulous third parties who develop and deploy software programs that could attack our software or result in unauthorized access to, acquisition of, or disclosure of customer data. Defects and errors and any failure by us to identify and address them could result in loss of revenue or market share, liability to customers or others, failure to achieve market acceptance or expansion, diversion of development and other resources, injury to our reputation, and increased service and maintenance costs. Defects or errors in our product or service processes might discourage existing or potential customers from purchasing services from us. Correction of defects or errors could prove to be impossible or impracticable. The costs incurred in correcting any defects or errors or in responding to resulting claims or liability might be substantial and could adversely affect our operating results.

In addition, customers that rely on our products and services to collect, manage, and report benefits data might have a greater sensitivity to service errors and security vulnerabilities than customers of software products in general. We market and sell services that, among other things, provide information to assist care providers in tracking and treating ill patients. Any operational delay in or failure of our software service processes might result in the disruption of patient care and could cause harm to our business and operating results.

Our customers might assert claims against us in the future alleging that they suffered damages due to a defect, error, or other failure of our product or service processes. A product liability claim or errors or omissions claim could subject us to significant legal defense costs and adverse publicity regardless of the merits or eventual outcome of such a claim.

Various events could interrupt customers' access to the Benefitfocus Platform, exposing us to significant costs.

The ability to access the Benefitfocus Platform is critical to our customers. Our operations and facilities are vulnerable to interruption and/or damage from a number of sources, many of which are beyond our control, including, without limitation: (i) power loss and telecommunications failures, (ii) fire, flood, hurricane, and other natural disasters, (iii) software and hardware errors, failures or crashes in our own systems or in other systems, (iv) computer viruses, denial-of-service attacks, hacking and similar disruptive problems in our own systems and in other systems, and (v) civil unrest, war, and/or terrorism. We have implemented various measures to protect against interruptions of customers' access to our platform. If customers' access is interrupted because of problems in the operation of our facilities, we could be exposed to significant claims by customers, particularly if the access interruption is associated with problems in the timely delivery of funds due to customers or medical information relevant to patient care. Our plans for disaster recovery and business continuity rely on third-party providers of related services. If those vendors fail us at a time when our systems are not operating correctly, we could incur a loss of revenue and liability for failure to fulfill our obligations. Any significant instances of system downtime could negatively affect our reputation and ability to retain customers and sell our services, which would adversely impact our revenue.

In addition, retention and availability of patient care and physician reimbursement data are subject to federal and state laws governing record retention, accuracy, and access. Some laws impose obligations on our customers and on us to produce information for third parties and to amend or expunge data at their direction. Our failure to meet these obligations might result in liability, which could increase our costs and reduce our operating results.

We rely on data center providers, Internet infrastructure, bandwidth providers, third-party computer hardware and software, other third parties, and our own systems for providing services to our customers, and any failure or interruption in the services provided by these third parties or our own systems could expose us to litigation and negatively impact our relationships with customers, adversely affecting our brand and our business.

We serve all our customers from two data centers, one located in Raleigh, North Carolina and the other located in Charlotte, North Carolina. While we control and have access to our servers, we do not control the operation of these facilities. The owners of our data center facilities have no obligation to renew their agreements with us on commercially reasonable terms, or at all. If we are unable to renew these agreements on commercially reasonable terms, or if one of our data center operators is acquired, we may be required to transfer our servers and other infrastructure to new data center facilities, and we may incur significant costs and possible service interruption in connection with doing so. Problems faced by our third-party data center locations, with the telecommunications network providers with whom we or they contract, or with the systems by which our telecommunications providers allocate capacity among their customers, including us, could adversely affect the experience of our customers. Our third-party data centers operators could decide to close their facilities without adequate notice. In addition, any financial difficulties, such as bankruptcy faced by our third-party data centers operators or any of the service providers with whom we or they contract may have negative effects on our business, the nature and extent of which are difficult to predict.

In addition, our ability to deliver our web-based services depends on the development and maintenance of the infrastructure of the Internet by third parties. This includes maintenance of a reliable network backbone with the necessary speed, data capacity, bandwidth capacity, and security. Our services are designed to operate without interruption in accordance with our service level commitments. However, we have experienced and expect that we will experience future interruptions and delays in services and availability from time to time. In the event of a catastrophic event with respect to one or more of our systems, we may experience an extended period of system unavailability, which could negatively impact our relationship with customers. To operate without interruption, both we and our service providers must guard against:

- damage from fire, power loss, natural disasters and other force majeure events outside our control;
- communications failures;
- software and hardware errors, failures, and crashes;
- security breaches, computer viruses, hacking, denial-of-service attacks, and similar disruptive problems; and
- other potential interruptions.

We also rely on computer hardware purchased or leased and software licensed from third parties in order to offer our services, including software from Oracle Corporation and Microsoft Corporation, and routers and network equipment from Cisco, Dell and Hewlett-Packard Company. This hardware and software is generally commercially available on varying terms. However, it is possible that this hardware and software might not continue to be available on commercially reasonable terms, or at all. Any loss of the right to use any of this hardware or software could result in delays in the provisioning of our services until equivalent technology is either developed by us, or, if available, is identified, obtained and integrated.

We exercise limited control over third-party vendors, which increases our vulnerability to problems with technology and information services they provide. Interruptions in our network access and services might in connection with third-party technology and information services reduce our revenue, cause us to issue refunds to customers for prepaid and unused subscription services, subject us to potential liability, or adversely affect our renewal rates. Although we maintain insurance for our business, the coverage under our policies might not be adequate to compensate us for all losses that may occur. In addition, we might not be able to continue to obtain adequate insurance coverage at an acceptable cost, if at all.

The use of open source software in our products and solutions may expose us to additional risks and harm our intellectual property rights.

Some of our products and solutions use or incorporate software that is subject to one or more open source licenses. Open source software is typically freely accessible, usable, and modifiable. Certain open source software licenses require a user who intends to distribute the open source software as a component of the user's software to disclose publicly part or all of the source code to the user's software. In addition, certain open source software licenses require the user of such software to make any derivative works of the open source code available to others on potentially unfavorable terms or at no cost.

The terms of many open source licenses to which we are subject have not been interpreted by U.S. or foreign courts. Accordingly, there is a risk that those licenses could be construed in a manner that imposes unanticipated conditions or restrictions on our ability to commercialize our solutions. In that event, we could be required to seek licenses from third parties in order to continue offering our products or solutions, to re-develop our products or solutions, to discontinue sales of our products or solutions, or to release our proprietary software code under the terms of an open source license, any of which could harm our business. Further, given the nature of open source software, it may be more likely that third parties might assert copyright and other intellectual property infringement claims against us based on our use of these open source software programs.

While we monitor the use of all open source software in our products, solutions, processes, and technology and try to ensure that no open source software is used in such a way as to require us to disclose the source code to the related product or solution when we do not wish to do so, it is possible that such use may have inadvertently occurred in deploying our proprietary solutions. In addition, if a third-party software provider has incorporated certain types of open source software into software we license from such third party for our products and solutions without our knowledge, we could, under certain circumstances, be required to disclose the source code to our products and solutions. This could harm our intellectual property position and our business, results of operations, and financial condition.

Risks Related to Regulation

Government regulation of the areas in which we operate creates risks and challenges with respect to our compliance efforts and our business strategies.

The employee benefits industry is highly regulated and is subject to changing political, legislative, regulatory, and other influences. Deregulatory efforts following the 2016 election cycle are ongoing and are likely to continue to impact the regulatory environment in our industry. Existing and new laws and regulations affecting the employee benefits industry could create unexpected liabilities for us, cause us to incur additional costs and restrict our operations. These laws and regulations are complex and their application to specific services and relationships are not clear. In particular, many existing laws and regulations affecting employee benefits, when enacted, did not anticipate the services that we provide, and these laws and regulations might be applied to our services in ways that we do not anticipate. Our failure to accurately anticipate the application of these laws and regulations, or our failure to comply, could create liability for us, result in adverse publicity, and negatively affect our business. Some of the risks we face from the regulation of employee benefits are as follows:

- PPACA. Health benefits are obtained, delivered, accessed, and maintained under an increasingly intricate and uncertain statutory and regulatory framework. In particular, ongoing efforts to repeal part or all of the Patient Protection and Affordable Care Act ("PPACA") have created uncertainty in the healthcare industry broadly. Although many of the provisions of PPACA do not directly apply to us, PPACA and continued efforts to repeal or modify the law may affect the business of many of our customers. For instance, carriers and large employers might experience changes in the numbers of individuals they insure as a result of the elimination of the penalty associated with PPACA's individual mandate, possible repeal of guaranteed issue, and flux in the state and national exchanges under PPACA. Although we are unable to predict with any reasonable certainty or otherwise quantify the likely impact of PPACA and related repeal efforts and deregulatory initiatives on our business model, financial condition, or results of operations, changes in the business of our customers and the number of individuals they insure may negatively impact our business.

- False Claims Act and Related Laws. There are numerous federal and state laws that forbid submission of false information or the failure to disclose certain information in connection with submission and payment of claims for reimbursement from the government. In some cases, these laws also forbid abuse of existing systems for such submission and payment. In addition, federal and state laws prohibit kickbacks in association with the provision of healthcare services. Many of these state laws pertain to all payors, not just items or services paid for by the federal government. Although our business operations are generally not subject to these laws and regulations, any contract we have with a government entity requires us to comply with these laws and regulations. Any failure of our services to comply with these laws and regulations could result in substantial liability, including but not limited to criminal liability, could adversely affect demand for our services, and could force us to expend significant capital, research and development, and other resources to address the failure. Any determination by a court or regulatory agency that our services with government clients violate these laws and regulations could subject us to civil or criminal penalties, invalidate all or portions of some of our government client contracts, require us to change or terminate some portions of our business, require us to refund portions of our services fees, cause us to be disqualified from serving not only government clients but also all clients doing business with government payers, and have an adverse effect on our business.

- HIPAA and Other Privacy and Security Requirements. There are numerous U.S. federal and state laws and regulations related to the privacy and security of personal health information. In particular, regulations promulgated pursuant to the Health Insurance Portability and Accountability Act of 1996, or HIPAA, established privacy and security standards that limit the use and disclosure of protected health information, and require the implementation of administrative, physical, and technological safeguards to ensure the confidentiality, integrity, availability, and privacy of protected health information. Health plans, healthcare clearinghouses, and most providers are "Covered Entities" subject to HIPAA. With respect to our operations as a healthcare clearinghouse, we are directly subject to the privacy regulations established under HIPAA, or the Privacy Rule, and the security regulations established under HIPAA, or the Security Rule. In addition, our carrier customers, or payors, are considered to be Covered Entities and are required to enter into written agreements with us, known as Business Associate Agreements, under which we are considered to be a "Business Associate" and that require us to safeguard protected health information and restrict how we may use and disclose such information. Both Covered Entities and Business Associates are subject to direct oversight and audit by the Department of Health and Human Services.

  Violations of HIPAA might result in civil fines of up to $57,051 per violation and a maximum civil penalty of $1,711,533 in a calendar year for violations of the same requirement, as well as criminal penalties. The U.S. Department of Health and Human Services' Office for Civil Rights

("OCR"), which enforces HIPAA, appears to have increased its enforcement activities. OCR also operates a formal HIPAA audit program. The audits are intended to assess compliance with HIPAA by both Covered Entities and Business Associates and are conducted by OCR with assistance from third-party vendors. Issues identified during the audits may result in agency-imposed corrective action plans or civil monetary penalties. Additionally, state attorneys general may bring civil actions seeking either injunctions or damages in response to violations of HIPAA that threaten the privacy of state residents.

We might not be able to adequately address the business risks created by HIPAA implementation and enforcement. Furthermore, we are unable to predict what changes to HIPAA or other laws or regulations might be made in the future or how those changes could affect our business or the costs of compliance. Noncompliance may result in litigation and high-dollar fines or settlements.

Some payors and clearinghouses interpret HIPAA transaction requirements differently than we do. Where payors or clearinghouses require conformity with their interpretations as a condition of a successful transaction, we seek to comply with their interpretations.

In addition to the Privacy Rule and Security Rule, most states have enacted patient confidentiality laws that protect against the disclosure of confidential medical and/or health information, and many states have adopted or are considering further legislation in this area, including privacy safeguards, security standards, and data security breach notification requirements. Such state laws, if more stringent than HIPAA requirements, are not preempted by the federal requirements, and we are required to comply with them. Failure by us to comply with any state standards regarding patient privacy may subject us to penalties, including civil monetary penalties and, in some circumstances, criminal penalties. Such failure may injure our reputation and adversely affect our ability to retain customers and attract new customers.

- Personal Privacy and Consumer Protection. There are numerous U.S. federal and state laws and regulations that have been adopted or are being considered regarding the collection, retention, use, and disclosure of personal information. In addition to HIPAA, we might be subject to various laws, rules and regulations related to privacy and information security such as those promulgated under the Gramm-Leach-Bliley Act and various state laws regulating the use and security of personal information. Those laws, rules, and regulations include requirements such as reasonable and appropriate safeguards to protect personal information, or providing appropriate notice to consumers about how their personal information will be used or disclosed. In addition, U.S. state legislatures have been actively enacting new laws addressing data security, security breach notification, and privacy, including the California Consumer Privacy Act of 2018. These areas may present implementation challenges and could be an enforcement priority for the state regulators generating increased lawsuits by consumers and other individuals. Our management believes that we are currently operating in compliance with these regulations. However, continued compliance with these evolving laws, rules and regulations regarding the privacy, security and protection of our customers' data, or the implementation of any additional privacy rules and regulations, could result in higher compliance and technology costs for us.

- Medicare and Medicaid Regulatory Requirements. We have contracts with insurance carriers who offer Medicare Managed Care (also known as Medicare Advantage or Medicare Part C) and Medicaid Managed Care benefits plans. We also have contracts with insurance carriers who offer Medicare prescription drug benefits (also known as Medicare Part D) plans. The activities of the Medicare plans are regulated by the Centers for Medicare & Medicaid Services, or CMS, the federal agency that provides oversight of the Medicare and Medicaid programs. The Medicaid Managed Care plans are regulated by both CMS and the individual states where the plans are offered. Some of the activities that we might perform, such as the enrollment of beneficiaries, may be subject to CMS and/or state regulation, and such regulations may force us to change the way we do business or otherwise restrict our ability to provide services to such plans. Moreover, the regulatory environment with respect to these programs has become, and will likely continue to become, increasingly complex.

- Financial Services-Related Laws and Rules. Financial services and electronic payment processing services are subject to numerous laws, regulations and industry standards, some of which might impact our operations and subject us, our vendors, and our customers to liability as a result of the payment distribution and processing solutions we offer. Although we do not act as a bank, we offer solutions that involve banks, or vendors who contract with banks and other regulated providers of financial services. As a result, we might be impacted by banking and financial services industry laws, regulations, and industry standards, such as licensing requirements, solvency standards, requirements to maintain the privacy and security of nonpublic personal financial information, and Federal Deposit Insurance Corporation deposit insurance limits. In addition, our patient billing and payment distribution and processing solutions might be impacted by payment card association operating rules, certification requirements, and rules governing electronic funds transfers. If we fail to comply with applicable payment processing rules or requirements, we might be subject to fines and changes in transaction fees and may lose our ability to process credit and debit card transactions or facilitate other types of billing and payment solutions. Moreover, payment transactions processed using the Automated Clearing House are subject to network operating rules promulgated by the National Automated Clearing House Association and to various federal laws regarding such operations, including laws pertaining to electronic funds transfers, and these rules and laws might impact our billing and payment solutions. Further, our solutions might impact the ability of our payor customers to comply with state prompt payment laws. These laws require payors to pay healthcare claims meeting the statutory or regulatory definition of a “clean claim” within a specified time frame.

- Insurance Broker Laws. Insurance laws in the United States are often complex, and states have broad authority to adopt regulations regarding brokerage activities. Our business's regulatory oversight generally also includes activity governing the selection and payment of insurance products and the licensing of insurance brokers and our wholly owned subsidiary, BenefitStore, Inc., is an insurance agency. Our continuing ability to provide insurance brokerage related services in the jurisdictions in which we operate depends on our compliance with the rules and regulations promulgated from time to time by the regulatory authorities in each of these jurisdictions.

- ERISA. The Employee Retirement Income Security Act of 1974, as amended, or ERISA, regulates how employee benefits are provided to or through certain types of employer-sponsored health benefits plans. ERISA is a set of laws and regulations that is subject to periodic interpretation by the U.S. Department of Labor as well as the federal courts. In some circumstances, and under certain customer contracts, we might be deemed to have assumed duties that make us an ERISA fiduciary, and thus be required to carry out our operations in a manner that complies with ERISA in all material respects. We believe that our current operations do not render us subject to ERISA fiduciary obligations, and therefore that we are in material compliance with ERISA and that any such compliance does not currently have a material adverse effect on our operations. However, there can be no assurance that continuing ERISA compliance efforts or any future changes to ERISA will not have a material adverse effect on us.

- Third-Party Administrator Laws. Numerous states in which we do business have adopted regulations governing entities engaged in third-party administrator, or TPA, activities. TPA regulations typically impose requirements regarding enrollment into benefits plans, claims processing and payments, and the handling of customer funds. Although we do not believe we are currently acting as a TPA, changes in state regulations could result in us being obligated to comply with such regulations, which might require us to obtain licenses to provide TPA services in such states.

We are subject to banking regulations that may limit our business activities.

The Goldman Sachs Group, affiliates of which owned approximately 11.8% of the voting and economic interest in our business at December 31, 2018, is regulated as a bank holding company and a financial holding company under the Bank Holding Company Act of 1956, as amended, or BHC Act. The BHC Act imposes regulations and requirements on The Goldman Sachs Group and on any company that is deemed to be controlled by The Goldman Sachs Group under the BHC Act and the regulations of the Board of Governors of the Federal Reserve System, or the Federal Reserve. Due to the size of its voting and economic interest, we might still be deemed to be controlled by The Goldman Sachs Group and are therefore considered to be a non-bank “subsidiary” of The Goldman Sachs Group under the BHC Act. We will remain subject to this regulatory regime until The Goldman Sachs Group is no longer deemed to control us for purposes of the BHC Act, which we do not generally have the ability to control and which will not occur until The Goldman Sachs Group has significantly reduced its voting and economic interest in us.

As a controlled non-bank subsidiary of The Goldman Sachs Group, we are restricted from engaging in activities that are not permissible under the BHC Act, or the rules and regulations promulgated thereunder. Permitted activities for a bank holding company or any controlled non-bank subsidiary generally include activities that the Federal Reserve has previously determined to be closely related to banking, financial in nature or incidental or complementary to financial activities, including data processing services such as those that we provide with our software solutions. Restrictions placed on The Goldman Sachs Group as a result of supervisory or enforcement actions under the BHC Act or otherwise may restrict us or our activities in certain circumstances, even if these actions are unrelated to our conduct or business. Further, as a result of being subject to regulation and supervision by the Federal Reserve, we may be required to obtain the prior approval of the Federal Reserve before engaging in certain new activities or businesses, whether organically or by acquisition. The Federal Reserve could exercise its power to restrict us from engaging in any activity that, in the Federal Reserve’s opinion, is unauthorized or constitutes an unsafe or unsound business practice. To the extent that these regulations impose limitations on our business, we could be at a competitive disadvantage because some of our competitors are not subject to these limitations.

Additionally, any failure of The Goldman Sachs Group to maintain its status as a financial holding company could result in further limitations on our activities and our growth. In particular, our permissible activities could be restricted to only those that constitute banking or activities closely related to banking. The Goldman Sachs Group’s loss of its financial holding company status could be caused by several factors, including any failure by The Goldman Sachs Group’s bank subsidiaries to remain sufficiently capitalized, by any examination downgrade of one of The Goldman Sachs Group’s bank subsidiaries, or by any failure of one of The Goldman Sachs Group’s bank subsidiaries to maintain a satisfactory rating under the Community Reinvestment Act. In addition, The Goldman Sachs Group is required to remain “well capitalized” and “well managed” in order to maintain its status as a financial holding company. We have no ability to prevent such occurrences from happening.

As a non-bank subsidiary of a bank holding company, we are subject to examination by the Federal Reserve and required to provide information and reports for use by the Federal Reserve under the BHC Act. In addition, we may be subject to regulatory oversight and examination because we are a technology service provider to regulated financial institutions. The Federal Reserve may also impose substantial fines and other penalties for violations of applicable banking laws, regulations and orders. Further, The Dodd-Frank Act, including the Volcker Rule, and related financial regulatory reform has resulted in the issuance of numerous regulations designed to increase and strengthen the regulation of bank holding companies, including The Goldman Sachs Group and its affiliates. The Volker Rule, in relevant part, restricts banking entities from proprietary trading (subject to certain exemptions) and from acquiring or retaining any equity, partnership or other interests in, or sponsoring, a private equity fund, subject to satisfying certain conditions, and from engaging in certain transactions with funds.

We have agreed to certain covenants that are intended to facilitate The Goldman Sachs Group’s compliance with the BHC Act, but that may impose certain obligations on our company. In particular, The

Goldman Sachs Group has rights to conduct audits on, and access certain information of, our company and certain rights to review the policies and procedures that we implement to comply with the laws and regulations that relate to our activities. In addition, we are obligated to provide The Goldman Sachs Group with notice of certain events and business activities and cooperate with The Goldman Sachs Group to mitigate potential adverse consequences resulting therefrom.

Potential regulatory requirements placed on our software, services, and content could impose increased costs on us, delay or prevent our introduction of new service types, and impair the function or value of our existing service types.

Our products and services are and are likely to continue to be subject to increasing regulatory requirements in a number of ways. As these requirements proliferate, we must change or adapt our products and services to comply. Changing regulatory requirements might render our services obsolete or might block us from accomplishing our work or from developing new services. This might in turn impose additional costs upon us to comply or to further develop our products and services. It might also make introduction of new product or service types more costly or more time-consuming than we currently anticipate. It might even prevent introduction by us of new products or services or cause the continuation of our existing products or services to become unprofitable or impossible.

Potential government subsidy of services similar to ours, or creation of a single payor system, might reduce customer demand.

Recently, entities including brokers and U.S. federal and state governments have offered to subsidize adoption of online benefits platforms or clearinghouses. In addition, federal regulations have been changed to permit such subsidy from additional sources subject to certain limitations. To the extent that we do not qualify or participate in such subsidy programs, demand for our services might be reduced, which may decrease our revenue. In addition, prior proposals regarding healthcare reform have included the concept of creation of a single payor for healthcare insurance. This kind of consolidation of critical benefits activity could negatively impact the demand for our services.

Our services present the potential for embezzlement, identity theft, or other similar illegal behavior by our associates with respect to third parties.

Among other things, certain services offered by us involve collecting payment information from individuals, and this frequently includes check and credit card information. Even though we do not handle direct payments, our services also involve the use and disclosure of personal and business information that could be used to impersonate third parties, commit identity theft, or otherwise gain access to their data or funds. If any of our associates take, convert, or misuse such funds, documents, or data, we could be liable for damages, and our business reputation could be damaged or destroyed. Moreover, if we fail to adequately prevent third parties from accessing personal and/or business information and using that information to commit identity theft, we might face legal liabilities and other losses than can have a negative impact on our business.

Risks Related to Our Indebtedness

We recently incurred substantial indebtedness that may decrease our business flexibility, access to capital and/or increase our borrowing costs, and we may still incur substantially more debt, which may adversely affect our operations and financial results.

In December 2018, we issued $240 million aggregate principal of 1.25% convertible senior notes (the “Notes”) due December 15, 2023, unless earlier repurchased by us or converted by the holder pursuant to their terms. The Notes may limit our ability to borrow additional funds for working capital, capital expenditures, acquisitions or other general business purposes; limit our ability to use our cash flow or obtain additional financing for future working capital, capital expenditures, acquisitions or other general business purposes; require us to use a substantial portion of our cash flow from operations to make debt service payments; limit our flexibility to plan for or react to, changes in our business and industry; place us at a competitive disadvantage compared to our less leveraged competitors; and increase our vulnerability to the impact of adverse economic and industry conditions. Further, the indenture governing the Notes does not restrict our ability to incur additional indebtedness and we and our subsidiaries may incur substantial additional indebtedness in the future, subject to the restrictions contained in any future debt instruments existing at the time, some of which may be secured indebtedness.

Servicing our debt requires a significant amount of cash, and we might not have or be able to obtain sufficient cash to pay our substantial debt.

As of December 31, 2018, we had $240 million aggregate principle of Notes outstanding. We also had the ability to borrow an aggregate of $77.3 million under our current credit facility, all of which would be secured debt. Our ability to make scheduled payments of the principal of, to pay interest on or to refinance our indebtedness, depends on our future performance, which is subject to economic, financial, competitive and other factors beyond our control. Our business might not continue to generate cash flow from operations in the future sufficient to service our debt timely. In addition, our ability to repurchase or to pay cash upon conversion of the Notes may be limited by law, regulatory authority or agreements governing our future indebtedness. If we are unable to generate sufficient cash to service our debt, we may be required to adopt one or more alternatives, such as selling assets, restructuring debt or obtaining additional equity capital on terms that may be onerous or highly dilutive. In addition, our ability to refinance our indebtedness will depend on the capital markets and our financial condition at such time. We might not be able to engage in any of these activities or engage in these activities on desirable terms, which could result in a default and acceleration of our debt obligations.

The conditional conversion feature of the Notes, if triggered, and any required repurchase of the Notes may adversely affect our financial condition and operating results.

In the event any conditional conversion feature of the Notes is triggered, holders of the Notes will be entitled to convert the Notes at any time during specified periods at their option. In addition, holders of the Notes have the right to require us to repurchase their Notes upon the occurrence of a fundamental change. If one or more holders elect to convert their Notes (and unless we elect to satisfy our conversion obligation by delivering solely shares of our common stock, other than paying cash in lieu of delivering any fractional share), or if we are required to repurchase the Notes due to a fundamental change, we would be required to settle a portion or all of our conversion obligation through the payment of cash or repurchase the Notes with cash, both of which could adversely affect our liquidity. In addition, even if holders do not elect to convert their Notes upon a conditional conversion feature being triggered, we could be required under applicable accounting rules to reclassify all or a portion of the outstanding principal of the Notes as a current rather than long-term liability, which would result in a material reduction of our net working capital.

The Notes are effectively subordinated to our secured debt and any liabilities of our subsidiaries.

