

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K/A
(Amendment No. 1)

(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, 2017

or

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

For the transition period from _____ to _____

Commission File Number: 001-36061

Benefitfocus, Inc.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

46-2346314
(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
Common Stock, \$0.001 Par Value

Name of each exchange of which registered
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 and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes 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
(Do not check if a smaller reporting company)

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

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

The aggregate market value of the registrant's common stock held by non-affiliates of the registrant on June 30, 2017 (based on the closing sale price of \$36.35 on that date), was approximately \$426,784,296. 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 March 12, 2018 was 31,331,447.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's definitive Proxy Statement for its 2018 Annual Meeting of Stockholders currently scheduled to be held on June 1, 2018 are incorporated by reference into Part III hereof.

EXPLANATORY NOTE

Benefitfocus, Inc. is filing this Amendment No. 1 ("Amendment No. 1") to its Annual Report on Form 10-K for the year ended December 31, 2017, originally filed with the Securities and Exchange Commission ("SEC") on March 15, 2018 (the "Original Filing"), to correct an inadvertent error in the number of large employer customers served by the Company as of December 31, 2017 and the related compound annual growth rate. The Original Filing stated that the number of large employer customers served by the Company as of December 31, 2017 was 915. The correct number, 920, was publicly reported in the Company's earnings press release dated March 14, 2018, as furnished to the SEC under cover of a Current Report on Form 8-K dated that date.

The following items in the Original Filing are being amended solely to correct the number of large employer customers served by the Company as of December 31, 2017 and the related compound annual growth rate:

- Part I – Item 1. Business; and
- Part II – Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

In accordance with applicable SEC rules, this Amendment No. 1 includes certifications from the Company's President and Chief Executive Officer, and its Chief Financial Officer dated as of the date of this filing. Except as set forth above, the Original Filing has not been amended, updated or otherwise modified, and does not reflect events occurring after March 15, 2018, the date of the Original Filing, or modify or update those disclosures that may have been affected by subsequent events. Accordingly, this Amendment No. 1 should be read in conjunction with the Original Filing and the Company's filings made with the SEC subsequent to the filing of the Original Filing.

Benefitfocus, Inc.
Form 10-K/A
(Amendment No. 1)
For Year Ended December 31, 2017
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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; 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, and brokers. The Benefitfocus Platform simplifies how organizations and individuals shop for, enroll in, manage and exchange benefits. Our employer and insurance carrier customers rely on our platform to manage, scale and exchange benefits data seamlessly. Our web-based platform has a user-friendly interface designed to enable the insured consumers to access all of their benefits in one place. Our comprehensive solutions support core benefits plans, including healthcare, dental, life, and disability insurance, and voluntary benefits offerings such as 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 has grown.

The Benefitfocus Platform enables our customers to simplify the management of complex benefits processes, from sales through enrollment and implementation to ongoing administration. It provides consumers with an engaging, highly intuitive, and personalized user interface for selecting and managing all of their benefits via their desktop browsers or mobile devices. Employers use our solutions to streamline benefits processes, keep up with complex and changing regulatory requirements, control costs, and offer a greater variety of plans to attract, retain, and motivate their employees. Insurance carriers use our solutions to more effectively market offerings, simplify billing, and improve the enrollment process. We also provide a network of more than 1,500 benefit provider data exchange connections, which facilitates the otherwise highly fragmented interaction among employees, employers, brokers, and carriers.

We serve two separate but related market segments. The employer market consists of employers offering benefits to their employees. Within this segment, we mainly target large employers with more than 1,000 employees, of which we believe there are over 18,000 in the United States. In our other market segment, we sell our solutions 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 markets gives us a strong position at the center of the benefits ecosystem. As of December 31, 2017, we served 920 large employer customers, an increase from 141 in 2010, and 54 carrier customers, an increase from 29 in 2010.

We sell the Benefitfocus Platform on a subscription basis, typically through annual contracts with our employer customers and multi-year contracts with our insurance carrier customers, with subscription fees paid monthly, quarterly and annually. The multi-year contracts with our carrier customers are generally only cancellable by the carrier in an instance of our uncured breach, although some of our carrier customers are able to terminate their respective contracts without cause or for convenience. Our software-as-a-service, or SaaS, model provides us significant visibility into our future operating results through increased revenue predictability, 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, brokers, benefits outsourcers, payroll processors, and financial institutions. According to IBISWorld calculations, in 2017, the market for HR benefits administration in the United States is expected to grow to over \$54 billion. In addition, Gartner estimates that in 2016, the U.S. insurance industry spent approximately \$66 billion on software and related services.¹

The variety and complexity of core benefits plans, including healthcare, dental, life, and disability insurance 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 voluntary benefits plans, such as critical illness, supplemental income, and financial wellness programs. Current point and legacy systems are inadequate to efficiently manage the complexity, regulation, and the involvement of multiple parties, driving the need for an enterprise benefits management system to improve operational efficiency along the entire benefits value chain.

¹ Gartner, *Forecast: Enterprise IT Spending by Vertical Industry Market, Worldwide, 2015-2021 4Q17 Update*, United States Insurance Market Spending on Software, IT Services, and Internal Services. The Gartner Report described herein, (the "Gartner Report") represents research opinion or viewpoints published, as part of a syndicated subscription service, by Gartner, Inc. ("Gartner"), and are not representations of fact. Each Gartner Report speaks as of its original publication date (and not as of the date of this Annual Report) and the opinions expressed in the Gartner Report are subject to change without notice.

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 \$1,213 per employee in 2017. Employers recognize the importance of offering a greater variety of core and voluntary 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. This results in expensive, error-prone, and frustrating 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 changed the employee-employer relationship. HR executives continue to search for effective strategies to increase efficiency and contain costs, while increasing employee engagement and satisfaction. Employers are increasingly interested in SaaS solutions that can help capture and analyze benefits data and ultimately lead to healthier, happier, and more productive employees. 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 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 health insurance, life and ancillary benefits 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 healthcare 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 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.

Reportable Segments

Our reportable segments, Employer and Carrier, are based on type of customer. Financial information for Benefitfocus' reportable segments is included in Note 14 to our consolidated financial statements included in this Annual Report on Form 10-K.

The Benefitfocus Solutions

We provide a multi-tenant cloud-based benefits management platform to the employer and carrier markets. The Benefitfocus Platform simplifies how organizations and individuals shop for, enroll in, manage, and exchange benefits.

We believe our solutions help employers 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.

Transition to Defined Contribution Benefits Funding Model. Our solutions help enable employers' ongoing shift to defined contribution plans. Defined contribution plans differ from traditional defined benefit plans as they grant employees a stipend with which to purchase benefits of their choosing. Defined contribution plans also offer more discretion and options compared to defined benefit plans. Our products support traditional defined benefit plans, allowing employees to select from a list of benefits offered by their employer, calculating required member contributions, and recording and transmitting elections and other important information to payroll. Separately, with respect to defined contribution plans, our exchange solutions help facilitate an online shopping environment with many benefit options that allows employees to select personalized benefit offerings to suit their individual needs.

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 more than 1,500 benefit provider data exchange connections. 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 in the following important ways:

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.

Bolster Retail Distribution Capabilities Through Marketplaces. Our solutions help carriers 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.

Facilitate Real-Time Data Exchange. Our solutions simplify interactions and data exchange, and foster collaboration among carriers and their partners, brokers, employer customers, and individual members. This allows carriers to rapidly tailor and offer new benefits packages.

Our Growth Strategy

We intend to strengthen our position as a leading provider of cloud-based benefits software solutions. 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 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.

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 and increased adoption across our carriers' member populations.

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

Further Develop our Partner Ecosystem. We have established strong relationships with organizations such as Mercer, SAP, Allstate Insurance Company, Equifax, and others in a variety of industries to deliver best-in-class applications to our customers. We plan to continue to invest in our integration infrastructure to allow third parties and customers to build custom applications on the Benefitfocus Platform and create deep integrations between their systems and ours.