The Notes rank senior in right of payment to any of our indebtedness that is expressly subordinated in right of payment to the Notes; equal in right of payment to any of our liabilities that are not so subordinated; effectively junior in right of payment to any of our senior, secured indebtedness to the extent of the value of the assets securing such indebtedness; and structurally junior to all indebtedness and other liabilities (including trade payables) of our subsidiaries. In the event of our bankruptcy, liquidation, reorganization or other winding up, our assets that secure debt ranking senior or equal in right of payment to the Notes will be available to pay obligations on the Notes only after the senior, secured debt has been repaid in full from these assets. There might not be sufficient assets remaining to pay amounts due on any or all of the Notes then outstanding. The indenture governing the Notes does not prohibit us from incurring additional senior debt or secured debt, nor does it prohibit any of our subsidiaries from incurring additional liabilities. All or indebtedness, including the Notes, must be repaid before our stockholders would receive anything in a liquidation.

If we fail to meet our current credit facility's financial covenants, our business and financial condition could be adversely affected.

Our current credit facility contains financial covenants, including covenants related to financial liquidity and EBITDA. If at any point we fail to comply with the financial covenants, the lenders can demand immediate repayment of our outstanding balance and deny future borrowings under the credit facility. This could have a negative impact on our liquidity, thereby reducing the availability of cash flow for other purposes and adversely affecting our business.

We may still incur substantially more debt or take other actions that would diminish our ability to make payments on the Notes when due.

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

The conversion of the Notes will 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 the Notes will dilute the ownership interests of existing stockholders to the extent we deliver shares of our common stock upon conversion of the Notes. The Notes may become in the future convertible at the option of the holders of the Notes prior to December 15, 2023 under certain circumstances as provided in the indenture governing the Notes. Any sales in the public market of the common stock issuable upon such conversion 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.

The capped call transactions we entered into in connection with the issuance of the Notes might not turn out to be effective in reducing dilution, and might adversely affect the value of our common stock.

In connection with the Notes, we paid approximately $33 million to enter into capped call transactions with certain purchasers or their affiliates (the "Option Counterparties"). The capped call transactions are expected generally to reduce the potential dilution upon conversion of the Notes and/or offset any cash payments we are required to make in excess of the principal amount of converted Notes, as the case may be, with such reduction and/or offset subject to a cap. If our stock is above $89.98 per share upon conversion of the Notes, the capped calls will not completely eliminate the dilution from Note conversion. Furthermore, if our stock price is less than $53.17 upon conversion of the Notes, the capped calls will have no effect and we will get no benefit from the cash we paid to enter into the capped calls.

In connection with establishing their initial hedges of the capped call transactions, the Option Counterparties entered into various derivative transactions with respect to our common stock. This activity could have increased (or reduced the size of any decrease in) the market price of our common stock or the Notes at that time.

In addition, the Option Counterparties may modify their hedge positions by entering into or unwinding derivatives with respect to our common stock and/or purchasing or selling our common stock or other securities of ours in secondary market transactions prior to the maturity of the Notes (and are likely to do so during any observation period related to a conversion of Notes or following any repurchase of Notes by us on any fundamental change repurchase date or otherwise). This activity could also cause or avoid an increase or decrease in the price of our common stock or the Notes.

The potential effect, if any, of these transactions and activities on the price of our common stock or the Notes will depend in part on the market conditions and cannot be ascertained at this time. Any of these activities could adversely affect the value of our common stock.

The accounting method for convertible debt securities that may be settled in cash, such as the Notes, could have a material effect on our reported financial results.

In May 2008, the Financial Accounting Standards Board ("FASB") issued Staff Position No. APB 14-1, Accounting for Convertible Debt Instruments That May Be Settled in Cash Upon Conversion (Including Partial Cash Settlement), which has subsequently been codified as ASC 470-20, Debt with Conversion and Other Options. Under ASC 470-20, an entity must separately account for the liability and equity components of the convertible debt instruments (such as the Notes) that may be settled entirely or partially in cash upon conversion in a manner that reflects the issuer's economic interest cost. The effect of ASC 470-20 on the accounting for the Notes is that the equity component is required to be included in the additional paid-in capital section of stockholders' equity on our consolidated balance sheet, and the value of the equity component would be treated as original issue discount for purposes of accounting for the debt component of the Notes. As a result, we will be required to record a greater amount of non-cash interest expense in current periods presented as a result of the amortization of the discounted carrying value of the Notes to their face amount over the term of the Notes. We will report lower net income in our financial results because ASC 470-20 will require interest to include both the current period's amortization of the debt discount and the instrument's coupon interest, which could adversely affect our reported or future financial results, the trading price of our common stock and the trading price of the Notes.

In addition, under certain circumstances, convertible debt instruments (such as the Notes) that may be settled entirely or partly in cash are currently accounted for utilizing the treasury stock method, the effect of which is that the shares issuable upon conversion of the Notes are not included in the calculation of diluted earnings per share except to the extent that the conversion value of the Notes exceeds their principal amount. Under the treasury stock method, for diluted earnings per share purposes, the transaction is accounted for as if the number of shares of common stock that would be necessary to settle such excess, if we elected to settle such excess in shares, are issued. We cannot be sure that the accounting standards in the future will continue to permit the use of the treasury stock method. If we are unable to use the treasury stock method in accounting for the shares issuable upon conversion of the Notes, then our diluted earnings per share would be adversely affected.

Risks Related to Ownership of Our Common Stock

Our stock price may be volatile or may decline regardless of our operating performance, and you may not be able to resell your shares at or above the price at which you purchase it.

The stock market historically has experienced extreme price and volume fluctuations. As a result of this volatility, you might not be able to sell your common stock at or above the price at which you purchase it. From our IPO in September 2013 through December 31, 2018, the per share trading price of our common stock has been as high as $77.00 and as low as $19.58. It might continue to fluctuate significantly in response to various factors, some of which are beyond our control. These factors include:

- our operating performance and the operating performance of similar companies;
- the overall performance of the equity markets;
- changes in laws or regulations relating to the sale of health insurance;
- announcements by us or our competitors of acquisitions, business plans, or commercial relationships;
- any major change in our management;
- threatened or actual litigation;
- publication of research reports or news stories about us, our competitors, or our industry, or positive or negative recommendations or withdrawal of research coverage by securities analysts;
- large volumes of sales of our shares of common stock by existing stockholders; and
- general political and economic conditions.

In addition, the stock market in general, and the market for Internet-related companies in particular, has experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of those companies. These fluctuations might be even more pronounced in the relatively new trading market for our stock. Additionally, securities class action litigation has often been instituted against companies following periods of volatility in the overall market and in the market price of a company's securities. This litigation, if instituted against us, could result in substantial costs, divert our management's attention and resources, and harm our business, operating results, and financial condition.

Conversion of the Notes will 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 the convertible Notes will dilute the ownership interests of existing stockholders to the extent we deliver shares upon conversion of any of the Notes. The Notes may become in the future convertible at the option of their holders prior to their scheduled terms under certain circumstances. Any sales in the public market of the common stock issuable upon such conversion 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.

The capped call transactions entered into when we issued the convertible notes may affect the value of our common stock.

In connection with the pricing of the Notes, we entered into capped call transactions with the option counterparties. The capped call transactions are expected generally to reduce the potential dilution upon conversion of the Notes and/or offset any cash payments we are required to make in excess of the principal amount of converted Notes, as the case may be, with such reduction and/or offset subject to a cap. In connection with establishing their initial hedges of the capped call transactions, the option counterparties or their respective affiliates entered into various derivative transactions with respect to our common stock concurrently with or shortly after the pricing of the Notes. The option counterparties or their respective affiliates may modify their hedge positions by entering into or unwinding derivatives with respect to our common stock and/or purchasing or selling our common stock or other securities of ours in secondary market transactions prior to the maturity of the Notes (and are likely to do so during any observation period related to a conversion of Notes). This activity could cause or avoid an increase or a decrease in the market price of our common stock. The capped call transactions may affect the value of the Notes and our common stock.

Our stock price could decline due to the large number of outstanding shares of our common stock and those underlying the Notes eligible for future sale.

Sales of a substantial number of shares of our common stock in the public market or the market perception that such sales and issuances may occur could reduce the market price of our common stock and impair our ability to raise capital through the sale of additional common stock or equity-linked securities at a time and price that we deem appropriate.

As of December 31, 2018, we had an aggregate of 32,017,773 shares of common stock outstanding. As of December 31, 2018, there also were outstanding options and restricted stock units to purchase 2,407,497 shares of our common stock that, if exercised or vested, as applicable, will result in these additional shares becoming available for sale subject in some cases to Rule 144. We have also registered an aggregate of 9,099,766 shares of our common stock that we may issue or sell under our stock plans. These shares can be freely sold in the public market upon issuance, unless they are held by "affiliates", as that term is defined in Rule 144 of the Securities Act. In addition, a substantial number of shares of our common stock is reserved for issuance upon conversion of the Notes. If a large number of these shares are sold in the public market, the sales could reduce the trading price of our common stock.

We might require additional capital to support business growth.

We intend to continue to make investments to support our business growth and might require additional funds to respond to business challenges or opportunities, including the need to develop new products and services or enhance our existing services, enhance our operating infrastructure, and acquire complementary businesses and technologies. Accordingly, we might need to engage in equity or additional debt financings to secure additional funds. If we raise additional funds through further issuances of equity or convertible 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 additional debt financing secured by us could involve restrictive covenants relating to our capital-raising activities and other financial and operational matters, which might make it more difficult for us to obtain additional capital and to pursue business opportunities, including potential acquisitions. In addition, we might 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 limited.

We do not currently intend to pay dividends on our common stock and, consequently, your ability to achieve a return on your investment will depend on appreciation in the price of our common stock.

We have never declared or paid any cash dividends on our common stock and do not currently intend to do so for the foreseeable future. We currently intend to invest our future earnings, if any, to fund our growth. Therefore, you are not likely to receive any dividends on your common stock for the foreseeable future, and the success of an investment in shares of our common stock will depend upon future appreciation in its value, if any. There is no guarantee that shares of our common stock will appreciate in value or even maintain the price at which our stockholders purchased their shares.

A limited number of stockholders will have the ability to influence the outcome of director elections and other matters requiring stockholder approval.

As of December 31, 2018, our directors, executive officers, and their affiliated entities beneficially owned approximately 21.1% of our outstanding common stock. In particular, GS Capital Partners VI Parallel, L.P., GS Capital Partners VI Offshore Fund, L.P., GS Capital Partners VI Fund, L.P., and GS Capital Partners VI GmbH & Co. KG, which are affiliates of Goldman, Sachs & Co. and which we refer to as the Goldman Funds, collectively beneficially owned approximately 11.8%. These stockholders, if they act together, could exert substantial influence over matters requiring approval by our stockholders, including the election of directors, amendment of our certificate of incorporation and bylaws, and the approval of mergers or other business combination transactions.

Our business is subject to changing regulations regarding corporate governance, disclosure controls, internal control over financial reporting, and other compliance areas that will increase both our costs and the risk of noncompliance.

As a public company, we are subject to the reporting requirements of the Securities Exchange Act of 1934, or the Exchange Act, the Sarbanes-Oxley Act of 2002, or the Sarbanes-Oxley Act, the Dodd-Frank Act, and the rules and regulations of our stock exchange. The requirements of these rules and regulations increase our legal, accounting, and financial compliance costs, make some activities more difficult, time-consuming, and costly, and may also place undue strain on our personnel, systems, and resources.

The Sarbanes-Oxley Act requires, among other things, that we maintain effective disclosure controls and procedures and internal control over financial reporting. Commencing with our fiscal year ending December 31, 2014, we performed system and process evaluation and testing of our internal control over financial reporting to allow management to report on the effectiveness of our internal control over financial reporting, as required by Section 404 of the Sarbanes-Oxley Act. We also are required to disclose changes made to our internal controls and procedures on a quarterly basis. Our ongoing compliance with Section 404 of the Sarbanes-Oxley Act will require that we incur substantial accounting expense and expend significant management efforts.

In addition, as of December 31, 2018, we no longer qualified as an “emerging growth company” as defined in the Jumpstart Our Business Startups Act of 2012, or the JOBS Act. Accordingly, our independent registered public accounting firm is required to formally attest to the effectiveness of our internal control over financial reporting pursuant to Section 404 of the Sarbanes-Oxley Act in this Annual Report on Form 10-K. We are also required to include additional information regarding executive compensation and include a nonbinding advisory vote on executive compensation in our 2019 proxy statement. These additional reporting requirements, among others, may increase our legal and financial compliance costs and cause management and other personnel to divert attention from operational and other business matters to devote substantial time to public company reporting requirements. In addition, if we are not able to comply with changing legal requirements in a timely manner, the market price of our stock could decline and we could be subject to sanctions or investigations by the stock exchange on which our common stock is listed, the SEC, or other regulatory authorities, which would require additional financial and management resources.

Failure to develop and maintain adequate financial controls could cause us to have material weaknesses, which could adversely affect our operations and financial position.

As previously reported, in the first quarter of 2014, we identified a material weakness in internal controls over the accounting for leasing transactions which resulted in the identification of a material error in the accounting for our headquarters lease executed in May 2005. We might in the future discover other material weaknesses that require remediation. In addition, an internal control system, no matter how well-designed, cannot provide absolute assurance that misstatements due to error or fraud will not occur or that all control issues and instances of fraud will be detected. If we are not able to comply with the requirements of Section 404 of the Sarbanes-Oxley Act in a timely manner, or if we are unable to maintain proper and effective internal controls, we might not be able to produce timely and accurate financial statements. If that were to happen, the market price of our stock could decline and we could be subject to sanctions or investigations by the stock exchange on which our common stock is listed, the SEC, or other regulatory authorities.

Any failure to develop or maintain effective controls, or any difficulties encountered in their implementation or improvement, could harm our operating results or cause us to fail to meet our reporting obligations. Any failure to implement and maintain effective internal controls also could adversely affect the results of periodic management evaluations regarding the effectiveness of our internal control over financial reporting that we are required to include in our periodic reports filed with the SEC under Section 404 of the Sarbanes-Oxley Act. Ineffective disclosure controls and procedures or internal control over financial reporting could also cause investors to lose confidence in our reported financial and other information, which would likely have a negative effect on the trading price of our common stock. Implementing any appropriate changes to our internal controls may require specific compliance training of our directors, officers, and employees, entail substantial costs in order to modify our existing accounting systems, and take a significant period of time to complete. Such changes may not be effective, however, in maintaining the adequacy of our internal controls, and any failure to maintain that adequacy, or consequent inability to produce accurate financial statements on a timely basis, could increase our operating costs and could materially impair our ability to operate our business. In the event that we are not able to demonstrate compliance with Section 404 of the Sarbanes-Oxley Act in a timely manner, that our internal controls are perceived as inadequate, or that we are unable to produce timely or accurate financial statements, investors may lose confidence in our operating results and our stock price could decline.

Provisions in our restated certificate of incorporation and amended and restated bylaws and Delaware law might discourage, delay, or prevent a change in control of our company or changes in our management and, therefore, depress the trading price of our common stock.

Provisions of our certificate of incorporation and bylaws and Delaware law might discourage, delay, or prevent a merger, acquisition, or other change in control that stockholders consider favorable, including transactions in which you might otherwise receive a premium for your shares of our common stock. These provisions might also prevent or frustrate attempts by our stockholders to replace or remove our management. These provisions include:

- limitations on the removal of directors;
- advance notice requirements for stockholder proposals and nominations;
- limitations on the ability of stockholders to call special meetings;
- the inability of stockholders to act by written consent;
- the inability of stockholders to cumulate votes at any election of directors;
- the classification of our board of directors into three classes with only one class, representing approximately one-third of our directors, standing for election at each annual meeting; and
- the ability of our board of directors to make, alter or repeal our bylaws.

Our Board of Directors has the ability to designate the terms of and issue new series of preferred stock without stockholder approval. In addition, Section 203 of the Delaware General Corporation Law prohibits a publicly held Delaware corporation from engaging in a business combination with an interested stockholder, generally a person which together with its affiliates owns, or within the last three years has owned, 15% of our voting stock, for a period of three years after the date of the transaction in which the person became an interested stockholder, unless the business combination is approved in a prescribed manner.

The existence of the foregoing provisions and anti-takeover measures could limit the price that investors are willing to pay in the future for shares of our common stock. They could also deter potential acquirers of our company, thereby reducing the likelihood that you could receive a premium for your common stock in an acquisition.

If securities or industry analysts do not publish research or reports about our business, or publish inaccurate or unfavorable research or reports about our business, our stock price and trading volume could decline.

The trading market for our common stock depends, to some extent, on the research and reports that securities or industry analysts publish about us and our business. We do not have any control over these analysts. If one or more of the analysts who cover us downgrade our common stock or change their opinion of our common stock, our stock price would likely decline. If one or more of these analysts cease coverage of our company or fail to regularly publish reports on us, we could lose visibility in the financial markets, which could cause our stock price or trading volume to decline.

Item 1B. Unresolved Staff Comments.

None.

Item 2. Properties.

As of December 31, 2018, we occupied approximately 289,000 square feet on the Daniel Island Executive Center campus in Charleston, South Carolina. This office space is leased under leases expiring in 2031. As of December 31, 2018, we also leased facilities in Greenville, South Carolina; New York City, New York; Tulsa, Oklahoma; and Salt Lake City, Utah.

We believe that our current and planned facilities are sufficient for our needs. We may add other facilities or expand existing facilities as we expand our associate base and geographic markets in the future, and we believe that suitable additional space will be available as needed to accommodate any such expansion of our operations.

Item 3. Legal Proceedings.

From time to time, we might become involved in legal or regulatory proceedings arising in the ordinary course of our business. We are not currently a party to any material litigation or regulatory proceeding and we are not aware of any pending or threatened litigation or regulatory proceeding against us that could have a material adverse effect on our business, operating results, financial condition or cash flows.

Item 4. Mine Safety Disclosures.

Not applicable.

PART II

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

Market Information for Common Stock

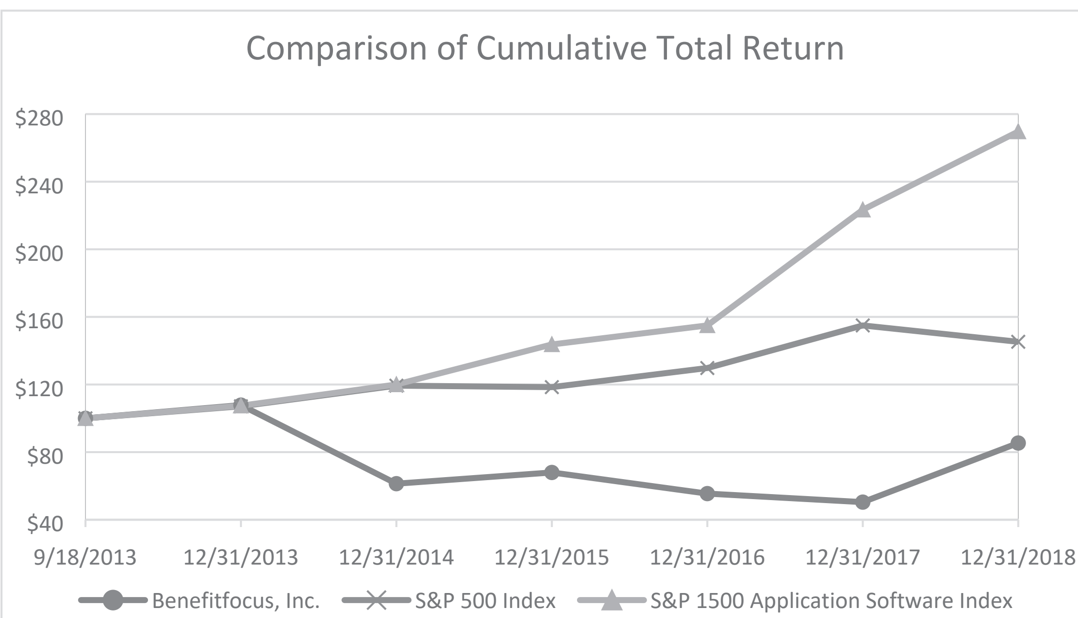
Our common stock has been listed on the Nasdaq Global Market under the symbol "BNFT" since September 18, 2013. Prior to that date, there was no public trading market for our common stock.

As of December 31, 2018, we had 51 holders of record of our common stock. The actual number of stockholders is greater than this number of record holders and includes stockholders who are beneficial owners, but whose shares are held in street name by brokers and other nominees. This number of holders of record also does not include stockholders whose shares may be held in trust by other entities.

Stock Performance Graph

The following shall not be deemed "filed" for purposes of Section 18 of the Exchange Act, or incorporated by reference into any of our other filings under the Exchange Act or the Securities Act of 1933, as amended, except to the extent we specifically incorporate it by reference into such filing.

This chart compares the cumulative total return on our common stock with that of the S&P 500 Index and the S&P 1500 Application Software Index. The chart assumes $100 was invested at the close of market on September 18, 2013, in the common stock of Benefitfocus, Inc., the S&P 500 Index and the S&P 1500 Application Software Index, and assumes the reinvestment of any dividends. The stock price performance on the following graph is not necessarily indicative of future stock price performance.



Company / Index	Base Period 9/18/2013	12/31/2013	12/31/2014	12/31/2015	12/31/2016	12/31/2017	12/31/2018
Benefitfocus, Inc.	$ 100.00	$ 107.82	$ 61.33	$ 67.96	$ 55.46	$ 50.42	$ 85.38
S&P 500 Index	$ 100.00	$ 107.12	$ 119.32	$ 118.45	$ 129.75	$ 154.95	$ 145.28
S&P 1500 Application Software Index	$ 100.00	$ 107.46	$ 120.00	$ 143.70	$ 154.95	$ 223.38	$ 269.66

Equity Compensation Plans

The information required by Item 5 of Form 10-K regarding equity compensation plans is incorporated herein by reference to Part III “Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters”.

Item 6. Selected Financial Data.

CONSOLIDATED SELECTED FINANCIAL DATA

The following selected consolidated financial data for the years December 31, 2018, 2017, 2016, 2015 and 2014 and the selected consolidated balance sheet data as of December 31, 2018, 2017, 2016, 2015, and 2014 are derived from our audited consolidated financial statements. As noted below and discussed elsewhere in this filing, we adopted Topic 606 in 2018 with an effective date of January 1, 2016. Our historical results are not necessarily indicative of the results to be expected in the future. The selected consolidated financial data should be read together with "Management's Discussion and Analysis of Financial Condition and Results of Operations", our consolidated financial statements, related notes, and other financial information included elsewhere in this Annual Report on Form 10-K.

Consolidated Statement of Operations Data

	Year Ended December 31,				
	2018	2017 *as adjusted	2016 *as adjusted	*2015	*2014
	(in thousands, except share and per share data)				
Revenue[1]	$ 258,721	$ 236,842	$ 236,523	$ 185,143	$ 137,420
Cost of revenue[2]	129,277	127,382	123,308	102,851	87,470
Gross profit	129,444	109,460	113,215	82,292	49,950
Operating expenses:					
Sales and marketing[2]	78,179	70,583	56,311	58,589	48,467
Research and development[2]	47,902	49,549	56,610	52,250	41,729
General and administrative[2]	43,062	27,268	32,750	25,727	18,657
Total operating expenses	169,143	147,400	145,671	136,566	108,853
Loss from operations	(39,699)	(37,940)	(32,456)	(54,274)	(58,903)
Total other expense, net	(12,900)	(12,339)	(7,873)	(7,785)	(4,251)
Loss before income taxes	(52,599)	(50,279)	(40,329)	(63,059)	(63,154)
Income tax expense (benefit)	28	15	17	25	25
Net loss	$ (52,627)	$ (50,294)	$ (40,346)	$ (62,084)	$ (63,179)
Net loss per common share--basic and diluted	$ (1.66)	$ (1.62)	$ (1.36)	$ (2.19)	$ (2.51)
Weighted-average common shares outstanding--basic and diluted	31,756,415	31,052,378	29,589,857	28,344,680	25,207,099
Other Financial Data					
Adjusted EBITDA[3]	$ 10,340	$ (4,979)	$ (1,385)	$ (32,160)	$ (43,844)

(1) In the first quarter of 2015, we decreased the estimated expected life of our customer relationships for both employer and carrier customers from 10 to 7 years. This change shortened the term over which we will recognize our deferred revenue and results in more revenue recognized in each period after the change.

(2) Cost of revenue and operating expenses include stock-based compensation expense as follows:

	Year Ended December 31,				
	2018	2017 *as adjusted	2016 *as adjusted	*2015	*2014
	(in thousands)				
Cost of revenue	$ 5,164	$ 2,508	$ 2,799	$ 1,950	$ 986
Sales and marketing	6,764	4,953	3,212	2,861	1,395
Research and development	5,510	2,990	4,533	2,399	1,376
General and administrative	11,430	5,686	7,544	3,244	1,831

(3) We define adjusted EBITDA as net loss before net interest and other expense, taxes, and depreciation and amortization expense, adjusted to eliminate stock-based compensation expense and expense related to the impairment of goodwill and intangible assets, transaction costs

expensed, and costs not core to our business. See "Adjusted EBITDA" below for more information and for a reconciliation of adjusted EBITDA to net loss, the most directly comparable financial measure calculated and presented in accordance with GAAP.

Our Segments

	Year Ended December 31,				
	2018	2017 *as adjusted	2016 *as adjusted	*2015	*2014
			(in thousands)		
Revenue from external customers by segment:					
Employer	$ 169,800	$ 153,481	$ 149,776	$ 94,842	$ 62,016
Carrier	88,921	83,361	86,747	90,301	75,404
Total net revenue from external customers	$ 258,721	$ 236,842	$ 236,523	$ 185,143	$ 137,420
Gross profit by segment					
Employer	$ 75,397	$ 58,347	$ 61,951	$ 33,655	$ 16,186
Carrier	54,047	51,113	51,264	48,637	33,764
Total gross profit by segment	$ 129,444	$ 109,460	$ 113,215	$ 82,292	$ 49,950

Consolidated Balance Sheet Data

	As of December 31,				
	2018	2017 *as adjusted	2016 *as adjusted	*2015	*2014
			(in thousands)		
Cash and cash equivalents	$ 190,928	$ 55,335	$ 56,853	$ 48,074	$ 51,074
Marketable securities	–	–	2,007	40,448	5,135
Accounts receivable, net	21,077	30,091	32,966	29,698	21,311
Total assets	313,939	192,003	216,555	182,119	140,018
Deferred revenue, total	45,863	55,027	56,949	93,529	94,510
Total liabilities	324,149	200,722	194,832	200,128	182,841
Common stock	32	31	30	29	26
Additional paid-in capital	403,631	352,496	332,254	310,304	223,409
Total stockholders' equity (deficit)	(10,210)	(8,719)	21,723	(18,009)	(42,823)

* The summary consolidated financial data for the years ended December 31, 2018, 2017, and 2016 and as of December 31, 2018, 2017, and 2016 reflects the adoption of Accounting Standards Update ("ASU") No. 2014-09, Revenue from Contracts with Customers ("Topic 606"). See Note 2 of the notes to consolidated financial statements for a summary of adjustments. The summary consolidated financial data for the years ended December 31, 2015 and 2014 and as of December 31, 2015 and 2014 does not reflect the adoption of Topic 606.