Leverage our Corporate Culture. We believe our culture inspires our associates and customers and supports our growth. We plan to continue to invest in our culture to help attract and retain top design and engineering professionals who are not only passionate about Benefitfocus and motivated to create superior software technology, but also passionate about contributing positively to their communities.

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 are consistent 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

Our portfolio of products, as summarized below, provides a seamless, integrated experience for the entire life cycle of benefits enrollment and management for insurance carriers and employers. We also provide extensive applications to help carriers and employers manage their programs more effectively.

Products and Services for Insurance Carriers

Marketplaces:
 Large Employer Marketplace
 Mid-Market Marketplace
 Small Employer Marketplace
 eEnrollment
 eBilling
 eExchange
 eSales
 Core & Advanced Analytics
 Certified Carrier Program
 Integrations
 Video
 Implementation Services
 Benefits Service Center

Products and Services for Employers

Benefitfocus Marketplace
 Communication Portal
 BenefitStore
 Core & Advanced Analytics
 Benefits Service Center
 Video
 ACA Management & Reporting
 Billing & Payment
 Implementation Services
 Integrations
 Benefitfocus University
 Account Services:
 Consumer Directed Healthcare Accounts
 COBRA Administration

Products for Insurance Carriers

- *Marketplaces* are online shopping environments, sometimes referred to as exchanges that allow customers to select from a variety of benefits plan choices to suit their individual needs. Marketplaces support the shift toward defined contribution benefits plans, which are increasing in popularity. Marketplaces provide consumer-centric experiences focused on personalization, and integrate social tools to help drive informed choices while selecting benefits. They also include features to track plans and compare pricing and features across multiple benefit plans.
- *eEnrollment* is our flagship product for carriers, providing them with online enrollment for all types of benefits. We designed eEnrollment to enhance our users' experience by presenting information in a user-friendly format and integrating educational videos as well as plan comparison and decision support tools to help users navigate the enrollment process. In addition to helping customers find suitable plans, eEnrollment supports complex business rules, such as eligibility and rating criteria. eEnrollment facilitates the following activities:
 - *Initial Enrollment.* Employees and brokers can complete applications and health statements prior to making elections. Once the selection occurs, eEnrollment

automatically calculates group numbers, finalizes benefit elections, and sends the data to the insurance carriers' membership systems.

- *Open Enrollment.* eEnrollment simplifies open enrollment by providing tools to map employees from one plan to another, such as workflow, to-do lists, e-mail reminders, and a wide range of reports.
- *New Hire Enrollment.* New hires can enroll in benefits anytime during their initial enrollment period. eEnrollment calculates wait periods and effective dates automatically to ensure compliance with the employers' business rules.
- *Life Events.* Employees can make changes to their elections for specific reasons, including a birth, marriage, and military leave. eEnrollment calculates effective dates and helps employees understand what types of coverage changes are permitted with each type of life event.
- *eBilling* is an electronic invoice presentment and payment solution, or EIPP. 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 communication gap between carrier and employer systems, allowing a seamless exchange of data between the two. Our customers use eExchange to integrate data from multiple 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.
- *Certified Carrier Program* is our partnership program with large life and ancillary product providers designed to deliver seamless ancillary, voluntary and life-style benefits to consumers. The program is a combination of technology solutions, preferred pricing and distribution opportunities.