Adjusted EBITDA

Within this Annual Report on Form 10-K we use adjusted EBITDA to provide investors with additional information regarding our financial results. Adjusted EBITDA is a non-GAAP financial measure. We have provided below a reconciliation of this measure to the most directly comparable GAAP financial measure, which for adjusted EBITDA is net loss.

We have included adjusted EBITDA in this Annual Report on Form 10-K because it is a key measure used by our management and board of directors to understand and evaluate our core operating performance and trends, to prepare and approve our annual budget, and to develop short- and long-term operational plans. In particular, we believe that the exclusion of the expenses eliminated in calculating adjusted EBITDA can provide a useful measure for period-to-period comparisons of our core business. Accordingly, we believe that adjusted EBITDA provides useful information to investors and others in understanding and evaluating our operating results.

Our use of adjusted EBITDA as an analytical tool has limitations, and you should not consider it in isolation or as a substitute for analysis of our financial results as reported under GAAP. Some of these limitations are:

- although depreciation and amortization are non-cash charges, the assets being depreciated and amortized might have to be replaced in the future, and adjusted EBITDA does not reflect cash capital expenditure requirements for such replacements or for new capital expenditure requirements;
- adjusted EBITDA does not reflect changes in, or cash requirements for, our working capital needs;
- adjusted EBITDA does not reflect the potentially dilutive impact of stock-based compensation;
- adjusted EBITDA does not reflect interest or tax payments that would reduce the cash available to us; and
- other companies, including companies in our industry, might calculate adjusted EBITDA or similarly titled measure differently, which reduces their usefulness as comparative measures.

Because of these and other limitations, you should consider adjusted EBITDA alongside other GAAP-based financial performance measures, including various cash flow metrics, gross profit, net loss and our other GAAP financial results. The following table presents a reconciliation of adjusted EBITDA to net loss for each of the periods indicated:

	Year Ended December 31,				
	2018	2017 *as adjusted	2016 *as adjusted	*2015	*2014
	(in thousands)				
Reconciliation from Net Loss to Adjusted EBITDA:					
Net loss	$ (52,627)	$ (50,294)	$ (40,346)	$ (62,084)	$ (63,179)
Depreciation	11,721	12,391	9,959	8,791	6,931
Amortization of software development costs	3,944	3,257	2,857	2,587	2,257
Amortization of acquired intangible assets	150	258	257	286	305
Interest income	(250)	(182)	(138)	(188)	(77)
Interest expense on building lease financing obligations	7,471	7,450	6,826	7,092	3,624
Interest expense on other borrowings	5,685	4,931	1,095	877	682
Income tax expense	28	15	17	25	25
Stock-based compensation expense	28,868	16,137	18,088	10,454	5,588
Transaction costs expensed	507	-	-	560	708
Costs not core to our business	4,843	1,058	-	-	-
Total net adjustments	$ 62,967	$ 45,315	$ 38,961	$ 30,484	$ 20,043
Adjusted EBITDA	$ 10,340	$ (4,979)	$ (1,385)	$ (31,600)	$ (43,136)

* The summary consolidated financial data for the years ended December 31, 2018, 2017, and 2016 and as of December 31, 2018, 2017, and 2016 reflects the adoption of Topic 606. See Note 2 of the notes to consolidated financial statements for a summary of adjustments. The summary consolidated financial data for the years ended December 31, 2015 and 2014 and as of December 31, 2015 and 2014 does not reflect the adoption of Topic 606.

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

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

You should read the following discussion and analysis of our financial condition and results of operations together with our consolidated financial statements and the related notes and other financial information included elsewhere in this Annual Report on Form 10-K. Some of the information contained in this discussion and analysis or set forth elsewhere in this report including information with respect to our plans and strategy for our business, includes forward-looking statements that involve risks and uncertainties. You should review the "Risk Factors" section of this report beginning on page 19 for a discussion of important factors that could cause actual results to differ materially from the results described in or implied by the forward-looking statements contained in the following discussion and analysis.

Overview

Benefitfocus provides a leading cloud-based benefits management platform for consumers, employers, insurance carriers, suppliers and brokers. The Benefitfocus Platform simplifies how organizations and individuals transact benefits. Our employer, carrier and supplier customers rely on our platform to manage, scale and exchange benefits data seamlessly. Our solutions drive value for all participants in our benefits ecosystem.

The Benefitfocus multi-tenant platform has a user-friendly interface designed for consumers to access all of their benefits in one place. Our comprehensive solutions support medical benefit plans and non-medical benefits, such as, dental, life, disability insurance, income protection, digital health and financial wellness. As the number of employer benefits plans has increased, with each plan subject to many different business rules and requirements, demand for the Benefitfocus Platform is growing.

Since our initial public offering, we have described our target market as comprising two separate but related market segments – the employer segment and the insurance carrier segment. Within the employer segment, we sell our technology solutions on an annually recurring or multi-year subscription basis to large employers, which we define as those with more than 1,000 employees. Similarly, in our other market segment, we sell our solutions on a subscription basis to insurance carriers, enabling us to expand our overall footprint in the benefits marketplace by aggregating many key constituents, including consumers, employers, and brokers. We believe our presence in both the employer and insurance carrier segments gives us a strong position at the center of the benefits ecosystem.

In 2018, we expanded our economic model to include a transaction-oriented, marketplace solution, known as BenefitsPlace, that aligns employers, brokers, carriers and suppliers around the needs of consumers on our platform from our employer, carrier and broker connections. In this model, our BenefitsPlace partners sell their voluntary benefit offerings through a holistic, multidimensional marketplace. This marketplace is designed to increase the economic value of the consumer lives on our platform by aligning platform products to consumer needs. In exchange for Benefitfocus delivering consumer access, data-driven analysis and operational efficiencies, BenefitsPlace partners pay us a percentage of the transaction value that is transacted on our platform. BenefitsPlace carrier agreements have terms of two to four years and are typically cancellable upon breach of contract or insolvency. BenefitsPlace supplier contracts have terms of one year or less and are generally cancellable upon breach of contract, failure to cure, bankruptcy and termination for convenience.

We classify our revenue into two streams – software services revenue and professional services revenue. Software services revenue primarily consists of monthly subscription fees and BenefitsPlace transactional revenue. Monthly subscription fees are paid to us by our employer and insurance carrier customers for access to, and usage of, cloud-based benefits software solutions for a specified contract term. Subscription fees are generally charged based on the number of employees or subscribers with access to the solution. Software services revenue also includes BenefitsPlace transactional revenue, which is generated from the value of the policies or products enrolled in through our marketplace. BenefitsPlace carrier revenue is generally recognized over the policy period of the enrolled products. In arrangements where we sell policies to employees of our customers as the broker, we earn insurance broker commissions. Revenue from insurance broker commissions and BenefitsPlace supplier transactions is generally recognized at the time when open enrollment is complete and the orders for policies are transferred to the supplier. Software services revenue accounted for approximately 78%, 78%, and 79% of our total revenue during the years ended December 31, 2018, 2017 and 2016, respectively.

Our professional services revenue stream is largely derived from the implementation of our customers onto our platform, which typically includes discovery, configuration and deployment, integration, testing, and training. We also provide customer support services and customized media content that supports our customers' effort to educate and communicate with consumers. Professional services revenue accounted for approximately 22%, 22%, and 21% of our total revenue during the years ended December 31, 2018, 2017 and 2016, respectively.

Expanding our customer base is a key element of our growth strategy. Historically we have measured our expansion by describing the growth in the number of large employer customers utilizing our solutions, which grew at a 28% compound annual growth rate from 141 as of December 31, 2010 to 1,024 as of December 31, 2018. With the addition of our transactional revenue model, we believe that the number of large employer customers no longer fully describes the revenue opportunity of our customer base. As described in "Key Financial and Operating Performance Metrics" below, we are introducing a new key metric, net benefit eligible lives, and discontinuing disclosure of our current key metric, number of large employer customers.

We believe that our continued innovation and new solutions, such as BenefitsPlace, extend the functionality of our mobile offerings, more robust data analytics capabilities and our ability to quickly respond to evolving market needs with innovative capabilities will help us attract additional net benefit eligible lives to our platform through new employer customers, partners and brokers and increase our revenue from existing customers and relationships.

We believe that there is a substantial market for our services, and we have been investing in growth over the past several years. In particular, we have continued to invest in technology and services to better serve our larger employer customers, which we believe are an important source of growth for our business. We have also substantially increased our marketing and sales efforts and expect those increased efforts to continue. As we have invested in growth, we have had operating losses in each of the last eight years, and expect our operating losses to continue for at least the next year. Due to the nature of our customer relationships, which have been stable in spite of some customer losses over the past years, and our hybrid subscription and transaction-based financial model, we believe that our current investment in growth should lead to substantially increased revenue, which will allow us to achieve profitability in the relatively near future. Of course, our ability to achieve profitability will continue to be subject to many factors beyond our control.

Key Financial and Operating Performance Metrics

We regularly monitor a number of financial and operating metrics in order to measure our current performance and project our future performance. These metrics help us develop and refine our growth strategies and make strategic decisions. We discuss revenue, gross margin, and the components of operating loss, as well as segment revenue and segment gross profit, in "Management's Discussion and Analysis of Financial Condition and Results of Operations—Components of Operating Results". In addition, we utilize other key metrics as described below.

In 2018, we expanded our economic model to include BenefitsPlace, our transaction-oriented, marketplace solution. We describe this strategy in more detail in "Business—Overview". This shift increases the focus on the transactions that occur on our platform. A key component of the success of this strategy is the number of consumer lives on our platform. We believe this metric is more meaningful to our business going forward, so we are discontinuing use of the metric of number of large employer and carrier customers.

We have added a new operating metric, net benefit eligible lives, that we believe is highly correlated to our subscription revenue and is the foundation of our transaction revenue opportunity.

Number of Large Employer and Carrier Customers

Since our initial public offering, we believed the number of large employer and carrier customers was a key indicator of our market penetration, growth, and future revenue. As a result of the shift in our economic model, we believe that the number of large employer and carrier customers will no longer be a meaningful metric. Accordingly, we are discontinuing use of this metric after December 31, 2018.

We generally define a customer as an entity with an active software services contract as of the measurement date. The following table sets forth the number of large employer and carrier customers for the periods indicated:

	Year Ended December 31,		
	2018	**2017**	**2016**
Number of customers:			
Large employer	1,024	920	833
Carrier	57	54	53

Net Benefit Eligible Lives

We are focused on driving revenue growth from adding lives to our platform and driving incremental transaction revenue. We believe the number of net benefit eligible lives is a key indicator of our market penetration, growth and future revenue. We believe net benefit eligible lives is highly correlated to our subscription revenue and is the foundation of our transaction revenue opportunity. We define a net benefit eligible life as a carrier or employer enrollment subscription with standard contracting, plus their estimated dependents, as of the measurement date. This definition excludes lives from other subscription-related contracts.

	As of								
	December 31, 2018	**September 30, 2018**	**June 30, 2018**	**March 31, 2018**	**December 31, 2017**	**September 30, 2017**	**June 30, 2017**	**March 31, 2017**	**December 31, 2016**
	(in millions)								
Net benefit eligible lives	13.3	13.2	12.3	11.8	11.2	10.8	10.7	10.5	10.2

Software Services Revenue Retention Rate

We believe that our ability to retain our customers and expand the revenue they generate for us over time is an important component of our growth strategy and reflects the long-term value of our customer relationships. We measure our performance on this basis using a metric we refer to as our software services revenue retention rate. We calculate this metric for a particular period by establishing the group of our customers that had active contracts for a given period. We then calculate our software services revenue retention rate by taking the amount of software services revenue we recognized for this group in the subsequent comparable period (for which we are reporting the rate) and dividing it by the software services revenue we recognized for the group in the prior period.

Our software services revenue retention rate exceeded 95% for the years ended December 31, 2018 and 2017. Because we adopted the revenue accounting rules prescribed by Topic 606 as of January 1, 2016, we do not have revenue by customer for 2015 under Topic 606, which is required for the calculation of this metric for 2016. When we recognized revenue in 2016 under Topic 605, our software services revenue exceeded 95% for that year.

Adjusted EBITDA

Adjusted EBITDA represents our earnings before net interest and other expense, taxes, and depreciation and amortization expense, adjusted to eliminate stock-based compensation and impairment of goodwill and intangible assets and costs not core to our business. Adjusted EBITDA is not a measure calculated in accordance with United States generally accepted accounting principles, or GAAP. Please refer to "Selected Consolidated Financial Data—Adjusted EBITDA" in this report for a discussion of the limitations of adjusted EBITDA and reconciliation of adjusted EBITDA to net loss, the most comparable GAAP measurement, respectively, for 2018, 2017 and 2016.

Components of Operating Results

Revenue

We derive the majority of our revenue from software services fees, which consist primarily of monthly subscription fees paid to us by our employer and carrier customers for access to, and usage of, our cloud-based benefits software solutions for a specified contract term. Software services revenue also includes transactional revenue from both insurance broker commissions from the sale of voluntary and ancillary benefits policies to employees of our customers and from transaction revenue from life and ancillary insurance carriers and specialty providers. We also derive revenue from professional services fees, which primarily include fees related to the implementation of our customers onto our platform. Our professional services typically include discovery, configuration and deployment, integration, testing, and training.

The following table sets forth a breakdown of our revenue between software services and professional services for the periods indicated (in thousands):

	Year Ended December 31,		
	2018	2017	2016
Software services	$ 202,348	$ 184,891	$ 186,158
Professional services	56,373	51,951	50,365
Total revenue	$ 258,721	$ 236,842	$ 236,523

We recognize revenues when control of these services is transferred to customers, in an amount that reflects the consideration we expect to be entitled to in exchange for those services. Taxes collected from customers relating to services and remitted to governmental authorities are excluded from revenues.

We determine revenue recognition through the following steps:

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

Software Services Revenues

Software services revenues primarily consist of monthly subscription fees paid to us by our employer and insurance carrier customers for access to, and usage of, cloud-based benefits software solutions for a specified contract term. Fees are generally charged based on the number of employees or subscribers with access to the solution. Software services revenue also includes BenefitsPlace transactional revenue, which is generated from the value of the policies or products enrolled in through our marketplace.

Software services revenues are generally recognized on a ratable basis over the contract term beginning on the date the software services are made available to the customer. Our software service contracts are generally three years for both carrier and employer customers. BenefitsPlace carrier revenue is generally recognized over the policy period of the enrolled products. Revenue from insurance broker commissions and BenefitsPlace supplier transactions is recognized at the point when the orders for the policies are received and transferred to the insurance carrier or supplier, and is reduced by estimates for risk from premium collection, policy cancellation and termination.

Professional Services Revenues

Professional services revenues primarily consist of fees related to the implementation of software products purchased by customers. Professional services typically include discovery, configuration and deployment, integration, testing, and training. Fees from consulting services, support services and training are also included in professional services revenue.

Revenue from implementation services with customers in the Carrier segment are generally recognized over the contract term of the associated software services contract, including any extension periods representing a material right. We utilize estimates of hours as a measure of progress to determine revenue for certain types of arrangements.

Revenues from implementation services with customers in the Employer segment are generally recognized as those services are performed.

Revenues from support and training fees are recognized over the service contract period.

Contracts with Multiple Performance Obligations

Certain of our contracts with customers contain multiple performance obligations. For these contracts, the individual performance obligations are accounted for separately if they are distinct. The transaction price is allocated to the separate performance obligations based on their relative standalone selling prices. We determine the standalone selling prices based on its overall pricing objectives, taking into consideration market conditions and other factors, including the value of its contracts, the software services sold, customer size and complexity, and the number and types of users within the contracts.

Reclassifications

In conjunction with the adoption of the new revenue recognition accounting standard described below, we reclassified revenue and associated cost of revenue from support and video services from software services to professional services. This reclassification is reflected in all periods presented.

Adoption of Revenue Accounting Standard

We adopted the new accounting standard for revenue recognition, Topic 606, on January 1, 2018. We applied the full retrospective transition method to all contracts that were not completed as of January 1, 2016. As such, all periods presented are on the same basis of revenue accounting.

The adoption of Topic 606 significantly affected the accounting for revenue from certain professional services in the Carrier segment and insurance broker commission revenue included in software services revenue in the Employer segment. We describe the effects of adoption of Topic 606 in more detail in Note 2 of our consolidated financial statements included elsewhere in this Annual Report on Form 10-K.

Overhead Allocation

Expenses associated with our facilities, security, information technology, and depreciation and amortization, are allocated between cost of revenue and operating expenses based on employee headcount determined by the nature of work performed.

Cost of Revenue

Cost of revenue primarily consists of salaries and other personnel-related costs, including benefits, bonuses, and stock-based compensation, for employees, whom we refer to as associates, providing services to our customers and supporting our SaaS platform infrastructure. Additional expenses in cost of revenue include co-location facility costs for our data centers, depreciation expense for computer equipment directly associated with generating revenue, infrastructure maintenance costs, professional fees, amortization expenses associated with capitalized software development costs, allocated overhead, and other direct costs.

We expense cost of revenue associated with fulfilling performance obligations as we incur the costs. Costs that relate directly to a customer contract that are not related to satisfying a performance obligation are capitalized and amortized to cost of revenue expense over the estimate period of benefit of the contract asset, which is generally five years.

We plan to continue to expand our capacity to support our growth, which will result in higher cost of revenue in absolute dollars. However, we expect cost of revenue as a percentage of revenue to decline and gross margins to increase primarily from the growth of the percentage of our revenue from large employers and the realization of economies of scale driven by retention of our customer base.

Operating Expenses

Operating expenses consist of sales and marketing, research and development, and general and administrative expenses. Salaries and personnel-related costs are the most significant component of each of these expense categories. We expect to continue to hire new associates in these areas in order to support our anticipated revenue growth; however, we expect to decrease our operating expenses, as a percentage of revenue, if and as we achieve economies of scale.

Sales and marketing expense. Sales and marketing expense consists primarily of salaries and other personnel-related costs, including benefits, bonuses, stock-based compensation, and commissions for our sales and marketing associates. Costs to obtain a contract that are incremental, such as sales commissions, are capitalized and amortized to expense over the estimated period of benefit of the asset, which is generally four to five years. Additional expenses include advertising, lead generation, promotional event programs, corporate communications, travel, and allocated overhead. For instance, our most significant promotional event is One Place, which we hold annually. We expect our sales and marketing expense to increase, in absolute dollars, in the foreseeable future as we further increase the number of our sales and marketing professionals and expand our marketing activities in order to continue to grow our business.

Research and development expense. Research and development expense consists primarily of salaries and other personnel-related costs, including benefits, bonuses, and stock-based compensation for our research and development associates. Additional expenses include costs related to the development, quality assurance, and testing of new technology, and enhancement of our existing platform technology, consulting, travel, and allocated overhead. We believe continuing to invest in research and development efforts is essential to maintaining our competitive position. We expect our research and development expense to decrease, as a percentage of revenue, if and as we achieve economies of scale.

General and administrative expense. General and administrative expense consists primarily of salaries and other personnel-related costs, including benefits, bonuses, and stock-based compensation for administrative, finance and accounting, information systems, legal, and human resource associates. Additional expenses include consulting and professional fees, insurance and other corporate expenses, and travel. We expect our general and administrative expenses to increase in absolute terms as a result of ongoing public company costs, including those associated with compliance with the Sarbanes-Oxley Act and other regulations governing public companies, increased costs of directors' and officers' liability insurance, and increased professional services expenses, particularly associated with the adoption of new accounting standards.

Other Income and Expense

Other income and expense consists primarily of interest income and expense and gain (loss) on disposal of property and equipment. Interest income represents interest received on our cash and cash equivalents and marketable securities. Interest expense consists primarily of the interest incurred on outstanding borrowings under our financing obligations, capital leases and credit facility.

Income Tax Expense

Income tax expense consists of U.S. federal and state income taxes. We incurred minimal income tax expense for 2018, 2017, and 2016. Net operating loss carryforwards for federal income tax purposes were approximately $287.7 million at December 31, 2018. State net operating loss carryforwards were approximately $285.4 million at December 31, 2018. Federal and state net operating loss carryforwards will expire at various dates beginning in 2022, if not utilized. Valuation allowances are recorded to reduce deferred tax assets to the amount we believe is more likely than not to be realized.

Results of Operations

Consolidated Statements of Operations Data

The following table sets forth our consolidated statements of operations data for each of the periods indicated (in thousands).

	Year Ended December 31,		
	2018	2017	2016
Revenue	$ 258,721	$ 236,842	$ 236,523
Cost of revenue(1)	129,277	127,382	123,308
Gross profit	129,444	109,460	113,215
Operating expenses:			
Sales and marketing(1)	78,179	70,583	56,311
Research and development(1)	47,902	49,549	56,610
General and administrative(1)	43,062	27,268	32,750
Total operating expenses	169,143	147,400	145,671
Loss from operations	(39,699)	(37,940)	(32,456)
Other income (expense):			
Interest income	250	182	138
Interest expense on building lease financing obligations	(7,471)	(7,450)	(6,826)
Interest expense on other borrowings	(5,685)	(4,931)	(1,095)
Other expense	6	(140)	(90)
Total other expense, net	(12,900)	(12,339)	(7,873)
Loss before income taxes	(52,599)	(50,279)	(40,329)
Income tax expense	28	15	17
Net loss	$ (52,627)	$ (50,294)	$ (40,346)

(1) Cost of revenue and operating expenses include stock-based compensation expense as follows (in thousands):

	Year Ended December 31,		
	2018	2017	2016
Cost of revenue	$ 5,164	$ 2,508	$ 2,799
Sales and marketing	6,764	4,953	3,212
Research and development	5,510	2,990	4,533
General and administrative	11,430	5,686	7,544

The following table sets forth our consolidated statements of operations data as a percentage of revenue for each of the periods indicated (as a percentage of revenue).

	Year Ended December 31,		
	2018	2017	2016
Revenue	100.0 %	100.0 %	100.0 %
Cost of revenue	50.0	53.8	52.1
Gross profit	50.0	46.2	47.9
Operating expenses:			
Sales and marketing	30.2	29.8	23.8
Research and development	18.5	20.9	23.9
General and administrative	16.6	11.5	13.8
Total operating expenses	65.4	62.2	61.6
Loss from operations	(15.3)	(16.0)	(13.7)
Other income (expense):			
Interest income	0.1	0.1	0.1
Interest expense on building lease financing obligations	(2.9)	(3.1)	(2.9)
Interest expense on other borrowings	(2.2)	(2.1)	(0.5)
Other expense	-	(0.1)	-
Total other expense, net	(5.0)	(5.2)	(3.3)
Loss before income taxes	(20.3)	(21.2)	(17.1)
Income tax expense	-	-	-
Net loss	(20.3) %	(21.2) %	(17.1) %

Our Segments

The following table sets forth segment results for revenue and gross profit for the periods indicated (in thousands):

	Year Ended December 31,		
	2018	2017	2016
Revenue from external customers by segment:			
Employer	$ 169,800	$ 153,481	$ 149,776
Carrier	88,921	83,361	86,747
Total net revenue from external customers	$ 258,721	$ 236,842	$ 236,523
Gross profit by segment			
Employer	$ 75,397	$ 58,347	$ 61,951
Carrier	54,047	51,113	51,264
Total gross profit by segment	$ 129,444	$ 109,460	$ 113,215

Comparison of Years Ended December 31, 2018 and 2017

Revenue

	Year Ended December 31,					
	2018		2017		Period-to-Period Change	
	Amount	Percentage of Revenue	Amount	Percentage of Revenue	Amount	Percentage
	(in thousands)					
Software services	$ 202,348	78.2 %	$ 184,891	78.1 %	$ 17,457	9.4 %
Professional services	56,373	21.8	51,951	21.9	4,422	8.5
Total revenue	$ 258,721	100.0 %	$ 236,842	100.0 %	$ 21,879	9.2 %

Growth in software services revenue was primarily attributable to an increase in software subscription revenue of $9.2 million as a result of increases in net benefit eligible lives at existing customers (which we call volume increases), and also to existing customers purchasing additional products, as well as to the net addition of new customers. Software subscription revenue included an increase of $1.1 million related to a change in estimated revenue from an employer customer contract. Additionally, transactional revenue from new insurance broker commissions and product enrollments in 2018 contributed an increase of $7.6 million.

The increase in professional services revenue was attributable to an increase in support revenue from newly activated customers of $2.2 million, an increase in customer-specific enhancements of $2.2 million, and an increase in implementation revenue of $1.9 million. These increases were partially offset by a reduction in non-recurring consulting revenue of $1.7 million.

Segment Revenue

	Year Ended December 31,					
	2018		2017		Period-to-Period Change	
	Amount	Percentage of Revenue	Amount	Percentage of Revenue	Amount	Percentage
	(in thousands)					
Employer	$ 169,800	65.6 %	$ 153,481	64.8 %	$ 16,319	10.6 %
Carrier	88,921	34.4	83,361	35.2	5,560	6.7
Total revenue	$ 258,721	100.0 %	$ 236,842	100.0 %	$ 21,879	9.2 %

Growth in our employer revenue was primarily attributable to a $12.4 million increase in our employer software services revenue, driven primarily by an increase in software subscription revenue of $8.0 million as well as an increase in new insurance broker commissions from enrollments in 2018 of $3.2 million, and a decline in the sales returns and allowance of $1.1 million. Additionally, employer professional services revenue increased $3.9 million primarily from a $2.2 million increase in support revenue and a $3.3 million increase in implementation revenue, partially offset by decreases in non-recurring consulting revenue of $1.7 million.

The increase in carrier revenue was primarily attributable to a $4.4 million increase in transactional revenue from carrier and supplier contracts. Software services revenue also increased $1.0 million from net volume and contractual rate increases. Additionally, an increase in professional services revenue of $2.3 million from customer-specific enhancement revenue was partially offset by a decrease in implementation professional services revenue of $1.4 million.

Cost of Revenue

	Year Ended December 31,					
	2018		2017		Period-to-Period Change	
	Amount	Percentage of Revenue	Amount	Percentage of Revenue	Amount	Percentage
	(in thousands)					
Cost of revenue	$ 129,277	50.0 %	$ 127,382	53.8 %	$ 1,895	1.5 %

The increase in cost of revenue in absolute terms was primarily attributable to an increase in salaries and personnel-related costs to support an increased number of customers and volume, as well as professional fees associated with third-party deliveries. This increase included an increase in stock-based compensation of $2.7 million. Cost of revenue as a percentage of revenue has continued to decrease as a result of economies of scale as our revenues have grown.

Gross Profit

	Year Ended December 31,					
	2018		2017		Period-to-Period Change	
	Amount	Percentage of Revenue	Amount	Percentage of Revenue	Amount	Percentage
	(in thousands)					
Software services	$ 136,344	67.4 %	$ 121,879	65.9 %	$ 14,465	11.9 %
Professional services	(6,900)	(12.2)	(12,419)	(23.9)	5,519	(44.4)
Gross profit	$ 129,444	50.0 %	$ 109,460	46.2 %	$ 19,984	18.3 %

The increase in software services gross profit was driven by a $17.5 million, or 9.4%, increase in software services revenue. This increase was partially offset by a $3.0 million, or 4.7%, increase in software services cost of revenue. Software services cost of revenue included $3.0 million and $1.3 million of stock-based compensation expense for the years ended December 31, 2018 and 2017, respectively, and $10.0 million and $9.6 million of depreciation and amortization for the years ended December 31, 2018 and 2017, respectively.

The improvement in professional services gross loss was driven by a $4.4 million, or 8.5%, increase in professional services revenue and a decrease in professional services cost of revenue of $1.1 million. Professional services cost of revenue included $2.2 million and $1.2 million of stock-based compensation expense for the years ended December 31, 2018 and 2017, respectively. In addition, professional services cost of revenue included $1.9 million and $2.2 million in depreciation and amortization for the years ended December 31, 2018 and 2017, respectively.

Segment Gross Profit

	Year Ended December 31,					
	2018		2017			
	Amount	Percentage of Revenue	Amount	Percentage of Revenue	Period-to-Period Change Amount	Period-to-Period Change Percentage
	(in thousands)					
Employer	$ 75,397	44.4 %	$ 58,347	38.0 %	$ 17,050	29.2 %
Carrier	54,047	60.8	51,113	61.3	2,934	5.7
Gross profit	$ 129,444	50.0 %	$ 109,460	46.2 %	$ 19,984	18.3 %

The increase in employer gross profit was driven by a $16.3 million, or 10.6%, increase in employer revenue and by a $0.7 million decrease in employer cost of revenue as we continued to achieve economies of scale. The decrease in cost of revenue was primarily attributable to decreased third-party costs. Our employer cost of revenue included $3.7 million and $1.9 million of stock-based compensation expense for the years ended December 31, 2018 and 2017, respectively. In addition, our employer cost of revenue included $7.4 million and $7.3 million of depreciation and amortization for the years ended December 31, 2018 and 2017, respectively.

The carrier gross profit was comprised of $5.6 million increase in carrier revenue partially offset by a $2.6 million increase in carrier cost of revenue. Our carrier cost of revenue included $1.5 million and $0.6 million of stock-based compensation expense for the years ended December 31, 2018 and 2017, respectively. In addition, carrier cost of revenue included $4.5 million and $4.5 million in depreciation and amortization for the years ended December 31, 2018 and 2017, respectively.

Operating Expenses

	Year Ended December 31,					
	2018		2017			
	Amount	Percentage of Revenue	Amount	Percentage of Revenue	Period-to-Period Change Amount	Period-to-Period Change Percentage
	(in thousands)					
Sales and marketing	$ 78,179	30.2 %	$ 70,583	29.8 %	$ 7,596	10.8 %
Research and development	$ 47,902	18.5 %	$ 49,549	20.9 %	$ (1,647)	(3.3)%
General and administrative	$ 43,062	16.6 %	$ 27,268	11.5 %	$ 15,794	57.9 %

The increase in sales and marketing expense was primarily attributable to a $7.4 million increase in salaries and personnel-related costs due to hires of sales and marketing associates and higher variable compensation. As discussed above in “Components of Operating Results-Operating Expenses”, certain sales commissions are capitalized and amortized over a period generally equal to four to five years.

The decrease in research and development expense reflects continued cost efficiencies during 2018 as contracted services and professional fees decreased by $2.0 million. An additional decrease of $1.3 million is attributable to an increase in the amount of software development costs capitalized. These decreases were partially offset by an increase in salaries and personnel-related costs of $1.8 million primarily attributable to an increase in stock-based compensation.

The increase in general and administrative expense included an increase in salary and personnel-related costs of $8.9 million, including an increase in stock-based compensation of $5.8 million. The remaining increase was primarily attributable to professional fees incurred in connection with implementing new accounting standards and costs associated with preparing for our first year of Sarbanes-Oxley 404(b) audit requirements, as well as transaction costs expensed, primarily in connection with a secondary stock offering during the second quarter of 2018.

Stock-based Compensation

Cost of revenue and operating expenses include an aggregate of $28.9 million and $16.1 million of stock-based compensation for the years ended December 31, 2018 and 2017, respectively, representing an increase of $12.8 million, or a 79.5% increase. The increase is primarily attributable to expense from performance-based awards granted in 2018 that are expected to vest.

Comparison of Years Ended December 31, 2017 and 2016

Revenue

	Year Ended December 31,					
	2017		2016			
	Amount	Percentage of Revenue	Amount	Percentage of Revenue	Period-to-Period Change Amount	Period-to-Period Change Percentage
	(in thousands)					
Software services	$ 184,891	78.1 %	$ 186,158	78.7 %	$ (1,267)	(0.7) %
Professional services	51,951	21.9	50,365	21.3	1,586	3.1
Total revenue	$ 236,842	100.0 %	$ 236,523	100.0 %	$ 319	0.1 %

Software services revenue decreased as an increase in software subscription revenue of $3.6 million was more than offset by decreases in insurance broker commissions of $3.4 million and non-recurring software services of $0.9 million and an unfavorable increase in the sales returns and allowance of $1.2 million.

The increase in professional services revenue was attributable to increases in consulting and support services and customer-specific enhancements, partially offset by a decrease in implementation revenue for newly activated customers.

Segment Revenue

	Year Ended December 31,					
	2017		2016			
	Amount	Percentage of Revenue	Amount	Percentage of Revenue	Period-to-Period Change Amount	Period-to-Period Change Percentage
	(in thousands)					
Employer	$ 153,481	64.8 %	$ 149,776	63.3 %	$ 3,705	2.5 %
Carrier	83,361	35.2	86,747	36.7	(3,386)	(3.9)
Total revenue	$ 236,842	100.0 %	$ 236,523	100.0 %	$ 319	0.1 %

Growth in our employer revenue was primarily attributable to a $3.8 million increase in our employer professional services revenue driven by consulting, support services and customer-specific enhancements. Employer software services was unchanged as increases in software subscriptions of $5.2 million were offset by decreases in insurance broker commissions of $3.4 million and non-recurring software services of $1.0 million and an unfavorable increase in sale returns and allowance of $1.3 million.

The decrease in carrier revenue was attributable to a $1.2 million decrease in software services revenue and $2.2 million decrease professional services revenue. The decrease in software services revenue was primarily attributable to a decrease in software subscription revenue of $1.6 million, partially offset by an increase in transactional revenue from product enrollments of $0.8 million. The professional services revenue decrease was primarily driven by a decrease in implementation revenue of $3.1 million, partially offset by increases in customer-specific enhancements and consulting with new customers.

Cost of Revenue

	Year Ended December 31,					
	2017		2016			
	Amount	Percentage of Revenue	Amount	Percentage of Revenue	Period-to-Period Change Amount	Period-to-Period Change Percentage
	(in thousands)					
Cost of revenue	$ 127,382	53.8 %	$ 123,308	52.1 %	$ 4,074	3.3 %

The increase in cost of revenue in absolute terms was primarily attributable to an increase in salaries and personnel-related costs to support an increased number of customers and volume, as well as professional fees associated with third-party deliveries. This increase was partially offset by a decrease in stock-based compensation of $0.3 million.

Gross Profit

	Year Ended December 31,					
	2017		2016		Period-to-Period Change	
	Amount	Percentage of Revenue	Amount	Percentage of Revenue	Amount	Percentage
	(in thousands)					
Software services	$ 121,879	65.9 %	$ 125,010	67.2 %	$ (3,131)	(2.5) %
Professional services	(12,419)	(23.9)	(11,795)	(23.4)	(624)	5.3
Gross profit	$ 109,460	46.2 %	$ 113,215	47.9 %	$ (3,755)	(3.3) %

The decrease in software services gross profit was driven by a $1.3 million decrease in software services revenue and a $1.9 million, or 3.0%, increase in software services cost of revenue. The increase in cost of revenue was primarily attributable to an increase professional fees associated with third-party deliveries. Software services cost of revenue included $1.3 million and $1.4 million of stock-based compensation expense for the years ended December 31, 2017 and 2016, and $9.6 million and $8.3 million of depreciation and amortization for the years ended December 31, 2017 and 2016, respectively.

The increase in professional services gross loss was driven by a $1.6 million increase in professional services revenue more than offset by a $2.2 million increase in professional services cost of revenue. The increase in cost of revenue is primarily attributable to an increase in contracted services. Professional services cost of revenue included $1.2 million and $1.4 million of stock-based compensation expense for the years ended December 31, 2017 and 2016, respectively. In addition, professional services cost of revenue included $2.2 million and $1.8 million in depreciation and amortization for the years ended December 31, 2017 and 2016, respectively.

Segment Gross Profit

	Year Ended December 31,					
	2017		2016		Period-to-Period Change	
	Amount	Percentage of Revenue	Amount	Percentage of Revenue	Amount	Percentage
	(in thousands)					
Employer	$ 58,347	38.0 %	$ 61,951	41.4 %	$ (3,604)	(5.8) %
Carrier	51,113	61.3	51,264	59.1	(151)	(0.3)
Gross profit	$ 109,460	46.2 %	$ 113,215	47.9 %	$ (3,755)	(3.3) %

The decrease in employer gross profit was driven by a $3.7 million increase in employer revenue more than offset by a $7.3 million, or 8.3%, increase in employer cost of revenue. The increase in cost of revenue was primarily attributable to increased personnel-related costs to support our customer base as well as increased depreciation and amortization, technology infrastructure costs and security-related costs. Our employer cost of revenue included $1.9 million and $2.0 million of stock-based compensation expense for the years ended December 31, 2017 and 2016, respectively. In addition, our employer cost of revenue included $7.3 million and $6.0 million of depreciation and amortization for the years ended December 31, 2017 and 2016, respectively.

The carrier gross profit was flat as a $3.4 million decrease in carrier revenue was accompanied by a $3.2 million decrease in carrier cost of revenue. The decrease in cost of revenue was attributable to operational efficiencies achieved in supporting our carrier customers and a decrease in customer-specific development, as opposed to platform enhancements and development. Our carrier cost of revenue included $0.6 million and $0.8 million of stock-based compensation expense for the years ended December 31, 2017 and 2016, respectively. In addition, our carrier cost of revenue included $4.5 million and $4.1 million in depreciation and amortization for the years ended December 31, 2017 and 2016, respectively.

Operating Expenses

	Year Ended December 31,					
	2017		2016		Period-to-Period Change	
	Amount	Percentage of Revenue	Amount	Percentage of Revenue	Amount	Percentage
	(in thousands)					
Sales and marketing	$ 70,583	29.8 %	$ 56,311	23.8 %	$ 14,272	25.3 %
Research and development	$ 49,549	20.9 %	$ 56,610	23.9 %	$ (7,061)	(12.5) %
General and administrative	$ 27,268	11.5 %	$ 32,750	13.8 %	$ (5,482)	(16.7) %

The increase in sales and marketing expense was attributable to $9.6 million higher salaries and personnel-related costs as we continued to invest in our direct sales channel. We increased the number sales associates during 2017, including hiring our Executive Vice-President, Global Sales. This increase included $1.7 million increase in stock-based compensation. Additionally, travel-related expenses increased $2.6 million and marketing expense, professional fees, technology infrastructure costs and other operating costs increased by $1.8 million.

The decrease in research and development expense reflects a $3.5 million decrease in salaries and personnel-related costs as the result of a decrease in the number of associates engaged in research and development activities. This decrease includes a $1.5 million decrease in stock-based compensation. Additionally, costs related to contracted services decreased $3.2 million.

The decrease in general and administrative expense was partly attributable to a $2.9 million decrease in salaries and personnel-related costs, which includes a decrease in stock-based compensation expense of $1.9 million. Sales tax expense decreased $1.3 million related to resolving liabilities in certain states. We experienced additional decreases in professional and consulting fees of $1.0 million attributable to discontinuing the use of certain consultants during 2017 and a decrease in bad debt expense of $0.6 million.

Critical Accounting Policies and Significant Judgments and Estimates

Our management's discussion and analysis of our financial condition and results of operations is based on our consolidated financial statements, which have been prepared in accordance with GAAP. The preparation of these consolidated financial statements requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the consolidated financial statements, and the reported amounts of revenue and expenses. In accordance with GAAP, we base our estimates on historical experience and on various other assumptions that we believe reasonable under the circumstances. Actual results might differ from these estimates under different assumptions or conditions.

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

Revenue Recognition and Deferred Revenue

We derive our revenue primarily from fees for software services and professional services sold to employers and insurance carriers. Revenues are recognized when control of these services is transferred to customers, in an amount that reflects the consideration we expect to be entitled to in exchange for those services. We also generate transactional revenue from the value of the policies or products enrolled through our marketplace.

We determine revenue recognition through the following steps:

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

The following are some significant judgments estimates involved in the recognition of revenue:

- Determination of standalone selling prices based on our overall pricing objectives, taking into consideration market conditions and other factors, including the value of our contracts, the software services sold, customer size and complexity, and the number and types of users under the contracts;
- Allocation of transaction price to the separate performance obligations based on their relative standalone selling prices;
- Estimation of hours or lives as a measure of progress; and
- Reduction of revenue for risks from collectability, policy cancellation and termination.

Convertible Senior Notes

We calculated the fair value of the liability portion of the convertible senior notes using an implied interest rate. The rate was estimated based on market data available for publicly traded, senior unsecured corporate bonds issued by companies in the same industry and with similar maturity, assuming no conversion option. Assumptions used in the estimate represent what market participants would use in pricing the equity component, including market interest rates, credit standing, and yield curves.

Accounts Receivable and Allowances for Doubtful Accounts and Returns

We state accounts receivable at realizable value, net of an allowance for doubtful accounts and estimated returns. We maintain the allowance for doubtful accounts for estimated losses expected to result from the inability of some customers to make payments as they become due. We base our estimated allowance on our analysis of past due amounts and ongoing credit evaluations. Historically, our actual collection experience has not varied significantly from our estimates, due primarily to our credit and collection policies and the financial strength of our customers.

The allowances for returns are accounted for as reductions of revenue and are estimated based on the Company's periodic assessment of historical experience and trends. The Company considers factors such as the time lag since the initiation of revenue recognition, historical reasons for adjustments, new customer volume, complexity of billing arrangements, timing of software availability, and past due customer billings.

Stock-Based Compensation

We currently issue restricted stock units under our stock plans. Stock-based awards granted to associates, directors, and non-associate third parties are measured at fair value at each grant date. We recognize stock-based compensation expense, net of forfeitures, ratably over the requisite service period of the option award. Restricted stock unit awards generally vest 25% on each anniversary of the grant date over 4 years, however we have granted awards that vest immediately as well as awards that vest annually over 3 years and 5 years.

As part of our management incentive program, we granted performance restricted stock units, which have vesting terms that are dependent upon the achievement of certain financial performance targets. Compensation expense for performance restricted stock units, which are accounted for as equity awards, is recognized over the requisite service period when it is probable that the award will vest. Significant judgment is involved in assessing the probability of achieving performance measures.

We determined fair value for restricted stock unit awards based on the closing price of our common stock on the date of grant or, if not a trading day, the trading day following the grant date.

Based upon the closing stock price of $45.72 on December 31, 2018, the aggregate intrinsic value of outstanding options to purchase shares of our common stock as of December 31, 2018 was $8.4 million, all of which was related to vested options. The aggregate intrinsic value of outstanding restricted stock units that are expected to vest as of December 31, 2018 was $92.2 million, of which all were unvested.

Liquidity and Capital Resources

Sources of Liquidity

As of December 31, 2018, our primary sources of liquidity were our cash and cash equivalents totaling $190.9 million, $21.1 million in accounts receivables, net of allowance, and unused availability under a revolving line of credit of $77.3 million, without taking into account the borrowing base limit. The terms of our revolving line of credit are described in Note 8 of our consolidated financial statements included elsewhere in this Annual Report on Form 10-K.

In December 2018, we issued $240 million aggregate principal amount of 1.25% convertible senior notes due December 15, 2023, unless earlier purchased by us or converted by the holder pursuant to their terms. Interest is payable semiannually in arrears on June 15 and December 15 of each year. Upon conversion, we will pay or deliver, as the case may be, cash, shares of our common stock or a combination, at our election. The convertible senior notes have an initial conversion rate of 18.8076 shares of common stock per $1,000 principal amount. This represents an initial effective conversion price of approximately $53.17 per share of common stock, with an aggregate of 4,513,824 shares issuable upon conversion. The terms of the convertible senior notes are described in Note 7 of our consolidated financial statements included elsewhere in this Annual Report on Form 10-K.

In December 2018, we amended our revolving line of credit agreement. The amendment altered definitions and amended sections of the agreement to allow for the convertible senior note financing. Additionally, in March 2018, we amended our revolving line of credit agreement. The amendment altered definitions to accommodate our adoption of Topic 606.

We are bound by customary affirmative and negative covenants in connection with the revolving line of credit, including financial covenants related to liquidity and EBITDA. In the event of a default, the lenders may declare all obligations immediately due and stop advancing money or extending credit under the line of credit. The line of credit is collateralized by substantially all of our tangible and intangible assets, including intellectual property and the equity of our subsidiaries. As of December 31, 2018, there were no amounts outstanding or due under the revolving line of credit.

Our cash flows from operations has improved in recent years and turned positive for the year ended December 31, 2018. We expect this trend to continue in at least the near term as we continue to achieve economies of scale.

Based on our current level of operations and anticipated growth, we believe our future cash flows from operating activities and existing cash balances will be sufficient to meet our cash requirements for at least the next 12 months.

Going forward, we may access capital markets to raise additional equity or debt financing for various business reasons, including required debt payments and acquisitions. The timing, term, size, and pricing of any such financing will depend on investor interest and market conditions, and there can be no assurance that we will be able to obtain any such financing on favorable terms or at all.

Operating and Capital Expenditure Requirements

We believe that our existing cash and cash equivalents balances, cash generated from operations, and our ability to draw on the revolving line of credit will be sufficient to meet our anticipated cash requirements through at least the next 12 months. Our future capital requirements will depend on many factors, including our customer growth rate, subscription renewal activity, the timing and extent of development efforts, the expansion of sales and marketing activities, the introduction of new and enhanced services offerings, and the continuing market acceptance of our services. We might require additional capital beyond our currently anticipated amounts. If our available cash and cash equivalents balances are insufficient to satisfy our liquidity requirements, we may seek to sell equity or convertible debt securities or enter into an additional credit facility. The sale of equity and convertible debt securities may result in dilution to our stockholders and those securities may have rights senior to those of our common shares. If we raise additional funds through the issuance of convertible debt securities, these securities could contain covenants that would restrict our operations. Additional capital might not be available on reasonable terms, or at all.

Contractual Obligations and Commitments

Our principal commitments consist of obligations under our outstanding credit facility, non-cancelable leases for our office space and computer equipment and purchase commitments for our co-location and other support services. The following table summarizes these contractual obligations at December 31, 2018. Future events could cause actual payments to differ from these estimates.

	Payment due by period				
Contractual Obligations	**Total**	**Less than 1 year**	**1-3 years**	**3-5 years**	**More than 5 years**
			(in thousands)		
Long-term debt--Convertible senior notes	$ 240,000	$ -	$ -	$ 240,000	$ -
Long-term debt--Revolving line of credit (1)	-	-	-	-	-
Operating lease obligations	12,973	1,350	2,041	2,068	7,514
Capital lease obligations	47,426	5,542	7,038	6,269	28,577
Financing obligations, build-to-suit leases	102,300	6,550	13,696	14,530	67,524
Financing obligations, other	4,167	1,952	1,974	241	-
Purchase commitments	276	276	-	-	-
Total	$ 407,142	$ 15,670	$ 24,749	$ 263,108	$ 103,615

(1) Repayment of the revolving line of credit is due at end of the term in 2020. Early repayment is allowed. Interest is paid monthly.

In December 2018, we issued $240 million of convertible senior notes that pay interest at 1.25% and mature December 2023. The terms of the notes are disclosed in more detail in Note 2 of our consolidated financial statements included elsewhere in this Annual Report on Form 10-K.

Borrowing limit under our revolving line of credit agreement is $95.0 million. The agreement terminates on February 20, 2020. Borrowing capacity under this agreement is subject to a borrowing base limit that is a function of our monthly recurring revenue as adjusted to reflect lost customer revenue during the previous three calendar months. Therefore, credit available under our line of credit may be less than the $95.0 million borrowing limit. Advances under the revolving line of credit agreement bear interest at the prime rate as published in the Wall Street Journal plus a margin based on the Company’s liquidity that ranges between 0.75% and 1.25%. The Company is charged an unused line fee under this arrangement at a rate based on its liquidity of 0.300% to 0.375% per year. Any outstanding principal is due at the end of the term. Available credit was $77.3 million as of December 31, 2018.

In December 2016, we entered into a cancellable lease agreement to build additional office space on our headquarters campus. In March 2018, our landlord extended certain terms of the agreement. Under this agreement and extension, we may commence construction on or about April 1, 2019 for a target lease commencement date of July 1, 2020. We can terminate the agreement prior to April 1, 2019 subject to reimbursing the lessor for reasonable pre-agreed out-of-pocket expenses. Annual rent obligation for the first year is $4.4 million and increases 2% each subsequent year during the 15-year lease term. We can renew the lease for five, one-year terms. The aggregate minimum lease payments are approximately $75.8 million and are not reflected in the contractual obligations table above.

Off-Balance Sheet Arrangements

As of December 31, 2018, other than as disclosed in Note 7 and 16, we did not have any off-balance sheet arrangements, as defined in Item 303(a)(4)(ii) of SEC Regulation S-K, such as the use of unconsolidated subsidiaries, structured finance, or special purpose entities. We are not the primary beneficiary of, nor do we have a controlling financial interest in, any variable interest entity. Accordingly, we have not consolidated any variable interest entities.

Recent Accounting Pronouncements

In June 2016, the FASB ASU No. 2016-13, “Measurement of Credit Losses on Financial Instruments.” The purpose of this ASU is to require a financial asset measured at amortized cost basis to be presented at the net amount expected to be collected. Credit losses relating to available-for-sale debt securities should be recorded through an allowance for credit losses. This ASU is effective for interim and annual reporting periods beginning after December 15, 2019. We are currently evaluating the impact of this guidance on our consolidated financial statements.

In February 2016, the FASB issued ASU No. 2016-02 “Leases (Topic 842)”. The amendments in this update require lessees, among other things, to recognize lease assets and lease liabilities on the balance sheet for those leases classified as operating leases under previous authoritative guidance. This update also introduces new disclosure requirements for leasing arrangements and is effective for us beginning January 1, 2019. We will apply Topic 842 without presenting comparative period financial statements, thus will recognize a cumulative-effect adjustment to the opening balance of retained earnings in 2019. We plan to utilize the following additional significant transition elections:

- Elect the package of three practical expedients to not reassess:
    - whether any expired or existing contracts are or contain a lease;
    - the classification of any expired or existing leases; and
    - the treatment of initial direct costs.
- Adopt a policy to not separate lease and associated nonlease components for all classes of assets. We will apply this policy to all existing leases on transition as well as new leases going forward.

We are continuing to evaluate the effect of adoption of this standard on our consolidated financial statements. We expect our consolidated financial statements to be significantly affected by the following:

- Assets and related financing obligations for our existing build-to-suit lease arrangements will be derecognized with a cumulative adjustment to retained earnings. These leases will be transitioned to the new standard based on a proforma analysis of the lease balances as of the transition date as if they had been a lease under ASC 840. Based on this analysis, the land component of these leases will be combined with the remainder of the lease obligation. Currently, this obligation is accounted for separately and recognized as part of facility expense. The following impacts are expected on our consolidated financial statements:
    - Operating expenses will increase as depreciation expense related to the buildings will increase as a result of shortening the period of depreciation from the estimated life of the asset to the expected term of the lease.
    - Interest expense will decrease as a result of a discount rate that is lower than the rate required for build-to-suit accounting.
- Lease liabilities and right-of-use, or ROU, assets related to existing operating lease obligations (including lease and associated non-lease components) will recorded on the balance sheet.
- Lease liabilities and ROU assets will be recorded related to payment obligations for nonlease components (e.g. common area maintenance and equipment maintenance) associated with existing capital lease components.

Total net cash flows will not be impacted by adoption of the new lease standard; however, classification of some transactions are expected to move between operating, investing and financing activities.

We are evaluating other accounting standards and exposure drafts that have been issued or proposed by the FASB or other standards setting bodies that do not require adoption until a future date to determine whether adoption will have a material impact on our consolidated financial statements.

Item 7A. Quantitative and Qualitative Disclosures About Risk.

Market risk is the risk of loss to future earnings, values or future cash flows that may result from changes in the price of a financial instrument. The value of a financial instrument might change as a result of changes in interest rates, exchange rates, commodity prices, equity prices and other market changes. We do not use derivative financial instruments for speculative, hedging or trading purposes, although in the future we might enter into exchange rate hedging arrangements to manage the risks described below.