Products for Employers

- *Benefitfocus Marketplace* is a cloud-based benefits management portal that streamlines online enrollment, employee communication, and benefits administration. It also and creates an exchange environment for large employers who offer defined contribution plans. In one cohesive, engaging workflow, Benefitfocus Marketplace presents employees with all of the plans their employers offer. Employees who need extra assistance can access avatars, animated videos, 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 employers' defined contribution in addition to the employees' out-of-pocket costs. If employees choose to purchase more coverage on their own, they can easily view and pay their bills in the Benefitfocus Marketplace.
- *Communication Portal* is an employee engagement portal that gives employers the tools to send personalized, targeted text and email communications to specific employee groups based on location, job level and eligibility status. Features such as an Intelligent Virtual Assistant provide employees on-demand support while reducing administration burden for employers, and Self-Service Total Compensation Reports increase transparency into the full value of benefit offerings, which can contribute to increased engagement and employee satisfaction.
- *BenefitStore* is a turnkey solution, enabled by BenefitStore, Inc., a wholly owned subsidiary insurance agency, that makes available directly to employees a broad array of voluntary and ancillary benefits through insurance consulting and brokerage services for employer sponsored and individual products such as transit, supplemental life and disability, among others, to provide a more comprehensive and customizable benefits package.
- *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.
- *Billing & Payment* is a comprehensive, dynamic EIPP application that synchronizes enrollment and billing information to streamline the monthly billing process, automate adjustments and increase accuracy of payments. 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.

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 a five-step approach for each implementation:

- *Discovery*, including project planning and coordination to establish key milestones, documenting business and technical requirements, establishing a deployment strategy, and planning operational and market adoption activities.
- *Configuration and deployment*, including configuring products to meet requirements identified during discovery, and defining needs for data exchange, payroll integration, and file transfer protocol.
- *Integration*, including connecting the Benefitfocus Platform functionality to a customer's currently existing systems, such as carrier membership and billing, payroll and HR systems, employee communications, intranets, and others.
- *Testing*, including testing of various scenarios and uses cases, inbound and outbound payroll integration, and regression testing.
- *Training and technical support*, including sessions to learn how to implement and access our products.
- *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 provides employees with personalized, guided support. Additional services, such as fulfillment, dependent verification, and HR administration, are available to meet unique organizational needs.
- *Video*. We create video and animated content that can be licensed within our applications or independently for distribution via client portals or websites. Benefitfocus provides a comprehensive video library and also can produce custom videos to meet specific communication requirements of its carrier and employer customers. Our staff of executive producers, project managers, writers, graphic designers, editors, and on-camera talent guide customers through the process from concept development to delivery. Benefitfocus hosts videos, eliminating the need for additional investments or internal IT resources by our customers. In addition, we incorporate our customers' unique branding to provide a seamless extension of corporate websites and messaging.

Partner Offerings

- *Integrations*. We allow our partners and customers to develop custom apps that integrate directly with Benefitfocus Marketplace. The open and flexible nature of our software architecture allows us to build deeper integrations with partner organizations and offer custom services in response to customer demand. Apps are organized into the following categories: voluntary benefits, health and wellness, benefits administration, finance, and communication. Some examples include:
 - *RedBrick Health* provides access to customizable health assessments, digital coaching, tracking and challenges.
 - *LifeLock* allows employees to purchase identity theft protection when they are enrolling in other benefit programs.
 - *SAP SuccessFactors* provides employee performance management solutions. We partnered with SAP to create a full HR and benefits management suite that combines employee talent, profile, and core HR information to help drive employee onboarding, promotion, and development. The SAP SuccessFactors suite of products provides an enterprise-class system of record, as well as powerful analytics and intuitive tools.

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

American Eagle Outfitters Inc.
Amerigas Propane, Inc.
Brookdale Senior Living Inc.
California Institute of Technology
Carolinas HealthCare System
Fender Musical Instruments Corporation
Fiesta Restaurant Group, Inc.
Hard Rock Café International (USA), Inc.
Rush University Medical Center
SAP America Inc.

Carrier Customers

American Family Life Assurance Company of Columbus
BlueChoice HealthPlan of South Carolina, Inc.
Blue Cross of Idaho Health Service, Inc.
Blue Cross and Blue Shield of Kansas City
Blue Cross and Blue Shield of South Carolina, Inc.
Wellmark, Inc.

During the year ended December 31, 2017, one customer accounted for 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;
- territory development representatives who respond to incoming leads 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;
- 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 LLC ("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 the web or mobile devices, rather than by installing software on their premises. Through our multi-tenant platform, our customers access a single instance of our software with multiple possible configurations enabled by our metadata-driven framework. The multi-tenant approach provides significant operating leverage and improved efficiency 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 vendors of legacy systems, who may be using a less flexible architecture that would require significant time and expense to update.

We host our applications and serve all of our customers from two redundant 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 tools detect a problem, our dedicated network operations center staff detect the issue and respond immediately to diagnose and resolve the problem. We take the security of our data and our systems very seriously, and we focus on minimizing the risk of vulnerabilities in our system at every level of software design and system and network administration.

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 software solutions, we face competition from various sources, many of which have greater resources than us. Competition in our employer segment includes:

- ERP software companies, including Oracle (PeopleSoft), Infor (Lawson) and Workday each offering a cloud-based benefits administration software solution;
- HR outsourcing companies, such as 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
- various niche software vendors.

Competitors in our carrier segment include:

- 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; and
- various niche software vendors.

We believe that competition for benefits software and services 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;
- 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;
- access to third-party apps;
- clearly defined implementation timeline;
- customer-branding and styling; 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 \$49.5 million, \$56.6 million and \$52.3 million for the years December 31, 2017, 2016 and 2015, 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.”, “All Your Benefits. In Your Pocket.”, and “Shop. Enroll. Manage. Exchange.” 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 changed how healthcare services are covered, delivered and reimbursed through expanded coverage of uninsured individuals, reduced Medicare program spending and insurance market reforms. PPACA, as enacted, required states to expand Medicaid coverage significantly and establish health insurance exchanges to facilitate the purchase of health insurance by individuals and small employers and provided subsidies to states to create non-Medicaid plans for certain low-income residents. Insurers have experienced mixed results providing services through the exchanges and many have exited this market. Increased volatility following the repeal of the individual mandate in late 2017 could create more uncertainty.

Although numerous lawsuits challenged the constitutionality of PPACA, the U.S. Supreme Court upheld the constitutionality of PPACA except for provisions that would have allowed the U.S. Department of Health and Human Services, or HHS, to penalize states that did not implement the Medicaid expansion

with the loss of existing federal Medicaid funding. Consequently, a number of states opted out of the Medicaid expansion. Since that time, several states that initially opted out of the Medicaid expansion changed their minds and expanded Medicaid after all. 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.

The long-term viability of PPACA remains in doubt. 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, an executive order was issued which stated that it is the U.S. federal government's policy to seek the prompt repeal of PPACA, and directed 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 destabilize 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. 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, 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 providers are considered by the HIPAA regulations to be "Covered Entities." 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 \$55,910 per violation and a maximum civil penalty of \$1,677,299 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. Nearly 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 19.9% of the voting and economic interest in our business as of December 31, 2017, 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 Dodd-Frank Wall Street Reform and Consumer Protection Act, or Dodd-Frank Act, was signed into law by President Obama on July 21, 2010, including Title VI known as the "Volcker Rule". US financial regulators approved final rules to implement the Volcker Rule in December 2013. The Volcker 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. On February 3, 2017, President Trump signed an executive order entitled "Presidential Executive Order on Core Principles for Regulating the United States Financial System". The executive order required the Secretary of the Treasury to consult with the heads of the member agencies of the Financial Stability Oversight Council (including the Federal Reserve) and report to the president within 120 days of the date of the executive order on the extent to which existing laws, regulations, and other policies promote the core principles outlined in the order. The report was also required to identify any laws, regulations, and other policies that inhibit financial regulation in a manner consistent with the core principles. On June 12, 2017, the U.S. Department of the Treasury published a report identifying regulations inconsistent with the principles articulated in the order. This was the first of a series of reports and addressed only the depository system. Future reports are expected to address the regulation of capital markets, the asset management and insurance industries, and nonbank financial services companies. The extent to which this executive order and the required reports thereunder may ultimately result in changes to financial services laws, regulations, and policies applicable to us is not currently known.

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 expect to be material to us.