Interest Rate Risk

We are exposed to market risk related to changes in interest rates. Borrowings under the revolving line of credit agreement, which was entered into in February 2015 and subsequently amended, bear interest at rates that are variable. Increases in the Prime Rate would increase the interest rate on borrowings under the revolving line of credit.

Changes in interest rates may also impact gains or losses from the conversion of our outstanding convertible senior notes. In December 2018, we issued $240 million in aggregate principal amount of our 1.25% convertible senior notes due 2023, or the Notes. Upon certain events and/or if certain conditions are met, the Notes can be redeemed into cash, or converted into cash, shares or combination of cash and shares. Upon conversion or redemption, we are required to record a gain or loss for the difference between the fair value of the debt to be extinguished and its corresponding net carrying value. The fair value of the debt to be extinguished depends on our then-current incremental borrowing rate. If our incremental borrowing rate at the time of conversion is higher or lower than the implied interest rate of the Notes, we will record a gain or loss in our consolidated statement of operations during the period in which the Notes are converted. The implicit interest rate for the notes is 7.30%. An incremental borrowing rate that is a hypothetical 100 basis points lower than the implicit interest rate upon conversion of $240 million aggregate principal amount of the Notes would result in a loss of approximately $2.4 million.

Interest Rate Sensitivity

We are subject to interest rate risk in connection with borrowings under the revolving line of credit agreement, which are subject to a variable interest rate. At December 31, 2018, there were no amounts due under the agreement. Any debt we incur in the future may also bear interest at variable rates.

Inflation Risk

We do not believe that inflation has had a material effect on our business, financial condition, or results of operations. We continue to monitor the impact of inflation in order to minimize its effects through pricing strategies, productivity improvements and cost reductions. 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.

Item 8. Financial Statements and Supplementary Data.

The information required by this Item is set forth in the Consolidated Financial Statements and Notes thereto beginning at page F-1 of this Report.

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

None.

Item 9A. Controls and Procedures.

Evaluation of Disclosure Controls and Procedures

Under the supervision and with the participation of our management, including our President and Chief Executive Officer and our Chief Financial Officer, we conducted an evaluation of the effectiveness of the design and operation of our disclosure controls and procedures, as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act, as of the end of the period covered by this report.

In designing and evaluating our disclosure controls and procedures, management recognizes that any disclosure controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives. In addition, the design of disclosure controls and procedures must reflect the fact that there are resource constraints and that management is required to apply its judgment in evaluating the benefits of possible controls and procedures relative to their costs.

Based on their evaluation, our President and Chief Executive Officer and our Chief Financial Officer concluded that as of December 31, 2018 our disclosure controls and procedures are designed to, and are effective to, provide assurance at a reasonable level that the information we are required to disclose in reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in SEC rules and forms, and that such information is accumulated and communicated to our management, including our President and Chief Executive Officer and our Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosures as of December 31, 2018.

Management's Annual Report on Internal Control Over Financial Reporting

Our management, including our President and Chief Executive Officer and our Chief Financial Officer, is responsible for establishing and maintaining adequate internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act). 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 U.S. GAAP. Our 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 our assets; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with U.S. GAAP, and that our receipts and expenditures are being made only in accordance with authorizations of our management and directors; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of our assets that could have a material effect on the financial statements.

Under the supervision and with the participation of our management, including our President and Chief Executive Officer and our Chief Financial Officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting as of December 31, 2018, based on the Internal Control—Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) (2013 Framework). Based on this evaluation under the 2013 Framework, our President and Chief Executive Officer and our Chief Financial Officer have concluded that our internal control over financial reporting was effective as of December 31, 2018.

Changes in Internal Control Over Financial Reporting

No change in internal control over financial reporting occurred during the most recent fiscal quarter with respect to our operations, which has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Attestation Report of Registered Public Accounting Firm

Our independent registered public accounting firm, Ernst & Young, LLP, has issued an attestation report on the effectiveness of our internal controls over financial reporting as of December 31, 2018, which appears on page F-3 of this Report.

Item 9B. Other Information.

None.

PART III

Item 10. Directors, Executive Officers and Corporate Governance.

Information required by this Item concerning our directors is incorporated by reference from the sections captioned "Election of Directors" and "Corporate Governance Matters" contained in our proxy statement related to the 2019 Annual Meeting of Stockholders currently scheduled to be held on May 31, 2019 which we intend to file with the Securities and Exchange Commission within 120 days of the end of our 2018 fiscal year pursuant to General Instruction G(3) of Form 10-K.

Our board of directors has determined that of the members of the Audit Committee, Messrs. Pelzer, Swad and Dennerline are independent within the meaning of the Nasdaq Stock Market listing rules and meet the additional test for independence for audit committee members imposed by Securities and Exchange Commission regulation and the Nasdaq Stock Market listing rules. Our board has also determined that Mr. Pelzer is an "audit committee financial expert" as defined in Item 407(d)(5)(ii) of Regulation S-K.

We have adopted a code of ethics relating to the conduct of our business by all of our employees, officers, and directors, as well as a code of conduct specifically for our principal executive officer and senior financial officers. Each of these policies is posted on our website, *www.benefitfocus.com*.

The information required by this Item concerning our executive officers is set forth at the end of Part I of this Annual Report on Form 10-K.

The information required by this Item concerning compliance with Section 16(a) of the United States Securities Exchange Act of 1934, as amended, is incorporated by reference from the section of the proxy statement captioned "Section 16(a) Beneficial Ownership Reporting Compliance".

Item 11. Executive Compensation.

The information required by this Item is incorporated by reference to the information under the sections captioned "Executive Compensation," "Director Compensation" and "Compensation Committee Interlocks and Insider Participation" in the proxy statement.

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

The following table sets forth the indicated information as of December 31, 2018 with respect to our equity compensation plans:

Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights	Weighted-average exercise price of outstanding options, warrants and rights	Number of securities remaining available for future issuance under equity compensation plans
Equity compensation plans approved by security holders			
2016 Employee Stock Purchase Plan	-	$ -	125,374
Amended and Restated 2012 Stock Plan	2,343,935	$ 0.82	1,731,799
Amended and Restated 2000 Stock Option Plan	63,562	$ 5.00	-
Total	2,407,497	$ 0.93	1,857,173

Our equity compensation plans consist of the Benefitfocus, Inc. 2016 Employee Stock Purchase Plan, Amended and Restated 2012 Stock Plan, and the Amended and Restated 2000 Stock Option Plan, which were approved by our stockholders. We do not have any equity compensation plans or arrangements that have not been approved by our stockholders.

The other information required by this Item is incorporated by reference to the information under the section captioned “Security Ownership of Certain Beneficial Owners and Management” contained in the proxy statement.

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

The information required by this Item is incorporated by reference to the information under the section captioned “Certain Relationships and Related Party Transactions” and “Corporate Governance Matters” in the proxy statement.

Item 14. Principal Accounting Fees and Services.

The information required by this Item is incorporated by reference to the information under the section captioned “Audit Committee Report” in the proxy statement.

PART IV

Item 15. Exhibits, Financial Statement Schedules.

(a) 1. Financial Statements.

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

AUDITED CONSOLIDATED FINANCIAL STATEMENTS

2. Financial Statement Schedules.

Schedules not listed above have been omitted because the information required to be set forth therein is not applicable or is shown in the financial statements or notes thereto.

(b) Exhibits.

		Incorporated by Reference (Unless Otherwise Indicated)			
Exhibit Number	Exhibit Title	Form	File	Exhibit	Filing Date
3.1	Restated Certificate of Incorporation of Benefitfocus, Inc.	10-Q	—	3.1.3	November 12, 2013
3.2	Amended and Restated Bylaws of Benefitfocus, Inc.	8-K	—	3.2.1	September 19, 2016
4.1	Specimen Certificate for Common Stock.	S-1/A	333-190610	4.1	September 5, 2013
4.2	Form of Second Amended and Restated Investors' Rights Agreement, dated, 2013, by and among Benefitfocus, Inc. and certain stockholders named therein.	S-1/A	333-190610	4.3	September 16, 2013
4.2.1	First Amendment to Second Amended and Restated Investors' Rights Agreement, dated February 24, 2015, by and among Benefitfocus, Inc. and certain stockholders named therein.	10-K	—	4.3.1	February 27, 2015

4.3	Indenture of Benefitfocus, Inc. and U.S. National Bank, as Trustee, dated as of December 27, 2018.	8-K	—	4.1	December 28, 2018
4.4	Form of 1.25% Convertible Senior Notes due 2023 (included in Exhibit 4.3).	8-K	—	4.1	December 28, 2018
10.1	Form of Second Amended and Restated Voting Agreement, dated, 2013, by and among Benefitfocus, Inc., and certain stockholders named therein.	S-1/A	333-190610	10.2	September 5, 2013
10.2	Amended and Restated 2000 Stock Option Plan.#	S-1	333-190610	10.3	August 14, 2013
10.3	Form of Grant Notice and Stock Option Agreement under the Amended and Restated 2000 Stock Option Plan.#	S-1	333-190610	10.5	August 14, 2013
10.4	Benefitfocus, Inc. Amended and Restated 2012 Stock Plan.#	DEF 14A	—	—	April 25, 2014
10.5	Form of Grant Notice and Stock Option Agreement under the 2012 Stock Plan, as amended.#	S-1	333-190610	10.6	August 14, 2013
10.6	Form of Management Incentive Bonus Program.#	S-1	333-190610	10.7	August 14, 2013
10.6.1	Benefitfocus, Inc. Management Incentive Bonus Program.#	DEF 14A	—	—	April 25, 2014
10.7	Employment Agreement, dated January 19, 2007, by and between Benefitfocus.com, Inc. and Mason R. Holland, Jr.#	S-1	333-190610	10.8	August 14, 2013
10.8	Form of Employment Agreement.#	S-1	333-190610	10.11	August 14, 2013
10.9	Form of Indemnification Agreement.#	S-1	333-190610	10.12	August 14, 2013
10.10	Lease between Daniel Island Executive Center, LLC and Benefitfocus.com, Inc., dated as of January 1, 2009, as amended.	S-1	333-190610	10.13	August 14, 2013
10.10.1	Third Amendment to Lease between Daniel Island Executive Center, LLC and Benefitfocus.com, Inc., dated as of December 12, 2016.	8-K	—	10.13.1	December 14, 2016
10.11	Lease between Daniel Island Executive Center, LLC and Benefitfocus.com, Inc., dated as of May 31, 2005.	S-1	333-190610	10.14	August 14, 2013

10.11.1	First Amendment to Lease between Daniel Island Executive Center, LLC and Benefitfocus.com, Inc., dated as of December 12, 2016.	8-K	—	10.14.1	December 14, 2016
10.12	Master Business Agreement between Aetna Life Insurance Company and Benefitfocus.com, Inc., dated as of November 28, 2006.+	S-1	333-190610	10.15	August 14, 2013
10.13	Lease between DIEC II, LLC and Benefitfocus.com, Inc., dated as of December 13, 2013.	10-K	—	10.19	March 21, 2014
10.13.1	Amendment to Lease between DIEC II, LLC and Benefitfocus.com, Inc., dated as of December 12, 2016.	8-K	—	10.16.1	December 14, 2016
10.14	Form of Independent Director Compensation Agreement.	8-K	—	10.21	June 23, 2014
10.15	Securities Purchase Agreement, dated as of February 24, 2015, by and among Benefitfocus, Inc. and Mercer LLC.	10-K	—	10.20	February 27, 2015
10.16	Right of First Offer Agreement, dated as of February 24, 2015, by and among Benefitfocus, Inc., Mercer LLC, GS Capital Partners VI Parallel, L.P., GS Capital Partners VI GmbH & Co. KG, GS Capital Partners VI Fund, L.P., GS Capital Partners VI Offshore Fund, L.P., Oak Investment Partners XII, Limited Partnership and certain stockholders named therein.	10-K	—	10.21	February 27, 2015

10.17	Employment Agreement, dated June 25, 2014, by and between Benefitfocus.com, Inc. and Ray August.#	8-K	—	10.22	April 8, 2015
10.17.1	First Amendment to Employment Agreement, dated November 20, 2017, by and between Benefitfocus.com, Inc. and Raymond A. August.#	10-K	—	10.18.1	March 15, 2018
10.18	Senior Secured Credit Facility, dated as of February 20, 2015, by and among Benefitfocus, Inc., Benefitfocus.com, Inc., Benefit Informatics, Inc., BenefitStore, Inc., several lenders, Silicon Valley Bank, as administrative agent, issuing lender and swingline lender and Comerica Bank, as documentation agent.	10-Q	—	10.23	May 6, 2015
10.18.1	First Amendment Agreement, dated as of June 16, 2015, by and among Benefitfocus, Inc., Benefitfocus.com, Inc., Benefit Informatics, Inc., BenefitStore, Inc., several banks and other financial institutions or entities and Silicon Valley Bank, as administrative agent and collateral agent for lenders.	8-K	—	10.25	June 16, 2015
10.18.2	Second Amendment Agreement, dated as of December 18, 2015, by and among Benefitfocus, Inc., Benefitfocus.com, Inc., Benefit Informatics, Inc., BenefitStore, Inc., several banks and other financial institutions or entities and Silicon Valley Bank, as administrative agent and collateral agent for lenders.	10-K	—	10.23	February 25, 2016
10.18.3	Third Amendment Agreement, dated as of March 24, 2016, by and among Benefitfocus, Inc., Benefitfocus.com, Inc., BenefitStore, Inc., several banks and other financial institutions or entities and Silicon Valley Bank, as administrative agent and collateral agent for lenders.	8-K	—	10.26	March 29, 2016

10.18.4	Fourth Amendment Agreement, dated as of October 28, 2016, by and among Benefitfocus, Inc., Benefitfocus.com, Inc. and BenefitStore, Inc., several banks and other financial institutions or entities and Silicon Valley Bank, as administrative agent and collateral agent for lenders.+	8-K	—	10.29	October 31, 2016
10.18.5	Fifth Amendment Agreement, dated as of December 12, 2016, by and among Benefitfocus, Inc., Benefitfocus.com, Inc. and BenefitStore, Inc., several banks and other financial institutions or entities and Silicon Valley Bank, as administrative agent and collateral agent for lenders.	8-K	—	10.32	December 14, 2016
10.18.6	Sixth Amendment Agreement, dated as of April 26, 2017, by and among Benefitfocus, Inc., Benefitfocus.com, Inc. and BenefitStore, Inc., several banks and other financial institutions or entities and Silicon Valley Bank, as administrative agent and collateral agent for lenders.+	10-Q	—	10.20.6	April 28, 2017
10.18.7	Seventh Amendment Agreement, dated as of March 29, 2018, by and among Benefitfocus, Inc., Benefitfocus.com, Inc. and BenefitStore, Inc., several banks and other financial institutions or entities and Silicon Valley Bank, as administrative agent and collateral agent for lenders.+	8-K	—	10.19.7	April 2, 2018
10.18.8	Eighth Amendment Agreement, dated as of December 19, 2018, by and among Benefitfocus, Inc., Benefitfocus.com, Inc. and BenefitStore, Inc., several banks and other financial institutions or entities and Silicon Valley Bank, as administrative agent and collateral agent for lenders.++				Filed herewith
10.19	Guarantee and Collateral Agreement, dated as of February 20, 2015, made by Benefitfocus, Inc., Benefitfocus.com, Inc., Benefit Informatics, Inc., BenefitStore, Inc., and other grantors, in favor of Silicon Valley Bank, as administrative agent.	10-Q	—	10.24	May 6, 2015

10.20	Benefitfocus, Inc. 2016 Employee Stock Purchase Plan.#	DEF14A	—	—	April 22, 2016
10.21	Waiver to Credit Agreement, dated as of September 1, 2016, by and among the Benefitfocus, Inc., Benefitfocus.com, Inc. and BenefitStore, Inc., the several banks and other financial institutions or entities party thereto and Silicon Valley Bank, as administration agent and collateral agent for the lenders.	8-K	—	10.28	September 1, 2016
10.22	Lease between DIEC II, LLC and Benefitfocus.com, Inc., dated as of December 12, 2016.	8-K	—	10.31	December 14, 2016
10.23	Employment Agreement, dated June 30, 2017, by and between Benefitfocus.com and Jonathon Dussault.#	10-Q	—	10.29	August 8, 2017
10.24	Form of Call Option Transaction Notice.	8-K	—	10.1	December 28, 2018
10.25	Employment Agreement, dated June 30, 2017, by and between Benefitfocus.com and James Restivo.#				Filed herewith
21.1	List of Subsidiaries of Registrant.	—	—	—	Filed herewith
23.1	Consent of Ernst & Young LLP.	—	—	—	Filed herewith
31.1	Certification of the President and Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.	—	—	—	Filed herewith
31.2	Certification of the Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.	—	—	—	Filed herewith
32.1	Certification of the President and Chief Executive Officer, and the Chief Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.	—	—	—	Filed herewith
101.INS	XBRL Instance Document.	—	—	—	Filed herewith
101.SCH	XBRL Taxonomy Extension Schema Document.	—	—	—	Filed herewith
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document.	—	—	—	Filed herewith
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document.	—	—	—	Filed herewith
101.LAB	XBRL Taxonomy Extension Label Linkbase Document.	—	—	—	Filed herewith

101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document.	—	—	—	Filed herewith

---

\# Management contract or compensatory plan.

\+ The registrant has received confidential treatment with respect to portions of this exhibit. Those portions have been omitted from the exhibit and filed separately with the SEC.

++ The registrant has requested confidential treatment with respect to portions of this exhibit. Those portions have been omitted from the exhibit and filed separately with the SEC.

Item 16. Form 10-K Summary.

None.

SIGNATURES

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

Benefitfocus, Inc.

Date: February 26, 2019

By: /s/ Jonathon E. Dussault
Jonathon E. Dussault
Chief Financial Officer

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

Signature	Capacity	Date
/s/ Mason R. Holland, Jr. Mason R. Holland, Jr.	Chairman of the Board of Directors	February 26, 2019
/s/ Raymond A. August Raymond A. August	President and Chief Executive Officer (principal executive officer)	February 26, 2019
/s/ Jonathon E. Dussault Jonathon E. Dussault	Chief Financial Officer (principal financial and accounting officer)	February 26, 2019
/s/ Douglas A. Dennerline Douglas A. Dennerline	Director	February 26, 2019
/s/ Joseph P. DiSabato Joseph P. DiSabato	Director	February 26, 2019
/s/ A. Lanham Napier A. Lanham Napier	Director	February 26, 2019
/s/ Francis J. Pelzer V Francis J. Pelzer V	Director	February 26, 2019
/s/ Stephen M. Swad Stephen M. Swad	Director	February 26, 2019
/s/ Ana M. White Ana M. White	Director	February 26, 2019

BENEFITFOCUS, INC.
INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

AUDITED CONSOLIDATED FINANCIAL STATEMENTS

CONSOLIDATED FINANCIAL STATEMENT SCHEDULE

Report of Independent Registered Public Accounting Firm

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

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Benefitfocus, Inc. (the Company) as of December 31, 2018 and 2017, the related consolidated statements of operations and comprehensive loss, changes in stockholders' equity (deficit) and cash flows for each of the three years in the period ended December 31, 2018, and the related notes and the financial statement schedule listed in the Index at Item 15(a)(2) (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at 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 U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2018, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated February 26, 2019 expressed an unqualified opinion thereon.

Adoption of New Accounting Standards

As discussed in Note 2 to the consolidated financial statements, the Company changed its method for accounting for revenue recognition from contracts with customers due to the adoption of ASU No. 2014-09, *Revenue from Contracts with Customers (Topic 606), as amended,* using the full retrospective adoption method.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ Ernst & Young LLP

We have served as the Company's auditor since 2008.

Raleigh, North Carolina
February 26, 2019

Report of Independent Registered Public Accounting Firm

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

Opinion on Internal Control Over Financial Reporting

We have audited Benefitfocus, Inc.'s internal control over financial reporting as of December 31, 2018, based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 Framework) (the COSO criteria). In our opinion, Benefitfocus, Inc. (the Company) maintained, in all material respects, effective internal control over financial reporting as of December 31, 2018, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of Benefitfocus, Inc. as of December 31, 2018 and 2017, the related consolidated statements of operations and comprehensive loss, changes in stockholders' equity (deficit) and cash flows for each of the three years in the period ended December 31, 2018, and the related notes and the financial statement schedule listed in the Index at Item 15(a)(2) and our report dated February 26, 2019 expressed an unqualified opinion thereon.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Annual Report on Internal Controls Over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

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

/s/ Ernst & Young LLP
Raleigh, North Carolina
February 26, 2019

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

	As of December 31,	
	2018	2017
Assets		
Current assets:		
Cash and cash equivalents	$ 190,928	$ 55,335
Accounts receivable, net	21,077	30,091
Contract, prepaid and other current assets	16,667	15,859
Total current assets	228,672	101,285
Property and equipment, net	69,965	72,681
Intangible assets, net	–	150
Goodwill	1,634	1,634
Deferred contract costs and other non-current assets	13,668	16,253
Total assets	$ 313,939	$ 192,003
Liabilities and stockholders' deficit		
Current liabilities:		
Accounts payable	$ 8,687	$ 4,260
Accrued expenses	11,461	9,110
Accrued compensation and benefits	17,269	14,250
Deferred revenue, current portion	36,540	43,804
Revolving line of credit, current portion	–	24,000
Financing and capital lease obligations, current portion	4,486	3,423
Total current liabilities	78,443	98,847
Deferred revenue, net of current portion	9,323	11,223
Convertible senior notes	176,692	–
Revolving line of credit, net of current portion	–	32,246
Financing and capital lease obligations, net of current portion	57,116	55,597
Other non-current liabilities	2,575	2,809
Total liabilities	324,149	200,722
Commitments and contingencies		
Stockholders' deficit:		
Preferred stock, par value $0.001, 5,000,000 shares authorized, no shares issued and outstanding at December 31, 2018 and December 31, 2017	-	-
Common stock, par value $0.001, 50,000,000 shares authorized, 32,017,773 and 31,307,989 shares issued and outstanding at December 31, 2018 and December 31, 2017, respectively	32	31
Additional paid-in capital	403,631	352,496
Accumulated deficit	(413,873)	(361,246)
Total stockholders' deficit	(10,210)	(8,719)
Total liabilities and stockholders' deficit	$ 313,939	$ 192,003

The accompanying notes are an integral part of the Consolidated Financial Statements.

BENEFITFOCUS, INC.
CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS
(in thousands, except share and per share data)

	Year Ended December 31,		
	2018	**2017**	**2016**
Revenue	$ 258,721	$ 236,842	$ 236,523
Cost of revenue	129,277	127,382	123,308
Gross profit	129,444	109,460	113,215
Operating expenses:			
Sales and marketing	78,179	70,583	56,311
Research and development	47,902	49,549	56,610
General and administrative	43,062	27,268	32,750
Total operating expenses	169,143	147,400	145,671
Loss from operations	(39,699)	(37,940)	(32,456)
Other income (expense):			
Interest income	250	182	138
Interest expense on building lease financing obligations	(7,471)	(7,450)	(6,826)
Interest expense on other borrowings	(5,685)	(4,931)	(1,095)
Other income (expense)	6	(140)	(90)
Total other expense, net	(12,900)	(12,339)	(7,873)
Loss before income taxes	(52,599)	(50,279)	(40,329)
Income tax expense	28	15	17
Net loss	$ (52,627)	$ (50,294)	$ (40,346)
Comprehensive loss	$ (52,627)	$ (50,294)	$ (40,346)
Net loss per common share:			
Basic and diluted	$ (1.66)	$ (1.62)	$ (1.36)
Weighted-average common shares outstanding:			
Basic and diluted	31,756,415	31,052,378	29,589,857

The accompanying notes are an integral part of the Consolidated Financial Statements.

BENEFITFOCUS, INC.
CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY (DEFICIT)
(in thousands, except share and per share data)

	Common Stock, $0.001 Par Value		Additional		Total
	Shares	Par Value	Paid-in Capital	Accumulated Deficit	Stockholders' Equity (Deficit)
Balance, December 31, 2015 (as previously reported)	29,194,332	$ 29	$ 310,304	$ (328,342)	$ (18,009)
Cumulative effect adjustment from adoption of revenue recognition standard	–	–	(2,805)	58,127	55,322
Balance, January 1, 2016	29,194,332	$ 29	$ 307,499	$ (270,215)	$ 37,313
Exercise of stock options	944,706	1	6,869	–	6,870
Issuance of common stock upon vesting of restricted stock units, net of shares surrendered for taxes	289,976	–	(202)	–	(202)
Stock-based compensation expense	–	–	18,088	–	18,088
Net loss	–	–	–	(40,346)	(40,346)
Balance, December 31, 2016	30,429,014	$ 30	$ 332,254	$ (310,561)	$ 21,723
Cumulative effect adjustment from adoption of new accounting standard	–	–	391	(391)	–
Exercise of stock options	463,870	1	3,457	–	3,458
Issuance of common stock upon vesting of restricted stock units	406,936	–	–	–	–
Issuance of common stock under Employee Stock Purchase Plan, or ESPP	8,169	–	257	–	257
Stock-based compensation expense	–	–	16,137	–	16,137
Net loss	–	–	–	(50,294)	(50,294)
Balance, December 31, 2017	31,307,989	$ 31	$ 352,496	$ (361,246)	$ (8,719)
Exercise of stock options	29,908	–	186	–	186
Issuance of common stock upon vesting of restricted stock units	663,419	1	(1)	–	–
Issuance of common stock under Employee Stock Purchase Plan, or ESPP	16,457	–	526	–	526
Purchase of convertible note capped call hedge	–	–	(33,024)	–	(33,024)
Equity component of convertible notes	–	–	56,950	–	56,950
Stock-based compensation expense	–	–	26,498	–	26,498
Net loss	–	–	–	(52,627)	(52,627)
Balance, December 31, 2018	32,017,773	$ 32	$ 403,631	$ (413,873)	$ (10,210)

The accompanying notes are an integral part of the Consolidated Financial Statements.