Geographic Areas

We operate solely in the United States. As such, we held substantially all our assets and generated all our revenue in the United States during the fiscal years ended December 31, 2017, 2016 and 2015.

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. Such reports may also be read and copied at the Securities and Exchange Commission's Public Reference Room at 100 F Street NE, Washington, D.C. 20549. Information regarding the operation of the Public Reference Room may be obtained by calling the Securities and Exchange Commission at (800) SEC-0330. The Securities and Exchange Commission also 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 March 15, 2018:

| <u>Name</u> | <u>Age</u> | <u>Position</u> |
|-----------------------|------------|---------------------------------------|
| Raymond A. August | 56 | President and Chief Executive Officer |
| Mason R. Holland, Jr. | 53 | Executive Chairman, Director |
| Jonathon E. Dussault | 44 | Chief Financial Officer, Treasurer |
| James P. Restivo | 58 | Chief Technology Officer |

Raymond A. August—President and Chief Executive Officer

Raymond August has been our President and Chief Executive Officer since January 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 Computer Sciences Corp. (now DXC Technology Co. (NYSE: DXC)), or CSC, Financial Services Group since October 2012. Prior to that, from March 2008 to September 2012, he served as CSC's President of the 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 our 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's other ventures have included establishing Holland Properties, LLC, a real estate development firm, in 1989, and acquiring Eclipse Aerospace, Inc., a jet aircraft manufacturer, in May 2009, for which he served as Chairman and Chief Executive Officer until its merger with Kestrel Aircraft in April 2015 to form ONE Aviation. Mr. Holland has served as Chairman of ONE Aviation since its formation. 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, 2017, 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.

**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, and brokers. The Benefitfocus Platform simplifies how organizations and individuals shop for, enroll in, manage, and exchange benefits. Our employer and insurance carrier customers rely on our platform to manage, scale and exchange data. Our web-based platform has a user-friendly interface designed to enable the insured consumers to access all of their benefits in one place. Our comprehensive solutions support core benefits plans, including healthcare, dental, life, and disability insurance, and voluntary benefits offerings such as 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 has grown.

We serve two separate but related market segments. The employer market which consists of employers offering benefits to their employees. Within this segment, we mainly target large employers with more than 1,000 employees, of which we believe there are over 18,000 in the United States. In our other market segment, we sell our solutions to insurance carriers, enabling us to expand our overall footprint in the benefits marketplace by aggregating many key constituents, including consumers, employers, and brokers. Our business model capitalizes on the close relationship between carriers and their members, and the carriers' ability to serve as lead generators for potential employer customers. Carriers pay for services at a rate reflective of the aggregated nature of their customer base on a per application basis. Carriers can then deploy their applications to employer groups and members. As employers become direct customers through our employer segment, we provide them our platform offering that bundles many software applications into a comprehensive benefits solution through Benefitfocus Marketplace. We believe our presence in both the employer and insurance carrier markets gives us a strong position at the center of the benefits ecosystem.

We sell the Benefitfocus Platform on a subscription basis, typically through annual contracts with employer customers and multi-year contracts with our insurance carrier customers, with subscription fees paid monthly, quarterly and annually. The multi-year contracts with our carrier customers are generally only cancellable by the carrier in an instance of our uncured breach, although some of our carrier customers are able to terminate their respective contracts without cause or for convenience. Software services revenue accounted for approximately 85%, 87%, and 87% of our total revenue during the years ended December 31, 2017, 2016 and 2015, respectively.

Another component of our revenue is professional services. We derive the majority of our professional services revenue from the implementation of our customers onto our platform, which typically includes discovery, configuration and deployment, integration, testing, and training. In general, it takes from four to six months to implement a new employer customer's benefits systems and eight to 10 months to implement a new carrier customer's benefits systems. 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 15%, 13%, and 13% of our total revenue during the years ended December 31, 2017, 2016 and 2015, respectively.