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

	Year Ended December 31,		
	2018	**2017**	**2016**
Cash flows from operating activities			
Net loss	$ (52,627)	$ (50,294)	$ (40,346)
Adjustments to reconcile net loss to net cash and cash equivalents used in operating activities:			
Depreciation and amortization	15,815	15,906	13,073
Stock-based compensation expense	28,868	16,137	18,088
Interest accrual on financing obligations	7,521	7,500	6,827
Loss on disposal or impairment of property and equipment	7	157	141
Provision for doubtful accounts	364	75	667
Changes in operating assets and liabilities:			
Accounts receivable, net	8,650	2,800	(3,936)
Accrued interest on short-term investments	–	7	220
Contract, prepaid and other current assets	(570)	4,519	(6,716)
Deferred costs and other non-current assets	3,137	5,538	3,816
Accounts payable and accrued expenses	6,566	(3,015)	(859)
Accrued compensation and benefits	649	(3,097)	(3,337)
Deferred revenue	(9,165)	(1,922)	(12,537)
Other non-current liabilities	(234)	(248)	2,073
Net cash and cash equivalents provided by (used in) operating activities	8,981	(5,937)	(22,826)
Cash flows from investing activities			
Purchases of short-term investments held to maturity	–	–	(2,004)
Proceeds from short-term investments held to maturity	–	2,000	40,225
Purchases of property and equipment	(8,290)	(8,279)	(12,705)
Net cash and cash equivalents (used in) provided by investing activities	(8,290)	(6,279)	25,516
Cash flows from financing activities			
Draws on revolving line of credit	115,000	105,000	84,000
Payments on revolving line of credit	(171,246)	(89,000)	(74,000)
Proceeds from issuance of convertible notes	240,000	–	–
Payments of debt issuance costs and deferred financing costs	(6,000)	–	(379)
Purchase of convertible note capped call hedge	(33,024)	–	–
Proceeds from exercises of stock options and ESPP	712	3,715	6,870
Remittance of taxes upon vesting of restricted stock units	–	–	(202)
Payments on financing and capital lease obligations	(10,540)	(9,017)	(10,200)
Net cash and cash equivalents provided by financing activities	134,902	10,698	6,089
Net increase (decrease) in cash and cash equivalents	135,593	(1,518)	8,779
Cash and cash equivalents, beginning of year	55,335	56,853	48,074
Cash and cash equivalents, end of year	$ 190,928	$ 55,335	$ 56,853
Supplemental disclosure of non-cash investing and financing activities			
Property and equipment purchases in accounts payable and accrued expenses	$ 244	$ 389	$ 699
Property and equipment purchased with financing and capital lease obligations	$ 4,810	$ -	$ 28,032
Post contract support purchased with financing obligations	$ 790	$ -	$ 1,048
Debt issuance costs included in accounts payable and accrued expenses	$ 358	$ -	$ -
Supplemental disclosure of cash flow information			
Income taxes paid	$ 28	$ 14	$ 7
Interest paid	$ 11,884	$ 10,911	$ 6,655

The accompanying notes are an integral part of the Consolidated Financial Statements

1. Organization and Description of Business

Benefitfocus, Inc. (the "Company") provides a leading cloud-based benefits management platform for consumers, employers, insurance carriers, suppliers and brokers that is designed to simplify how organizations and individuals transact benefits. The financial statements of the Company include the financial position and operations of its wholly owned subsidiaries, Benefitfocus.com, Inc. and BenefitStore, Inc.

2. Summary of Significant Accounting Policies

Principles of Consolidation

These consolidated financial statements have been prepared in accordance with U.S. generally accepted accounting principles ("GAAP"). The consolidated financial statements include the accounts of the Company and its wholly owned subsidiaries. All intercompany accounts and transactions have been eliminated in consolidation. The Company is not the primary beneficiary of, nor does it have a controlling financial interest in, any variable interest entity. Accordingly, the Company has not consolidated any variable interest entity.

Use of Estimates

The preparation of financial statements in conformity with GAAP requires the Company to make estimates and assumptions that affect the reported amounts in the consolidated financial statements and accompanying notes. Such estimates include revenue recognition and related reserves, allowances for doubtful accounts and returns, valuations of deferred income taxes, long-lived assets, warrants, capitalizable software development costs and the related amortization, stock-based compensation, the determination of the useful lives of assets, and the impairment assessment of acquired intangibles and goodwill. Determination of these transactions and account balances are based on the Company's estimates and judgments. These estimates are based on the Company's knowledge of current events and actions it may undertake in the future as well as on various other assumptions that it believes to be reasonable. Actual results could differ materially from these estimates.

Revenue and Deferred Revenue

The Company derives its revenues primarily from fees for software services and professional services sold to employers and insurance carriers. Revenues are recognized when control of these services is transferred to customers, in an amount that reflects the consideration the Company expects to be entitled to in exchange for those services. Taxes collected from customers relating to services and remitted to governmental authorities are excluded from revenues.

The Company determines revenue recognition through the following steps:

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

Software Services Revenues

Software services revenues primarily consist of monthly subscription fees paid to the Company by its employer and insurance carrier customers for access to, and usage of, cloud-based benefits software solutions for a specified contract term. Fees are generally charged based on the number of employees or subscribers with access to the solution. Software services revenue also includes certain other revenue which is generated from the value of policies or products enrolled in through the Company's marketplace.

Software services revenues are generally recognized on a ratable basis over the contract term beginning on the date the software services are made available to the customer. The Company's software service contracts are generally three years for both carrier and employer customers. Revenue from insurance broker commissions and supplier transactions is recognized at a point in time when the orders for the policies are received and transferred to the insurance carrier or supplier, and is reduced by estimates for risks from collectability, policy cancellation and termination.

Professional Services Revenues

Professional services revenues primarily consist of fees related to the implementation of software products purchased by customers. Professional services typically include discovery, configuration and deployment, integration, testing, and training. Fees from consulting services, support services and training are also included in professional services revenue.

Revenue from implementation services with customers in the Carrier segment are generally recognized over the contract term of the associated software services contract, including any extension periods representing a material right. In certain arrangements, the Company utilizes estimates of hours as a measure of progress to determine revenue.

Revenues from implementation services with customers in the Employer segment are generally recognized as those services are performed.

Revenues from support and training fees are recognized over the service period.

Contracts with Multiple Performance Obligations

Certain of the Company's contracts with customers contain multiple performance obligations. For these contracts, the individual performance obligations are accounted for separately if they are distinct. The Company allocates the transaction price to the separate performance obligations based on their relative standalone selling prices. The Company determines the standalone selling prices based on its overall pricing objectives, taking into consideration market conditions and other factors, including the value of its contracts, the software services sold, customer size and complexity, and the number and types of users under the contracts.

Practical Expedients Elected

In addition to practical expedients disclosed elsewhere in the notes to consolidated financial statements, the Company has elected to use the practical expedient not to adjust the promised amount of consideration for the effects of a significant financing component for contracts in which the period between transferring a service to a customer and when the customer pays for that service is one year or less.

Contract Costs

The Company capitalizes costs to obtain contracts that are considered incremental and recoverable, such as sales commissions. Payments of sales commissions generally include multiple payments. The Company capitalizes only those payments made within an insignificant time from the contract inception, typically three months or less. Subsequent payments are expensed as incurred. The capitalized costs are amortized to sales and marketing expense over the estimated period of benefit of the asset, which is generally four to five years. The Company has elected to use the practical expedient to expense the costs to obtain a contract when the amortization period is less than one year. The balance of deferred costs related to obtaining contracts included in deferred contract costs and other non-current assets was $7,506 and $7,376 as of December 31, 2018 and 2017, respectively. Sales and marketing expense includes $4,217, $4,488 and $4,348 of amortization for the years ended December 31, 2018, 2017 and 2016, respectively.

The Company capitalizes contract fulfillment costs directly associated with customer contracts that are not related to satisfying performance obligations. The costs are amortized to cost of revenue expense over the estimated period of benefit, which is generally five years. The balance of deferred fulfillment costs included in deferred contract costs and other non-current assets was $5,235 and $8,060 as of December 31, 2018 and 2017, respectively. Cost of revenue expense includes $3,480, $3,525 and $3,187 of amortization for the years ended December 31, 2018, 2017 and 2016, respectively.

Cost of Revenue

Cost of revenue primarily consists of employee compensation, professional services, data center co-location costs, networking expenses, depreciation expense for computer equipment directly associated with generating revenue, amortization expense for capitalized software development costs, and infrastructure maintenance costs. In addition, the Company allocates a portion of overhead, such as facilities and security costs, additional depreciation and amortization expense, and employee benefit costs, to cost of revenue based on headcount.

Cash and Cash Equivalents

Cash and cash equivalents consist of bank checking accounts and money market accounts. The Company considers all highly liquid investments with original maturities of three months or less at the time of purchase to be cash equivalents.

Marketable Securities

Marketable securities consist of short-term investments in corporate bonds, commercial paper, and various U.S. government backed securities. To reflect its intention, the Company classifies its marketable securities as held-to-maturity at the time of purchase. As a result, the marketable securities are recorded at amortized cost and any gains or losses realized upon maturity are reported in other expense, net in the consolidated statements of operations and comprehensive loss.

Concentrations of Credit Risk

The Company’s financial instruments that are exposed to concentrations of credit risk consist primarily of cash equivalents, marketable securities and accounts receivable. All of the Company’s cash and cash equivalents are held at financial institutions that management believes to be of high credit quality. The bank deposits of the Company might, at times, exceed federally insured limits and are generally uninsured and uncollateralized. The Company has not experienced any losses on cash and cash equivalents to date.

To manage credit risk related to marketable securities, the Company invests in various types of highly rated corporate bonds, commercial paper, and various U.S. government backed securities with maturities of less than two years. The weighted average maturity of the portfolio of investments must not exceed nine months, per the Company’s investment policy.

To manage accounts receivable risk, the Company evaluates the creditworthiness of its customers and maintains an allowance for doubtful accounts. Accounts receivable were unsecured and were derived from revenue earned from customers located in the United States. Accounts receivable from one customer represented approximately 12% of the total accounts receivable at December 31, 2017, and approximately 13%, 11% and 12% of total revenue for the year ended December 31, 2018, 2017 and 2016, respectively. The revenue is attributable to the Company’s Employer segment.

(thousands, except share and per share data)

Accounts Receivable and Allowance for Doubtful Accounts and Returns

Accounts receivable are stated at realizable value, net of allowances for doubtful accounts and estimated returns. The Company utilizes the allowance method to provide for doubtful accounts based on management's evaluation of the collectability of amounts due, and other relevant factors. Bad debt expense is recorded in general and administrative expense on the consolidated statements of operations and comprehensive loss. The Company's estimate is based on historical collection experience and a review of the current status of accounts receivable. Historically, actual write-offs for uncollectible accounts have not significantly differed from the Company's estimates. The Company removes recorded receivables and the associated allowances when they are deemed permanently uncollectible. However, higher than expected bad debts may result in future write-offs that are greater than the Company's estimates. The allowance for doubtful accounts was $392 and $654 as of December 31, 2018 and 2017, respectively.

The allowances for returns are accounted for as reductions of revenue and are estimated based on the Company's periodic assessment of historical experience and trends. The Company considers factors such as the time lag since the initiation of revenue recognition, historical reasons for adjustments, new customer volume, delivery issues or delays, and past due customer billings. The allowance for returns was $3,191 and $2,877 as of December 31, 2018 and 2017, respectively.

Property and Equipment and Capitalized Software Development Costs

Property and equipment, including capitalized software development costs, are stated at cost less accumulated depreciation and amortization. Expenditures for major additions and improvements are capitalized. Depreciation and amortization are recognized over the estimated useful lives of the related assets using the straight-line method.

The estimated useful lives for significant property and equipment categories are generally as follows:

Buildings	30 years
Computers and related equipment	3-5 years
Purchased software and licenses	1-7 years
Developed software	3 years
Furniture and fixtures	7 years
Leasehold improvements	Lesser of estimated useful life of asset or lease term
Other equipment	5-12 years
Vehicles	5 years

Useful lives of significant assets are periodically reviewed and adjusted prospectively to reflect the Company's current estimates of the respective assets' expected utility. Costs associated with maintenance and repairs are expensed as incurred.

The Company capitalizes certain costs related to its software developed or obtained for internal use. Costs related to preliminary project activities and post-implementation activities are expensed as incurred. Internal and external costs incurred during the application development stage, including upgrades and enhancements representing modifications that will result in significant additional functionality, are capitalized. Software maintenance and training costs are expensed as incurred. Capitalized costs are recorded as part of property and equipment and are amortized on a straight-line basis over the software's estimated useful life which is three years. The Company evaluates these assets for impairment whenever events or changes in circumstances occur that could impact the recoverability of these assets.

Identifiable Intangible Assets

Identifiable intangible assets with finite lives are recorded at their fair values at the date of acquisition and are amortized on a straight-line basis over their respective estimated useful lives, which is the period over which the asset is expected to contribute directly or indirectly to future cash flows.

Impairment of Long-Lived Assets and Goodwill

The Company reviews long-lived assets and definite-lived intangible assets for impairment whenever events or changes in circumstances indicate the carrying amount of an asset might not be recoverable. Recoverability of the long-lived asset is measured by a comparison of the carrying amount of the asset or asset group to future undiscounted net cash flows expected to be generated. If such assets are not recoverable, the impairment to be recognized, if any, is measured as the amount by which the carrying amount of the assets exceeds the estimated fair value (discounted cash flow) of the assets or asset group. Assets held for sale are reported at the lower of the carrying amount or fair value, less costs to sell.

Goodwill represents the excess of the aggregate of the fair value of consideration transferred in a business combination over the fair value of assets acquired, net of liabilities assumed. Goodwill is not amortized; rather, goodwill is tested for impairment at the reporting unit level as of October 31 of each year, or more frequently if an event occurs or circumstances change that would more likely than not reduce the fair value of a reporting unit below its carrying value.

The Company performs a qualitative assessment to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying value before testing goodwill for impairment for each reporting unit. The reporting units are determined by the components of the Company's operating segments that constitute a business for which both (1) discrete financial information is available and (2) segment management regularly reviews the operating results of that component. If it is more likely than not that the fair value of a reporting unit is less than its carrying value, the Company performs the impairment test by applying a fair-value-based test. The Company compares the fair value of a reporting unit to its carrying value. If the carrying value of the net assets assigned to the reporting unit exceeds the fair value of our reporting unit, an impairment loss is recorded equal to the difference.

The Company has identified two reporting units, Employer and Carrier. To determine the fair value of the Company's reporting units, the Company has used a discounted cash flow analysis, which requires significant assumptions and estimates about future operations. Significant judgments inherent in this analysis include the determination of an appropriate discount rate, estimated terminal value and the amount and timing of expected future cash flows. The Company may also determine fair value of its reporting units using a market approach by applying multiples of earnings of peer companies to its operating results.

Debt Issuance Costs

Debt issuance costs related to the convertible senior note financing have been recorded as a reduction of the carrying amount of the debt and are amortized to interest expense using the effective interest method.

Debt issuance costs related to the revolving line of credit have been recorded in other non-current assets and are amortized to interest expense over the remaining life of the agreement.

Financing Obligations

In its build-to-suit lease arrangements where the Company is involved in the construction of its buildings, the Company is deemed the owner for accounting purposes during the construction period. The Company records an asset for the amount of the total project costs in Property and Equipment, net and the related financing obligation in Financing and Capital Lease Obligations on the Consolidated Balance Sheet. Once construction is complete, the Company determines if the asset qualifies for sale-leaseback accounting treatment. If the arrangement does not qualify for sale-lease back treatment, the Company continues to reduce the obligation over the lease term as payments are made and depreciates the asset over its useful life. The Company does not report rent expense for the portion of the rent payment determined to be related to the assets that it owns for accounting purposes. Rather, this portion of the rent payment under the lease is recognized as a reduction of the financing obligation and as interest expense.

Financing obligations also include liabilities for the purchase of software licenses.

Advertising

The Company expenses advertising costs as they are incurred. Direct advertising costs for the years ended December 31, 2018, 2017 and 2016 were $391, $168 and $635, respectively.

Comprehensive Loss

The Company’s net loss equals comprehensive loss for all periods presented.

Stock-Based Employee Compensation

Stock-based employee compensation is measured based on the grant-date fair value of the awards and recognized in the Consolidated Statements of Operations and Comprehensive Loss over the period during which the award holder is required to perform services in exchange for the award, which is the vesting period. Compensation expense is recognized over the vesting period of the applicable award using the straight-line method. Compensation expense related to performance-based restricted stock units, which are accounted for as equity awards, is recognized when it is probable that the performance measure will be met. Compensation costs related to restricted stock units (“RSUs”) is based on the market price on the grant date. The Company uses the Black-Scholes option pricing model for estimating the fair value of stock options. The use of the option valuation model requires the input of subjective assumptions, including the expected life of the option and the expected stock price volatility. Additionally, prior to January 1, 2017, the recognition of stock-based compensation expense required the estimation of the number of options and RSUs that will ultimately vest and the number of options and RSUs that will ultimately be forfeited. Starting January 1, 2017, the Company recognizes the effect of forfeitures as they occur. The recognition of stock-based compensation expense associated with performance-based restricted stock units requires the estimation of the probability of achieving performance measures.

The Company adopted the guidance in Accounting Standards Update ("ASU") 2016-09, “Compensation - Stock Compensation (Topic 718) - Improvements to Employee Share-Based Payment Accounting,” on January 1, 2017. Under this ASU, entities are permitted to make an accounting policy election to either estimate forfeitures on share-based payment awards, as previously required, or to recognize forfeitures as they occur. The Company has elected to recognize forfeitures as they occur and the impact of that change in accounting policy has been recorded as a $391 cumulative effect adjustment to its accumulated deficit as of January 1, 2017.

Income Taxes

The Company uses the asset and liability method for income tax accounting. This method requires the recognition of deferred tax assets and liabilities for the expected future tax consequences of temporary differences between the financial reporting and tax basis of assets and liabilities, as well as for operating loss and tax credit carryforwards. Deferred tax assets and liabilities are measured using the tax rates that are expected to apply to taxable income for the years in which those tax assets and liabilities are expected to be realized or settled. Valuation allowances are recorded to reduce deferred tax assets to the amount the Company believes is more likely than not to be realized. The tax benefits of uncertain tax positions are recognized only when the Company believes it is more likely than not that the tax position will be upheld on examination by the taxing authorities based on the merits of the position. The Company recognizes interest and penalties, if any, related to unrecognized income tax benefits in income tax expense. Income tax effects related to settlements of share-based payment awards are reported in earnings as an increase or decrease to income tax expense (benefit), net. Additionally, income tax-related cash flows resulting from share-based payments are reported as operating activities in the statement of cash flows.

Basic and Diluted Net Loss per Common Share

Basic net loss per share attributable to common stockholders is computed by dividing the net loss attributable to common stockholders by the weighted-average number of shares of common stock outstanding during the period. Diluted net loss per share is computed by giving effect to all potential shares of common stock, including outstanding stock options, outstanding warrants, common stock related to unvested restricted stock units and convertible senior notes to the extent dilutive, and common stock issuable pursuant to the ESPP. Basic and diluted net loss per share was the same for each period presented, as the inclusion of all potential common shares outstanding would have been anti-dilutive.

Recent Accounting Pronouncements

Recently Adopted Accounting Standards

Goodwill Impairment

In January 2017, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2017-04, "Simplifying the Test for Goodwill Impairment." The ASU eliminates Step 2 from the goodwill impairment test and an entity should recognize an impairment charge for the amount by which the carrying amount of goodwill exceeds the reporting unit's fair value, not to exceed the carrying amount of goodwill. The Company adopted this guidance for its goodwill impairment test performed as of October 31, 2018. Adoption did not have any impact on the Company’s consolidated financial statements.

Cloud Computing Arrangements

In August 2018, the FASB issued Accounting Standards Update (“ASU”) 2018-15, “Intangibles - Goodwill and Other - Internal-Use Software (Subtopic 350-40): Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement that is a Service Contract.” The ASU allows companies to capitalize implementation costs incurred in a hosting arrangement that is a service contract over the term of the arrangement, including periods covered by renewal options that are reasonably certain to be exercised. The Company early adopted this standard on a prospective basis in the quarter ended September 30, 2018. There was no impact on the Company’s consolidated financial statements upon adoption.

Revenue from Contracts with Customers

On January 1, 2018, the Company adopted ASU No. 2014-09, “Revenue from Contracts with Customers (Topic 606),” applying the full retrospective transition method to all contracts that were not completed as of January 1, 2016, the initial date of application.

The adoption of Topic 606 significantly affected the accounting for revenue from certain professional services in the Carrier segment and insurance broker commission revenue included in software services revenue in the Employer segment.

Prior to the adoption of Topic 606, the Company recognized revenue from certain professional services in the Carrier segment over the customer relationship period. Under Topic 606, revenue from certain of these services are recognized over the contract term of the associated software services contract, including any extension periods representing a material right, which can be shorter than the customer relationship period. The financial statement impact of this change is a reduction to the deferred revenue balance as of the date of adoption.

Also prior to the adoption of Topic 606, the Company recognized insurance broker commission revenue over the policy period. Under Topic 606, the revenue related to broker commissions is recognized when the performance obligation has been satisfied, which is when the orders for the policies are received and transferred to the insurance carrier. As a result, software services revenue from these arrangements in the Employer segment is recognized in the aggregate and earlier under Topic 606 in comparison to the previous treatment. The financial statement impact of this change is reductions to balances of deferred revenue and increases in contract asset balances reported in other non-current assets.

Additionally, prior to the adoption of Topic 606, the Company recognized revenue from implementation services fees that are paid in advance in the Employer segment either when the associated software services are made available to the customer or over the customer relationship period. Under the new standard, revenue from these fees are recognized as the services are provided on a percentage of completion basis. The financial statement impact of this change is revenue from these fees being recognized sooner under the new standard.

In connection with the adoption of Topic 606, the Company is required to capitalize costs associated with obtaining and fulfilling a contract. Contract assets recognized for costs to obtain a contract consist primarily of sales commissions associated with obtaining contracts in the Carrier segment. These assets are amortized to sales and marketing expense over the estimated period of benefit of the asset, which is generally four to five years. Contract assets recognized for costs to fulfill a contract consist primarily of internal costs related to implementing products in the Carrier segment. These assets are amortized to cost of revenue expense over the estimated period of benefit, which is generally five years.

The Company used the practical expedient for contracts that were completed by January 1, 2016, the initial date of application of Topic 606, that allows for the use of the transaction price at the date the contract was completed for contracts restated in comparative reporting periods, rather than estimating the variable consideration amount in each comparative reporting period.

(thousands, except share and per share data)

The following tables show the amounts by which financial statement lines were affected by the adoption of Topic 606.

	As of December 31, 2017		
Financial Statement Line Item	**As previously reported**	**Adjustments**	**As adjusted**
Consolidated Balance Sheet:			
Accounts receivable, net	$ 30,156	$ (65)	$ 30,091
Contract, prepaid and other current assets	4,337	11,522	15,859
Deferred contract costs and other non-current assets	816	15,437	16,253
Accrued expenses	9,136	(26)	9,110
Deferred revenue, current portion	38,821	4,983	43,804
Deferred revenue, net of current portion	19,898	(8,675)	11,223
Additional paid-in capital	355,301	(2,805)	352,496
Accumulated deficit	(394,663)	33,417	(361,246)

	Year Ended December 31, 2017		
Financial Statement Line Item	**As previously reported**	**Adjustments**	**As adjusted**
Consolidated Statement of Operations and Comprehensive Loss:			
Revenue	$ 256,735	$ (19,893)	$ 236,842
Cost of revenue	124,156	3,226	127,382
Sales and marketing	69,280	1,303	70,583
Loss from operations	(13,518)	(24,422)	(37,940)
Net loss and comprehensive loss	(25,872)	(24,422)	(50,294)
Net loss per common share: Basic and diluted	$ (0.83)	$ (0.79)	$ (1.62)

	Year Ended December 31, 2016		
Financial Statement Line Item	**As previously reported**	**Adjustments**	**As adjusted**
Consolidated Statement of Operations and Comprehensive Loss:			
Revenue	$ 233,335	$ 3,188	$ 236,523
Cost of revenue	120,681	2,627	123,308
Sales and marketing	55,488	823	56,311
Research and development	56,584	26	56,610
Loss from operations	(32,168)	(288)	(32,456)
Net loss and comprehensive loss	(40,058)	(288)	(40,346)
Net loss per common share: Basic and diluted	$ (1.35)	$ (0.01)	$ (1.36)

Cash provided by, or used in, operating, investing and financing activities were not affected by the adoption of Topic 606.

Accounting Standards Not Yet Adopted

In August 2018, the FASB issued ASU 2018-13, “Fair Value Measurement (Topic 820): Disclosure Framework - Changes to the Disclosure Requirements for Fair Value Measurement.” The ASU modifies the disclosure requirements required for fair value measurements. This ASU is effective for the Company for the interim and annual reporting periods starting January 1, 2020. Early adoption is permitted. The Company does not expect this guidance to have a material impact on its consolidated financial statements.

In June 2016, the FASB issued ASU No. 2016-13, “Financial Instruments – Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments.” The purpose of this ASU is to require a financial asset measured at amortized cost basis to be presented at the net amount expected to be collected. Credit losses relating to available-for-sale debt securities should be recorded through an allowance for credit losses. This ASU is effective for interim and annual reporting periods starting January 1, 2020. The Company is currently evaluating the impact of this guidance on its consolidated financial statements.

In February 2016, the FASB issued ASU No. 2016-02, “Leases (Topic 842).” The amendments in this update require lessees, among other things, to recognize lease assets and lease liabilities on the balance sheet for those leases classified as operating leases under previous authoritative guidance. Topic 842 introduces new disclosure requirements for leasing arrangements and is effective for the Company beginning January 1, 2019. The Company will apply Topic 842 without presenting comparative period financial statements, thus will recognize a cumulative-effect adjustment to the opening balance of retained earnings as of January 1, 2019. The Company plans to utilize the following additional significant transition elections:

- Elect the package of three practical expedients to not reassess:
    - whether any expired or existing contracts are or contain a lease;
    - the classification of any expired or existing leases; and
    - the treatment of initial direct costs.
- Adopt a policy to not separate lease and associated nonlease components for all classes of assets. The Company will apply this policy to all existing leases on transition as well as new leases going forward.

The Company is continuing to evaluate the effect of adoption of this standard on its consolidated financial statements. The Company expects its consolidated financial statements to be significantly affected by the following:

- Assets and related financing obligations for the Company’s existing build-to-suit lease arrangements will be derecognized with a cumulative adjustment to retained earnings. These leases will be transitioned to the new standard based on a proforma analysis of the lease balances as of the transition date as if they had been a lease under ASC 840. Based on this analysis, the land component of these leases will be combined with the remainder of the lease obligation. Currently, this obligation is accounted for separately and recognized as part of facility expense. The following impacts are expected on the Company’s consolidated financial statements:
    - Operating expenses will increase as depreciation expense related to the buildings will increase as function of shortening the period of depreciation from the estimated life of the asset to the expected term of the lease.
    - Interest expense will decrease as a result of a discount rate that is lower than the rate required for build-to-suit accounting.
- Lease liabilities and right-of-use, or ROU, assets related to existing operating lease obligations (including lease and associated non-lease components) will recorded on the balance sheet.
- Lease liabilities and ROU assets will be recorded related to payment obligations for nonlease components (e.g. common area maintenance and equipment maintenance) associated with existing capital lease components.

(thousands, except share and per share data)

Total net cash flows will not be impacted by adoption of the new lease standard; however, classification of some transactions are expected to move between operating, investing and financing activities.

3. Net Loss Per Common Share

Diluted loss per common share is the same as basic loss per common share for all periods presented because the effects of potentially dilutive items were anti-dilutive given the Company's net loss. The following common share equivalent securities have been excluded from the calculation of weighted-average common shares outstanding because the effect is anti-dilutive for the periods presented:

	Year Ended December 31,		
Anti-Dilutive Common Share Equivalents	**2018**	**2017**	**2016**
Restricted stock units	2,174,250	1,937,014	1,467,811
Stock options	233,247	263,155	727,559
Convertible senior notes	4,513,824	-	-
Warrant to purchase common stock	-	-	580,813
Employee Stock Purchase Plan	-	7,039	3,964
Total anti-dilutive common share equivalents	6,921,321	2,207,208	2,780,147

In connection with its issuance of the convertible senior notes in December 2018, the Company paid $33,024 to enter into capped call option agreements to reduce the potential dilution to holders of the Company's common stock upon conversion of the convertible senior notes. The capped call option agreements are excluded from the calculation of diluted net loss per share attributable to common stockholders as their effect is antidilutive.

Basic and diluted net loss per common share is calculated as follows:

	Year Ended December 31,		
	2018	**2017**	**2016**
Numerator:			
Net loss	$ (52,627)	$ (50,294)	$ (40,346)
Net loss attributable to common stockholders	$ (52,627)	$ (50,294)	$ (40,346)
Denominator:			
Weighted-average common shares outstanding, basic and diluted	31,756,415	31,052,378	29,589,857
Net loss per common share, basic and diluted	$ (1.66)	$ (1.62)	$ (1.36)

4. Fair Value Measurement

The carrying amounts of certain of the Company's financial instruments, including cash and cash equivalents, net accounts receivable, accounts payable and other accrued liabilities, and accrued compensation and benefits, approximate fair value due to their short-term nature. The carrying value of the Company's financing obligations and revolving line of credit approximates fair value, considering the borrowing rates currently available to the Company for financing obligations with similar terms and credit risks.

The Company uses a three-tier fair value hierarchy to classify and disclose all assets and liabilities measured at fair value on a recurring basis, as well as assets and liabilities measured at fair value on a non-recurring basis, in periods subsequent to their initial measurement. The hierarchy requires the

(thousands, except share and per share data)

Company to use observable inputs when available, and to minimize the use of unobservable inputs when determining fair value. The three tiers are defined as follows:

Level 1. Quoted prices (unadjusted) in active markets for identical assets or liabilities.

Level 2. Other inputs that are directly or indirectly observable in the marketplace.

Level 3. Unobservable inputs for which there is little or no market data, which require the Company to develop its own assumptions.

Assets and Liabilities Measured at Fair Value on a Recurring Basis

The Company evaluates its financial assets and liabilities subject to fair value measurements on a recurring basis to determine the appropriate level to classify them for each reporting period. This determination requires significant judgments to be made.

The following tables present information about the Company's assets and liabilities that are measured at fair value on a recurring basis using the above categories, as of December 31, 2018 and 2017.

	December 31, 2018			
Description	Level 1	Level 2	Level 3	Total
Cash Equivalents:				
Money market mutual funds [1]	$ 182,748	$ -	$ -	$ 182,748
Total assets	$ 182,748	$ -	$ -	$ 182,748

	December 31, 2017			
Description	Level 1	Level 2	Level 3	Total
Cash Equivalents:				
Money market mutual funds [1]	$ 46,730	$ -	$ -	$ 46,730
Total assets	$ 46,730	$ -	$ -	$ 46,730

(1) Money market mutual funds are classified as cash equivalents in the Company's consolidated balance sheets. As short-term, highly liquid investments readily convertible to known amounts of cash, with remaining maturities of three months or less at the time of purchase, the Company's cash equivalent money market funds have carrying values that approximate fair value.

5. Property and Equipment

Property and equipment consists of the following as of December 31:

	2018	2017
Buildings, leased	$ 48,558	$ 48,558
Computers and related equipment	38,183	35,728
Purchased software and licenses	30,702	27,317
Developed software	36,713	30,624
Furniture and fixtures	6,773	6,669
Leasehold improvements	4,633	4,289
Other equipment	2,313	2,260
Vehicles	146	146
Total property and equipment, at cost	168,021	155,591
Accumulated depreciation and amortization	(98,056)	(82,910)
Property and equipment, net	$ 69,965	$ 72,681

Depreciation and amortization expense on property and equipment was $15,665, $15,648 and $12,816, for the years ended December 31, 2018, 2017 and 2016, respectively. Property and equipment includes fixed assets acquired under capital lease agreements of $31,148 and $35,761 for the years ended December 31, 2018 and 2017. Accumulated depreciation of assets under capital leases totaled

(thousands, except share and per share data)

$6,216 and $9,633 as of December 31, 2018 and 2017, respectively. Amortization of assets under capital leases is included in depreciation expense.

The Company capitalized software development costs of $6,090 and $4,482 for the years ended December 31, 2018 and 2017, respectively. Amortization of capitalized software development costs totaled $3,944, $3,257 and $2,857 during the years ended December 31, 2018, 2017 and 2016, respectively. The net book value of capitalized software development costs was $9,806 and $7,660 at December 31, 2018, and 2017, respectively.

6. Goodwill and Intangible Assets

The Company's goodwill balance of $1,634 is solely attributable to the Employer reporting unit. The gross carrying amount and accumulated impairment losses were $3,304 and $(1,670), respectively, for the beginning and ending balances in all periods presented. There were no changes in the carrying amount of goodwill in the years ended December 31, 2018 and 2017.

Information regarding the Company's acquisition-related intangible assets is as follows:

	As of December 31, 2018			
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Weighted-Average Remaining Useful Life (in years)
Trademarks	$ 240	$ (240)	$ -	-
Customer agreements	2,060	(2,060)	-	-
Non-compete agreements	126	(126)	-	-
Total	$ 2,426	$ (2,426)	$ -	-

	As of December 31, 2017			
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Weighted-Average Remaining Useful Life (in years)
Trademarks	$ 240	$ (240)	$ -	-
Customer agreements	2,060	(1,910)	150	0.6
Non-compete agreements	126	(126)	-	-
Total	$ 2,426	$ (2,276)	$ 150	0.6

Amortization expense of acquisition-related intangible assets for the years ended December 31, 2018, 2017 and 2016 was $150, $258 and $257, respectively. As of December 31, 2018, the acquisition-related intangible assets were fully amortized. There were no impairments of intangible assets during the years ended December 31, 2018, 2017 and 2016.

7. Convertible Senior Notes

In December 2018, the Company issued $240,000 aggregate principal amount of 1.25% convertible senior notes ("Notes") due December 15, 2023, unless earlier repurchased by the Company or converted by the holder pursuant to their terms. Interest is payable semiannually in arrears on June 15 and December 15 of each year, commencing on June 15, 2019.

The Notes are governed by an Indenture between the Company, as issuer, and U.S. Bank, National Association, as trustee. The Notes are unsecured and rank: senior in right of payment to the Company's future indebtedness that is expressly subordinated in right of payment to the Notes; equal in right of payment to the Company's unsecured indebtedness that is not so subordinated; effectively junior in right of payment to any of the Company's senior, secured indebtedness to the extent of the value of the assets securing such indebtedness; and structurally junior to all indebtedness and other liabilities incurred by the Company's subsidiaries.

Upon conversion, the Company will pay or deliver, as the case may be, cash, shares of the Company's common stock or a combination of cash and shares of common stock, at the Company's election.

The Notes have an initial conversion rate of 18.8076 shares of common stock per $1 principal amount of Notes. This represents an initial effective conversion price of approximately $53.17 per share of common stock and 4,513,824 shares issuable upon conversion. Throughout the term of the Notes, the conversion rate may be adjusted upon the occurrence of certain events. Holders of the Notes will not receive any cash payment representing accrued and unpaid interest, if any, upon conversion of a Note, except in limited circumstances. Accrued but unpaid interest will be deemed to be paid by cash, shares of the Company's common stock or a combination of cash and shares of the Company's common stock paid or delivered, as the case may be, to the holder upon conversion of Notes.

Prior to the close of business on September 14, 2023, the Notes will be convertible at the option of holders during certain periods, only upon satisfaction of certain conditions set forth below. On or after September 15, 2023, until the close of business on the second scheduled trading day immediately preceding the maturity date, holders may convert all or any portion of their Notes at the conversion price at any time regardless of whether the conditions set forth below have been met.

Holders may convert all or a portion of their Notes prior to the close of business on September 14, 2023, in multiples of $1 principal amount, only under the following circumstances:

- during any calendar quarter commencing after the calendar quarter ending on March 31, 2019 (and only during such calendar quarter), if the last reported sales price of the common stock for at least 20 trading days (whether or not consecutive) during a period of 30 consecutive trading days ending on, and including, the last trading day of the immediately preceding calendar quarter is greater than or equal to 130% of the conversion price on each applicable trading day;
- during the five business day period after any five consecutive trading day period, or the Notes measurement period, in which the "trading price" (as defined in the Indenture) per $1 principal amount of notes for each trading day of the Notes measurement period was less than 98% of the product of the last reported sale price of the Company's common stock and the conversion rate on each such trading day;
- if the Company calls any or all of the Notes for redemption, at any time prior to the close of business on September 14, 2023; or
- upon the occurrence of specified corporate events.

As of December 31, 2018, the Notes are not yet convertible.

Based on market data available for publicly traded, senior, unsecured corporate bonds issued by companies in the same industry and with similar maturity, the Company estimated the implied market interest rate of its Notes to be approximately 7.30%, assuming no conversion option. Assumptions used in the estimate represent what market participants would use in pricing the liability component of the Notes, including market interest rates, credit standing, and yield curves, all of which are defined as Level 2 observable inputs. The estimated implied interest rate was applied to the Notes, which resulted in a fair value of the liability component of $181,500 upon issuance, calculated as the present value of future contractual payments based on the $240,000 aggregate principal amount. The excess of the principal amount of the liability component over its carrying amount, or the debt discount, is amortized to interest expense over the term of the Notes. The $58,500 difference between the gross proceeds received from issuance of the Notes of $240,000 and the estimated fair value of the liability component represents the equity component of the Notes and was recorded in additional paid-in capital. The equity component is not remeasured as long as it continues to meet the conditions for equity classification.

In accounting for the transaction costs related to the issuance of the Notes, the Company allocated the total amount incurred to the liability and equity components in proportion to the allocation of proceeds. Transaction costs attributable to the liability component, totaling $4,808, are being amortized to expense over the term of the Notes, and transaction costs attributable to the equity component, totaling $1,550, and were included with the equity component in shareholders' equity.

(thousands, except share and per share data)

The Notes consist of the following as of December 31:

	2018	2017
Liability Component:		
Principal	$ 240,000	$ -
Less: debt discount, net of amortization	(63,308)	-
Net carrying amount	$ 176,692	$ -
Equity component (a)	56,950	-

(a) Recorded in the consolidated balance sheet within additional paid-in capital, net of $1,550 transaction costs in equity.

The following table sets forth total interest expense recognized related to the Notes:

	Year Ended December 31, 2018	Year Ended December 31, 2017
1.25% coupon	$ 42	$ -
Amortization of debt discount and transaction costs	-	-
	$ 42	$ -

As of December 31, 2018, the fair value of the Notes, which was determined based on inputs that are observable in the market or that could be derived from, or corroborated with, observable market data, quoted price of the Notes in an over-the-counter market (Level 2), and carrying value of debt instruments (carrying value excludes the equity component of the Company's convertible notes classified in equity) were as follows:

	December 31, 2018		December 31, 2017	
	Fair Value	Carrying Value	Fair Value	Carrying Value
Convertible senior notes	$ 254,400	$ 176,692	$ -	$ -

In connection with the issuance of the Notes, the Company entered into capped call transactions with certain counterparties affiliated with the initial purchasers and others. The capped call transactions are expected to reduce potential dilution of earnings per share upon conversion of the Notes. Under the capped call transactions, the Company purchased capped call options that in the aggregate relate to the total number of shares of the Company's common stock underlying the Notes, with an initial strike price of approximately $53.17 per share, which corresponds to the initial conversion price of the Notes and is subject to anti-dilution adjustments substantially similar to those applicable to the conversion rate of the Notes, and have a cap price of approximately $89.98. The cost of the purchased capped calls of $33,024 was recorded to stockholders' deficit and will not be re-measured. The capped call will not be re-measured provided it continues to meet the conditions for equity classification.

Based on the closing price of our common stock of $45.72 on December 31, 2018, the if-converted value of the Notes was less than their respective principal amounts.

8. Revolving Line of Credit

In February 2015, the Company executed a loan and security agreement with a syndicate of lenders led by Silicon Valley Bank for a senior revolving credit agreement ("Senior Revolver") to replace its then current revolving line of credit. Debt issuance fees of $591 were capitalized in the Company's balance sheet and are amortized over the life of the Senior Revolver.

The Senior Revolver had an original borrowing limit of $60,000 and an original term of three years. Borrowing capacity under the Senior Revolver is subject to a borrowing base limit that is a function of the Company's monthly recurring revenue as adjusted to reflect lost customer revenue during the previous three calendar months. Therefore, credit available under the Senior Revolver may be less than the borrowing limit. Interest is payable monthly. Advances under the Senior Revolver bear interest at the prime rate as published in the Wall Street Journal plus a margin based on the Company's liquidity, which originally ranged between 1.0% and 1.5%. The Company is charged an unused line fee under this arrangement at a rate based on its liquidity, which was originally 0.300% to 0.375% per year. Any outstanding principal is due at the end of the term.

In 2016, the Company amended its Senior Revolver agreement. The amendments, among other things, increased the borrowing capacity to $95,000, extended the termination date of the facility to February 20, 2020, added Goldman Sachs Lending Partners LLC to the lending syndicate and revised certain covenants including those related to accounts receivable, Minimum Consolidated EBITDA requirements, Indebtedness, permitted Indebtedness and certain capital expenditure limits. Additionally, the amendments altered definitions in the Senior Revolver agreement, including Alternate Base Rate, Applicable Margin, Consolidated EBITDA, Liquidity and Commitment Fee Rate. As a result of certain of these definitional changes, the Alternate Base Rate was modified to be the prime rate as published in the Wall Street Journal plus a margin based on our liquidity that ranges between 0.75% and 1.25%. The amendments further waived any default that may have occurred as a result of certain Indebtedness previously incurred by the Company and the disclosure to the lenders of registered Intellectual Property. In connection with the amendments, debt issuance fees of $379 were capitalized in the Company's balance sheet and are being amortized over the remaining life of the Senior Revolver.

The Company further amended its Senior Revolver agreement in April 2017 to adjust terms in the agreement to accommodate changes in its business.

In March 2018, the Company amended its Senior Revolver to modify certain terms and requirements to account for the Company's adoption of Topic 606. The Company amended its Senior Revolver again in December 2018. The amendment altered definitions and amended sections of the agreement to allow for transactions required to administer the convertible senior note financing.

The Company is bound by customary affirmative and negative covenants in connection with the Senior Revolver agreement, including financial covenants related to liquidity and EBITDA. In the event of a default, the lenders may declare all obligations immediately due and stop advancing money or extending credit under the line of credit. The line of credit is collateralized by substantially all of the Company's tangible and intangible assets, including intellectual property and the equity of subsidiaries.

During the years ended December 31, 2018, 2017 and 2016, the Company borrowed an aggregate of $115,000, $105,000 and $84,000, respectively, under the Senior Revolver for general operating purposes and repaid an aggregate of $171,246, $89,000 and $74,000, respectively. As of December 31, 2018, there were no amounts outstanding under the Senior Revolver and the amount available to borrow was $77,264.

9. Commitments and Contingencies

The Company leases three buildings on its Charleston, South Carolina campus. One leasing arrangement is accounted for as a capital lease. The remaining two lease agreements are accounted for as build-to-suit, failed sale-leaseback arrangements. Accordingly, the Company recognized liabilities for the lease payments related to these two buildings, which have been recorded as financing obligations. A portion of the lease payment for these two leases has been allocated to land and is accounted for using operating lease accounting. Information regarding these three leases is incorporated in the following disclosures.

Operating Lease Commitments

The Company leases office facilities under various non-cancelable operating lease agreements with original lease periods expiring between 2019 and 2023. Some of the leases provide for renewal terms at the Company's option. Certain future minimum lease payments due under these operating lease agreements contain free rent periods or escalating rent payment provisions. These leases generally do not contain purchase options. Rent expense on these operating leases is recognized over the term of the lease on a straight-line basis. Operating lease commitments include rent for land associated with the Company's build-to-suit leases expiring through 2031.

(thousands, except share and per share data)

In December 2016, the Company amended its three leases for buildings on its Charleston, South Carolina campus. As a result, one lease, that was previously accounted for as an operating lease was classified as a capital lease at the end of 2016.

Rent expense totaled $2,063, $1,605, and $4,403 for the years ended December 31, 2018, 2017, and 2016, respectively.

Future minimum lease payments are as follows:

	Operating Leases
Year Ending December 31,	
2019	$ 1,350
2020	1,042
2021	999
2022	1,022
2023	1,046
Thereafter	7,514
Total minimum lease payments	$ 12,973

Financing and Capital Lease Obligations

The Company has entered into various purchase arrangements to obtain property and equipment for operations that are accounted for as capital leases. Certain purchase arrangements contain payments for licenses, which the Company records as financing obligations. These arrangements have original terms ranging from 3 to 5 years with interest rates ranging from 0.5% to 15.0%. The leases are secured by the underlying leased property and equipment.

In December 2016, the Company amended a lease agreement for office space that had been previously accounted for as an operating lease. The amendment extended the term of the lease by 15 years from the amendment date. This modification required the Company to evaluate the lease as if it were a new lease. Upon evaluation, the lease was classified as a capital lease because the present value of the lease payments exceeded 90% of the fair value of the leased asset. Aggregate payments under this lease are $48,600, including executory costs of $5,938. As of December 31, 2018, capital lease obligations include amounts under this lease of $20,325. Details of the lease extension are disclosed under "Contractual Commitments" below.

Financing obligations were $37,544 and $34,233, as of December 31, 2018 and 2017, respectively, and consist primarily of obligations for build-to-suit lease arrangements. The aggregate amount of future minimum payments for financing obligations was $106,467 at December 31, 2018 which includes aggregate payments of $102,300 related to build-to-suit arrangements. Details of the build-to-suit lease arrangements are disclosed in Note 16.

Financing obligations are allocated as follows:

	As of December 31,	
	2018	2017
Buildings, build-to-suit	$ 33,814	$ 32,652
Software and support	3,730	1,581
Total financing obligations	$ 37,544	$ 34,233
Less: current portion	(1,678)	(1,283)
Financing obligations, net of current portion	$ 35,866	$ 32,950

(thousands, except share and per share data)

Future minimum lease payments are as follows:

	Capital Leases	Financing Obligations
Year Ending December 31,		
2019	$ 5,542	$ 8,502
2020	3,777	8,166
2021	3,261	7,504
2022	3,089	7,278
2023	3,180	7,493
Thereafter	28,577	67,524
Total minimum lease and financing obligation payments	47,426	$ 106,467
Less: executory costs	(5,147)	
Less: imputed interest	(18,221)	
Less: current portion	(2,808)	
Capital lease obligations, net of current portion	$ 21,250	

Contractual Commitments

In connection with a 2013 lease for office space on its Charleston, South Carolina campus, the Company entered into an option to lease space in two additional adjacent buildings. The option term was 36 months and required the Company to incur costs annually prior to the exercise of the option in the amount of up to $466 per year. If the Company terminated the option or did not exercise the option prior to expiration it would incur termination fees pro-rated through the dates of termination or expiration. The maximum liability for termination fees was $757. During the year ended December 31, 2016, the Company determined that the options would expire unexercised and expensed the full amount of the termination fees.

On December 12, 2016, the Company executed an amendment to each of three lease agreements for office space on its Charleston, South Carolina campus. The amendments extended the term of the leases to December 31, 2031. The amendments also provided for the following:

- extending from December 13, 2016 to December 31, 2018 the term of an option that allows the Company to require the lessors to build a two-story building, including potentially for a welcome center, of approximately 18,500 square feet on its campus (“Building 5”) for the Company to lease;
- waiving accrued and future carrying costs and termination fees otherwise payable to the lessors by the Company under the existing option in the amount of $1,223; and
- contingent upon construction of Building 4 described below, reducing the annual rent increases from 3% to 2% for the Company’s Customer Success Center, a 145,800 square foot building on its campus which it first occupied on January 1, 2015.

The waived carrying and termination fees in the amount of $1,223 is being amortized over the 15-year term of the extension as a reduction of interest and rent expense.

On December 12, 2016, the Company also executed a lease agreement pursuant to which the lessor will construct a building of approximately 145,800 square feet on its campus for the Company to accommodate anticipated future growth (“Building 4”). Through an extension by the landlord, the target commencement date of the lease is July 1, 2020 with a term of 15 years. Under the terms of the lease, the Company agrees to commence construction on or about April 1, 2019, but can terminate the lease prior to that time, subject to the payment of reasonable, documented, and agreed-to out-of-pocket costs with respect to the lease and building to date. If the Company delays beginning construction past December 31, 2019, the lessor may terminate the lease. The Company may renew the lease upon 365 days’ notice to the lessor for five additional one-year terms, provided that the Company is not in default at the time of its request. Significant terms of the lease for Building 4 include annual rent for the first year of the lease of $30.05 per square foot of rentable area with annual rent increases of 2% of the rent paid for the preceding lease year. If the Company exercises its option to cause the construction of Building 5, the term of the lease will reset to 15 years from the date the Company begins paying rent for Building 5. The Company will begin to capitalize costs associated with the construction of Building 4 when construction has commenced.

(thousands, except share and per share data)

The Company also has $276 of non-cancellable contractual commitments as of December 31, 2018 related to the purchase of software and maintenance. These commitments are not accrued in the consolidated balance sheet of the Company.

Legal Contingencies

The Company may become a party to a variety of legal proceedings that arise in the normal course of business. While the results of such normal course legal proceedings cannot be predicted with certainty, management believes, based on current knowledge, that the final outcome of any matters will not have a material adverse effect on the Company's business, financial position, results of operations or cash flows.

10. Stock-Based Compensation

Employee Stock-based Compensation Plan

The Company maintains the Amended and Restated Benefitfocus.com, Inc. 2000 Stock Option Plan (the "2000 Plan") and the Benefitfocus.com, Inc. Amended and Restated 2012 Stock Plan, (the "2012 Plan"), pursuant to which the Company has reserved 4,139,296 shares of its common stock for issuance to its employees, directors and non-employee third parties. The 2012 Plan, effective on January 31, 2012, serves as the successor to the 2000 Plan and permits the granting of incentive stock options, non-statutory stock options, stock bonuses, stock purchase rights, stock appreciation rights, and restricted stock units and awards. No new awards can be issued under the 2000 Plan after the effective date of the 2012 Plan. Outstanding awards under the 2000 Plan continue to be subject to the terms and conditions of the 2000 Plan. Shares available for grant under the 2000 Plan, which were reserved but not issued or subject to outstanding awards under the 2000 Plan as of the effective date, were added to the reserves of the 2012 Plan. As of December 31, 2018, the Company had 1,731,799 shares allocated to the 2012 Plan, but not yet issued.

The Company has issued two types of awards under these plans: stock options and restricted stock units ("RSUs"). The following table sets forth the number of awards outstanding for each award type is as follows:

	Outstanding at December 31,		
Award type	**2018**	**2017**	**2016**
Restricted stock units	2,174,250	1,937,014	1,467,811
Stock options	233,247	263,155	727,559

The grant date value of RSUs is equal to the closing price of the Company's stock on the date of grant, or, if not a trading day, the closing price of the previous trading day. Stock options are granted at exercise prices not less than the estimated fair market value of the Company's common stock at the date of grant. Generally, the Company issues previously unissued shares for the exercise of stock options or exchange of RSUs; however, previously acquired shares may be reissued to satisfy future issuances. The standard vesting period for RSU and option awards is over four years however vesting periods range from one to five years. Some RSUs vest immediately upon grant. The options expire 10 years from the grant date. Compensation expense for the fair value of the stock-based awards at their grant date is recognized ratably over the vesting period.

(thousands, except share and per share data)

Compensation expense related to stock-based awards is included in the following line items in the accompanying consolidated statements of operations and comprehensive loss for the years ended December 31:

	2018	2017	2016
Cost of revenue	$ 5,164	$ 2,508	$ 2,799
Sales and marketing	6,764	4,953	3,212
Research and development	5,510	2,990	4,533
General and administrative	11,430	5,686	7,544
	$ 28,868	$ 16,137	$ 18,088

The total compensation cost related to non-vested awards not yet recognized as of December 31, 2018 was $43,842 and will be recognized over a weighted-average period of approximately 2.59 years.

Restricted Stock Units

During 2018, the Company granted RSUs under the 2012 Plan. Restricted stock units granted to employees vest in equal annual installments over terms that range from immediate vesting at grant to 4 years. The fair value of the stock at the time of grant is amortized based on a straight-line basis over the vesting period.

The summary of unvested restricted stock units is as follows:

	Restricted stock units	Weighted average grant date fair value
Unvested at December 31, 2017	1,937,014	$ 30.90
Granted	1,664,652	31.96
Forfeited	(763,997)	29.38
Vested	(663,419)	33.01
Unvested at December 31, 2018	2,174,250	$ 31.61

As of December 31, 2018, the number and intrinsic value of restricted stock units expected to vest was 2,015,771 and $92,161, respectively. The aggregate fair value of restricted stock units vested during the years ended December 31, 2018, 2017 and 2016 was $18,623, $12,137 and $10,311, respectively.

Included in the grants of 2018 restricted stock units are performance restricted stock units for which vesting is contingent upon meeting various financial targets to support growth initiatives. The Company granted 857,827 performance restricted stock units to officers and certain employees with an aggregate grant-date fair value of $28,589. The actual number of shares issued upon vesting could range from 0% to 100%. As of December 31, 2018, there were 818,975 performance restricted stock units outstanding with a weighted average grant-date fair value of $33.32 per unit, of which 650,190 units with a weighted average grant-date fair value of $33.26 per unit were expected to vest.

(thousands, except share and per share data)

Stock Options

The following is a summary of the option activity for the year ended December 31, 2018:

	Number of Options	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value
Outstanding balance at December 31, 2017	263,155	$ 9.22		
Granted	-	-		
Exercised	(29,908)	6.22		
Forfeited or expired	-	-		
Outstanding balance at December 31, 2018	233,247	$ 9.60	3.2	$ 8,425
Exercisable at December 31, 2018	233,247	$ 9.60	3.2	$ 8,425
Vested and expected to vest at December 31, 2018	233,247	$ 9.60	3.2	$ 8,425

The aggregate intrinsic value of employee options exercised during the years ended December 31, 2018, 2017, and 2016 was $915, $10,829 and $21,117, respectively.

No stock options were granted during the years ended December 31, 2018, 2017 and 2016.

11. Stockholders' Deficit

Preferred stock

The Company has 5,000,000 shares of preferred stock authorized all of which is undesignated.

Common Stock

The holders of common stock are entitled to one vote for each share. The voting, dividend and liquidation rights of the holders of common stock are subject to and qualified by the rights, powers and preferences of the holders of preferred stock.

The Company maintains the Benefitfocus, Inc. 2016 Employee Stock Purchase Plan ("ESPP") pursuant to which the Company has reserved 125,374 shares of its common stock for purchase by its employees who meet certain criteria. Under the ESPP, eligible employees may purchase the Company's common stock through accumulated payroll deductions. Options to purchase shares are granted twice yearly on or about January 1 and July 1 and exercisable on or about the succeeding June 30 and December 31, respectively, of each year. Shares are purchased at acquisition prices equal to 95% of the fair market value of the Company's common stock at the purchase date. No participant may purchase more than $12 worth of the Company's common stock in a six-month offering period.

At December 31, 2018, the Company had reserved a total of 4,264,670 of its authorized 50,000,000 shares of common stock for future issuance as follows:

Outstanding stock options	233,247
Restricted stock units	2,174,250
Available for future issuance under stock award plans	1,731,799
Available for future issuance under ESPP	125,374
Total common shares reserved for future issuance	4,264,670

(thousands, except share and per share data)

12. Revenue

Disaggregation of Revenue

The following tables provide information about disaggregation of revenue by service line and includes a reconciliation of disaggregated revenue with reportable segments:

	Year ended December 31, 2018		
	Employer	Carrier	Total
Service line:			
Software services	$ 129,643	$ 72,705	$ 202,348
Professional services	40,157	16,216	56,373
Total	$ 169,800	$ 88,921	$ 258,721

	Year ended December 31, 2017		
	Employer	Carrier	Total
Service line:			
Software services	$ 117,236	$ 67,655	$ 184,891
Professional services	36,245	15,706	51,951
Total	$ 153,481	$ 83,361	$ 236,842

	Year ended December 31, 2016		
	Employer	Carrier	Total
Service line:			
Software services	$ 117,342	$ 68,816	$ 186,158
Professional services	32,434	17,931	50,365
Total	$ 149,776	$ 86,747	$ 236,523

Contract Balances

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

	Balance at Beginning of Period	Balance at End of Period
As of December 31, 2018		
Contract assets	$ 11,522	$ 12,798
Contract liabilities:		
Deferred revenue	$ 55,027	$ 45,863
As of December 31, 2017		
Contract assets	$ 15,929	$ 11,522
Contract liabilities:		
Deferred revenue	$ 56,949	$ 55,027

The Company recognizes payments from customers based on contractual billing schedules. Accounts receivable are recorded when the right to consideration becomes unconditional. Contract assets include amounts related to the Company's contractual right to consideration for completed performance objectives not yet invoiced. Contract liabilities include payments received in advance of performance under the contract and are recognized as revenue when earned under the contract. The Company had no asset impairment charges related to contract assets during the years ended December 31, 2018 and 2017.

(thousands, except share and per share data)

Contract assets are largely comprised of unbilled software services revenue from insurance broker commissions. The performance obligation for this revenue is satisfied when the order is received. Amounts are recorded as accounts receivable when the right to consideration becomes unconditional which generally occurs over the period of underlying insurance policy. Payments from insurance broker commissions are typically received monthly in arrears.

The following tables show the significant changes in contract asset balances:

	Year ended December 31,			
Contract Assets	**2018**		**2017**	
Transferred to receivables from contract assets	$	20,560	$	19,512
Revenue recognized from performance obligations satisfied but not billed	$	21,836	$	15,106

Revenue recognized during the years ended December 31, 2018 and 2017 that was included in the deferred revenue balance at the beginning of the periods was $33,421 and $25,238, respectively.

The Company recorded favorable transaction price adjustments to software services revenue from performance obligations satisfied or partially satisfied in previous periods of $1,161 during the year ended December 31, 2018. There were no such adjustments during the ended December 31, 2017.

Performance Obligations

As of December 31, 2018, the aggregate amount of the Company’s performance obligations that are unsatisfied or partially unsatisfied were approximately $216,000, of which a majority are expected to be satisfied within the next three years. The Company excludes from its population of performance obligations contracts with original durations of one year or less, contract renewal periods that renew automatically, and amounts of variable consideration that are allocated to wholly unsatisfied distinct service that forms part of a single performance obligation and meets certain variable allocation criteria.

13. Employee Benefit Plan

The Company maintains a qualified defined contribution plan under Section 401(k) of the U.S. Internal Revenue Code (the “401(k) Plan”) covering substantially all employees. Employees are eligible to participate in the 401(k) Plan after one day of service and upon attainment of age 21, and may elect to defer an amount or percentage of their annual compensation up to amounts prescribed by law. The Company makes discretionary matching contributions to employee plan accounts. During each of the years ended December 31, 2018, 2017 and 2016, the Company matched 50% of the employees’ contribution, with the match limited to 3% of qualifying compensation. Employee vesting in matching company contributions occurs at a rate of 20% per year after one year of service. During the years ended December 31, 2018, 2017, and 2016, employer matching contributions were $3,162, $3,020 and $2,649, respectively.

14. Income Taxes

The Company files income tax returns in the U.S. for federal and various state jurisdictions. The Company is subject to U.S. federal income tax examination for calendar tax years 2014 through 2017 as well as state income tax examinations for various years depending on statutes of limitations of those jurisdictions.

(thousands, except share and per share data)

The following summarizes the components of income tax expense for the years ended December 31:

	2018	2017	2016
Current:			
Federal	$ -	$ -	$ -
State and local	28	15	17
Total current expense	$ 28	$ 15	$ 17
Deferred:			
Federal	$ -	$ -	$ -
State and local	-	-	-
Total deferred taxes	$ -	$ -	$ -

Reconciliation between the effect of applying the federal statutory rate and the effective income tax rate used to calculate the Company's income tax provision is as follows for the years ended December 31:

	2018	2017	2016
Federal statutory rate	21.0%	34.0%	34.0%
Effect of:			
State income taxes, net of federal benefit	10.3%	6.6%	6.0%
Change in state tax rates	1.7%	0.4%	2.6%
Change in federal tax rates	0.0%	(67.8%)	0.0%
Change in valuation allowance	(29.4%)	24.3%	(46.3%)
State tax credits	0.3%	0.4%	4.0%
Stock-based compensation	(2.2%)	3.8%	(0.1%)
Section 162(m)	(0.8%)	(1.2%)	0.0%
Other permanent items	(0.9%)	(0.5%)	(0.2%)
Deferred true-up	0.0%	0.0%	0.0%
Income tax provision effective rate	0.0%	0.0%	0.0%

The significant components of the Company's deferred tax asset and liability were as follows as of December 31:

	2018	2017
Deferred tax assets relating to:		
Net operating loss carryforwards	$ 82,057	$ 69,452
Deferred revenue	3,150	7,929
Commissions and incentive accrual	678	547
Deferred rent	433	471
State tax credits	7,936	7,866
Stock-based compensation	4,595	4,060
Compensation and other accruals	-	2,539
Property and equipment and intangible assets	1,138	551
Interest limitation	968	-
Total gross deferred tax assets	100,955	93,415
Deferred tax liabilities		
Compensation and other accruals	$ (2,366)	$ (4,322)
Convertible debt	(16,281)	-
Total gross deferred tax liabilities	(18,647)	(4,322)
Deferred tax assets less liabilities	82,308	89,093
Less: valuation allowance	(82,308)	(89,093)
Net deferred tax asset (liability)	$ -	$ -

As of December 31, 2018 and 2017, the Company's gross deferred tax was reduced by a valuation allowance of $82,308 and $89,093, respectively.

(thousands, except share and per share data)

The valuation allowance decreased by $6,785 and increased by $7,832 during the years ended December 31, 2018 and 2017, respectively. The valuation allowance decrease in 2018 resulted primarily from establishing deferred tax liabilities related to tax method changes and convertible debt issuance partially offset by changes in the deferred tax assets related to the net operating loss carryforwards. The increase in the valuation allowance in 2017 resulted primarily from changes in deferred tax assets partially offset by a decrease from the revaluation of the deferred tax assets and liabilities in connection with enactment of the Tax Cuts & Jobs Act (“Tax Reform”) on December 22, 2017. Among other things, the primary provision of Tax Reform impacting the Company is the reduction to the U.S. corporate income tax rate from 34% to 21%.

The Company adopted the revenue accounting rules prescribed by Topic 606 in 2018 with an effective date of January 1, 2016. As a result of this adoption, the Company has restated its deferred tax assets related to net operating loss carryforwards for both federal and state income tax purposes along with the related offsetting valuation allowances.

Net operating loss carryforwards for federal income tax purposes were approximately $287,686 and $253,946 at December 31, 2018 and 2017, respectively. State net operating loss carryforwards were $285,377 and $221,189 at December 31, 2018 and 2017, respectively. The federal and state net operating loss carryforwards will expire at various dates during 2019 through 2037, if not utilized. Net operating loss carryforwards and credit carryforwards reflected above may be limited due to historical and future ownership changes.

South Carolina jobs tax credit and headquarters tax credit carryovers of $10,483 and $10,322 were available at December 31, 2018 and 2017, respectively. Headquarters credits are expected to be used to offset future state income tax license fees. The credits expire in various amounts during 2020 through 2033.

The Company follows FASB ASC 740-10 for accounting for unrecognized tax benefits. As of December 31, 2018, the Company had gross unrecognized tax benefits of $437.

A reconciliation of the beginning and ending amounts of unrecognized tax benefits is as follows for the years ended December 31:

	2018	2017	2016
Balance at beginning of year	$ 437	$ 437	$ 437
Additions based on tax positions related to the current year	-	-	-
Additions for tax positions in prior years	-	-	-
Reductions for tax positions of prior years	-	-	-
Reductions for tax positions due to lapse of statute	-	-	-
Settlements	-	-	-
Balance at end of year	$ 437	$ 437	$ 437

At December 31, 2018 and 2017, none of the $437 liabilities for unrecognized tax benefits could impact the Company’s effective tax rate, if recognized. The Company does not expect the unrecognized tax benefits to change within the next twelve months.

15. Segments and Geographic Information

Operating segments are defined as components of an enterprise for which discrete financial information is available that is evaluated regularly by the chief operating decision maker (“CODM”) for purposes of allocating resources and evaluating financial performance. The Company’s CODM, the Chief Executive Officer, reviews financial information presented on a consolidated basis, accompanied by information about operating segments, for purposes of allocating resources and evaluating financial performance.

(thousands, except share and per share data)

The Company's reportable segments are based on the type of customer. The Company determined its operating segments to be: Employer, which derives substantially all of its revenue from customers that use the Company's services for the provision of benefits to their employees, and administrators acting on behalf of employers; and Carrier, which derives substantially all of its revenue from insurance companies that provide coverage at their own risk.

Segments are evaluated based on gross profit. The Company does not allocate interest income, interest expense or income tax expense by segment. Accordingly, the Company does not report such information. Additionally, Employer and Carrier segments share the majority of the Company's assets. Therefore, no segment asset information is reported.

	Year Ended December 31,		
	2018	2017	2016
Revenue from external customers by segment:			
Employer	$ 169,800	$ 153,481	$ 149,776
Carrier	88,921	83,361	86,747
Total net revenue from external customers	$ 258,721	$ 236,842	$ 236,523
Depreciation and amortization by segment:			
Employer	$ 10,232	$ 10,229	$ 8,116
Carrier	5,583	5,677	4,957
Total depreciation and amortization	$ 15,815	$ 15,906	$ 13,073
Gross profit by segment			
Employer	$ 75,397	$ 58,347	$ 61,951
Carrier	54,047	51,113	51,264
Total gross profit by segment	$ 129,444	$ 109,460	$ 113,215

Substantially all assets were held and all revenue was generated in the United States during the years ended December 31, 2018, 2017 and 2016.

16. Related Parties

Related Party Leasing Arrangements

The Company leases its office space at its Charleston, South Carolina headquarters campus under the terms of three non-cancellable leases from entities with which one of the Company's directors, significant stockholders, and executives as well as another significant stockholder are affiliated. The Company's headquarters building lease and an additional building lease are accounted for as build-to-suit leases and recorded as financing obligations in the Consolidated Balance Sheets. The remaining lease, also for office space, was accounted for as an operating lease during 2016 and periods prior and as a capital lease in 2017 and after. The Company executed an amendment to each of the three lease agreements on December 12, 2016. These amendments extended the term of the leases to December 31, 2031. The leases contain options to renew the leases for five additional years. The arrangements provide for 3.0% fixed annual rent increases. In addition to extending the lease term, the amendment to the lease for the Company's Customer Success Center, a 145,800 square foot building on its campus, which commenced January 1, 2015:

- extended from December 13, 2016 to December 31, 2018 the term of an option that allows the Company to require the lessor to build Building 5 for the Company to lease,
- waived certain accrued and future carrying costs and termination fees payable to the lessor by the Company under the existing option in the amount of $1,223, and
- reduced the annual rent increases for the Customer Success Center from 3% to 2% contingent upon construction of Building 4.

On December 12, 2016 and in conjunction with the lease amendments, the Company also executed a cancellable lease agreement with an entity with which one of the Company's directors, significant stockholders, and executives as well as another significant stockholder are affiliated. Pursuant to the agreement the lessor will construct a building of approximately 145,800 square feet on its campus for the Company to accommodate anticipated future growth ("Building 4"). Through an extension provided by the lessor, the target commencement date of the lease is July 1, 2020 with a term of 15 years. Under the terms of the lease, the Company agrees to commence construction on or about April 1, 2019, but can terminate the lease prior to that time, subject to payment of reasonable, documented, and agreed-to out-of-pocket costs with respect to the lease and building to date. If the Company delays beginning construction past December 31, 2019, the lessor may terminate the lease. The Company may renew the lease upon 365 days' notice to the lessor for five additional one-year terms, provided that the Company is not in default at the time of its request. Significant terms of the lease for Building 4 include annual rent for the first year of the lease of $30.05 per square foot of rentable area with annual rent increases of 2% of the rent paid for the preceding lease year. If the Company exercises its option to cause the construction of Building 5, the term of the lease will reset to 15 years from the date the Company begins paying rent for Building 5.

In connection with the cancellable lease for Building 4 and the option for Building 5 described above, the leasing entity meets the criteria to be a variable interest entity. The Company is not the primary beneficiary of the leasing entity, as the activities that are most significant to the leasing entity's economic performance, consisting of financing, development, management, and sale of office facilities, are directed by another party. As such, the Company is not required to consolidate the entity as the primary beneficiary. The lease terms would not include a residual value guarantee, fixed-price purchase option, or similar feature that would obligate the Company to absorb decreases in value or would entitle the Company to participate in increases in the value of Buildings 4 or 5. The Company has not and does not intend to provide financial or other support to the leasing entity. The Company's maximum exposure, assuming the exercise of the option, would consist of rent to be paid over the 15-year term of the lease, construction cost overruns, agreed upon pre-construction costs incurred prior to termination and operating expenses in excess of a certain threshold. The Company's maximum exposure currently cannot be quantified.

Payments related to these agreements were $10,659, $10,328, and $10,417 for the years ended December 31, 2018, 2017 and 2016, respectively. Amounts due to the related parties were recorded as $833 and $901 in accrued expenses in the accompanying consolidated balance sheets as of December 31, 2018 and 2017, respectively.

Other Related Party Expenses

The Company utilizes the services of various companies that are owned and controlled by an executive who is also a Company director and significant stockholder. The companies provide construction project management services, private air transportation and other services. Expenses related to these companies were $107, $20, and $80 for the years ended December 31, 2018, 2017 and 2016, respectively. No amounts were due to the related parties as of December 31, 2018 and 2017.

During 2018, the Company entered into an agreement to purchase software and services from a company affiliated with a Company director. The aggregate amount of payments due under this contract is $115. Payments related to this agreement were $35 for the year ended December 31, 2018. Amounts due to this company were $35 as of December 31, 2018.

Related Party Revenues

The Company entered into a Stock Purchase Agreement with Mercer, a customer, on February 24, 2015 pursuant to which Mercer acquired 2,817,526 shares of the Company's common stock and a warrant to purchase up to an additional 580,813 shares of the Company's common stock. As a result of this transaction, Mercer became a related party by virtue of beneficially owning more than 10% of the voting interest of the Company. At the same time, the Company entered into an amendment of its commercial contract with Mercer. The amendment to the commercial contract, among other things, expanded certain terms and conditions of the existing relationship between the Company and Mercer and its affiliates. On August 24, 2017, Mercer's warrant to purchase common stock of the Company expired unexercised resulting in Mercer's beneficial ownership of the Company falling below 10%. Accordingly, as of that date, the Company no longer considers Mercer a related party. As of December 31, 2018, Mercer beneficially owned 8.8% of the Company's outstanding common stock. For the period January 1, 2017 to August 24, 2017, revenue from Mercer was $17,611. For the year ended December 31, 2016, revenue from Mercer was $27,663. Revenue from Mercer was reflected in "Revenues," within the accompanying statements of operations.

(thousands, except share and per share data)

Related Party Revolving Line of Credit

As disclosed in Note 8, the Company amended its Senior Revolver at various times in 2017 and 2018. As part of the amendment in October 2016, Goldman Sachs Lending Partners, LLC was added to the lending syndicate. Goldman Sachs Lending Partners, LLC is an affiliate of The Goldman Sachs Group, Inc., as are the Goldman Sachs funds that owned approximately 11.8% of the Company's outstanding common stock as of December 31, 2018. Goldman Sachs Lending Partners, LLC committed $10,000 to the revolving commitment and participates in amounts borrowed under the credit facility at a rate of approximately 10.5%.

17. Selected Quarterly Financial Data (unaudited)

The following tables set forth selected unaudited quarterly statements of operations data for each of the eight quarters in the years ended December 31, 2018 and 2017.

	Quarter Ended							
	December 31, 2018	September 30, 2018	June 30, 2018	March 31, 2018	December 31, 2017	September 30, 2017	June 30, 2017	March 31, 2017
Consolidated Statements of Operations Data:								
Revenue	$ 74,771	$ 61,006	$ 60,581	$ 62,363	$ 67,879	$ 56,251	$ 55,089	$ 57,623
Gross profit	39,358	29,266	29,860	30,960	33,705	24,941	25,393	25,421
Total operating expenses	48,995	37,600	40,915	41,633	37,338	35,888	36,213	37,961
Operating loss	(9,637)	(8,334)	(11,055)	(10,673)	(3,633)	(10,947)	(10,820)	(12,540)
Net loss	$ (12,966)	$ (11,598)	$ (14,261)	$ (13,802)	$ (6,855)	$ (14,006)	$ (13,850)	$ (15,583)
Net loss per common share (a)	$ (0.41)	$ (0.36)	$ (0.45)	$ (0.44)	$ (0.22)	$ (0.45)	$ (0.45)	$ (0.51)
Weighted-average common shares outstanding--basic and diluted	31,988,033	31,883,029	31,806,972	31,333,348	31,285,263	31,181,141	31,076,995	30,658,468

(a) Quarterly and year-to-date computations of per share amounts are made independently. Therefore, the sum of the per-share amounts for the quarters may not agree with per share amounts for the year.

The quarterly unaudited consolidated financial statements have been prepared on the same basis as the audited consolidated financial statements included in this report and include all adjustments, consisting only of normal recurring adjustments, that we consider necessary for a fair presentation of such information when read in conjunction with our annual audited consolidated financial statements and notes appearing in this report. The operating results for any quarter do not necessarily indicate the results for any subsequent period or for the entire fiscal year.

18. Subsequent Events

Business Combinations

On February 25, 2019, the Company purchased certain operating assets and liabilities, intellectual property and intangible assets, including the workforce in place, from the commercial business of Connecture, Inc., for $24,000 in cash. This acquisition will add technology to potentially strengthen the

Company's platform, expand its customer reach and enhance the value the Company delivers to its carrier customers. The Company has not completed its purchase price allocation.

Stock-Based Compensation

During January 2019, the Company granted 35,284 restricted stock units to employees with an aggregate grant date fair value of $1,710. These restricted stock units generally vest in equal annual installments generally over 3 and 4 years from the grant date. The Company amortizes the fair value of the stock subject to the restricted stock units at the time of grant on a straight-line basis over the period of vesting.

During January and February 2019, stock option exercises and vesting of restricted stock units resulted in the issuance of 23,121 shares of common stock.

Schedule II—Valuation and Qualifying Accounts (in thousands)

	Balance at Beginning of Period	Additions Charged To Expense	Additions Charged Against Revenue	Deductions	Balance at End of Period
Allowance for doubtful accounts and returns:					
Year Ended December 31, 2018	$ 3,531	$ 138	$ 4,813	$ (4,898)	$ 3,584
Year Ended December 31, 2017	$ 4,595	$ 75	$ 5,593	$ (6,732)	$ 3,531
Year Ended December 31, 2016	$ 2,585	$ 667	$ 5,004	$ (3,661)	$ 4,595

	Balance at Beginning of Period	Additions Charged To Costs and Expenses (1)	Deductions	Balance at End of Period
Deferred tax asset valuation allowance:				
Year Ended December 31, 2018 (2)	$ 89,093	$ 15,444	$ (22,229)	$ 82,308
Year Ended December 31, 2017 (3)(4)	$ 81,261	$ 41,904	$ (34,072)	$ 89,093
Year Ended December 31, 2016 (5)	$ 63,252	$ 18,009	$ -	$ 81,261

(1) Increase in valuation allowance is related to the generation of net operating losses and other deferred tax assets.

(2) Decrease in valuation on allowances is related to adjustments to deferred revenue and convertible debt issuance.

(3) Increase in valuation allowance is related to adoption of ASU 2016-09.

(4) Decrease in valuation on allowances is related to the change in the enacted tax rule.

(5) Beginning balance has been adjusted for the effects of adoption of Topic 606.

Exhibit 31.1

CERTIFICATION PURSUANT TO
SECTION 302 OF
THE SARBANES-OXLEY ACT OF 2002

I, Raymond A. August, certify that:

1. I have reviewed this Annual Report on Form 10-K of Benefitfocus, Inc. (the registrant);

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a–15(e) and 15d–15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 26, 2019

/s/ Raymond A. August
Raymond A. August
President and Chief Executive Officer
(Principal executive officer)

Exhibit 31.2

CERTIFICATION PURSUANT TO
SECTION 302 OF
THE SARBANES-OXLEY ACT OF 2002

I, Jonathon E. Dussault, certify that:

1. I have reviewed this Annual Report on Form 10-K of Benefitfocus, Inc. (the registrant);

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a–15(e) and 15d–15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 26, 2019

/s/ Jonathon E. Dussault
Jonathon E. Dussault
Chief Financial Officer
(Principal financial and accounting officer)

Exhibit 32.1

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

In accordance with 18 U.S.C. 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, Raymond A. August, President and Chief Executive Officer (principal executive officer) of Benefitfocus, Inc. (the “registrant”), and Jonathon E. Dussault, Chief Financial Officer (principal financial and accounting officer) of the registrant, each hereby certifies that, to the best of their knowledge:

1. The registrant’s Annual Report on Form 10-K for the year ended December 31, 2018, to which this Certification is attached as Exhibit 32.1 (the “Report”), fully complies with the requirements of Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934, as amended; and

2. The information contained in the Report fairly presents, in all material respects, the financial condition of the registrant at the end of the period covered by the Report and results of operations of the registrant for the periods covered by the Report.

Date: February 26, 2019

/s/ Raymond A. August
Raymond A. August
President and Chief Executive Officer
(Principal executive officer)

/s/ Jonathon E. Dussault
Jonathon E. Dussault
Chief Financial Officer
(Principal financial and accounting officer)

Board of Directors

Mason R. Holland, Jr., Director
Executive Chairman, Benefitfocus, Inc.

Raymond A. August, Director
President and Chief Executive Officer, Benefitfocus, Inc.

Douglas A. Dennerline, Director
Chief Executive Officer and Executive Chairman, BetterWorks Systems, Inc.

A. Lanham Napier, Director
Co-Founder and Chief Executive Officer, BuildGroup Management LLC

Francis J. Pelzer V, Director
Chief Financial Officer, F5 Networks, Inc.

Stephen M. Swad, Director
Chief Financial Officer, Vox Media, Inc.

Ana M. White, Director
Executive Vice President and Chief Human Resources Officer, F5 Networks, Inc.

Financial Reports

Copies of the Company's Annual Report on Form 10-K, as filed with the Securities and Exchange Commission are available at www.benefitfocus.com or on request, free of charge, by calling (843) 849-7476 or emailing ir@benefitfocus.com.

[This page intentionally left blank]

[This page intentionally left blank]

BENEFITFOCUS®

All Your Benefits. One Place.®

100 Benefitfocus Way
Charleston, South Carolina 29492

Phone: (843) 849-7476
Fax: (843) 849-9485
www.benefitfocus.com