Increasing our base of large employer customers is an important source of revenue growth for us. We actively pursue new employer customers in the U.S. market, and we have increased the number of large employer customers utilizing our solutions from 141 as of December 31, 2010 to 920 as of December 31, 2017, a 30.7% compound annual growth rate. We believe that our continued innovation and new solutions, such as online benefits marketplaces, also known as private exchanges, account services, enhanced mobile offerings, and more robust data analytics capabilities will help us attract additional large employer customers and increase our revenue from existing customers.

We believe that there is a substantial market for our services, and we have been investing in growth over the past six 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 seven 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 the subscription nature of our 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.

Number of Large Employer and Carrier Customers

We believe the number of large employer and carrier customers is a key indicator of our market penetration, growth, and future revenue. We have aggressively invested in and intend to continue to invest in our sales function to grow our customer base. 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, | | |
|----------------------|-------------------------|------|------|
| | 2017 | 2016 | 2015 |
| Number of customers: | | | |
| Large employer | 920 | 833 | 723 |
| Carrier | 54 | 53 | 54 |

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.

For 2017, 2016 and 2015 our software services revenue retention rate exceeded 95%.

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 2017, 2016 and 2015.

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. 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, | | |
|-----------------------|-------------------------|-------------------|-------------------|
| | 2017 | 2016 | 2015 |
| Software services | \$ 218,443 | \$ 201,797 | \$ 161,477 |
| Professional services | 38,292 | 31,538 | 23,666 |
| Total revenue | <u>\$ 256,735</u> | <u>\$ 233,335</u> | <u>\$ 185,143</u> |

We generally recognize software services fees monthly based on the number of employees covered by the relevant benefits plans at contracted rates for a specified period of time, provided that an enforceable contract has been signed by both parties, access to our software has been granted to the customer and it is available for their use, the fee for the software services is fixed or determinable, and collection is reasonably assured.

We defer recognition of our professional services fees paid by customers related to implementation services that are determined to not have stand-alone value and are sold with our software services, and recognize them, beginning once the related software services have commenced, ratably over the longer of the contract term or the estimated expected life of the customer relationship, which was 7 years. We periodically evaluate the term over which revenue is recognized for professional services to reflect our experience with customer contract renewals.

As of July 1, 2015, we determined that we had established standalone value for the implementation services for the Benefitfocus Marketplace solution in the Employer segment as they are now sold separately from the software services. This was primarily due to the system integrators that have been trained and certified to perform these implementation services, the successful completion of an implementation by a trained system integrator, and the sale of several software subscription arrangements to customers in the Employer segment without the Company's implementation services. Accordingly, revenues related to implementation services for the Benefitfocus Marketplace solution in the Employer segment that are delivered after July 1, 2015 are recognized separately from the revenues earned from the Employer software subscription services. Revenues related to such implementation services are recognized at the time that the professional services have been completed and the related software services have commenced. Prior to July 1, 2015, we did not have standalone value for implementation services related to the Benefitfocus Marketplace solution as we had historically performed these services to support our customers' implementation of this solution. The incremental revenue from recognition of services upon delivery compared to recognition over the customer relationship period of 7 years was \$2.3 million in twelve months ended December 31, 2015.

We generally invoice our employer and carrier customers for software services in advance, in monthly, quarterly or annual installments. We invoice our employer customers for implementation fees at the inception of the arrangement. We generally invoice our carrier customers for implementation fees at various contractually defined times throughout the implementation process. Implementation fees that have been invoiced are initially recorded as deferred revenue until recognized to revenue as described above.

We earn commissions from brokerage services from our voluntary benefit insurance offerings. We recognize revenue when these commissions are earned.

We will adopt the new revenue accounting standard on January 1, 2018. The new standard will significantly affect how we recognize revenue for our products and services. The expected effects of the new accounting standard are included in Note 2 to our consolidated financial statements appearing 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 our cost of revenue as we incur the costs. However, the related revenue from fees we receive for our implementation services, performed before a customer is operating on our platform, that is determined to not have stand-alone value is deferred until the commencement of the monthly subscription and recognized as revenue ratably over the longer of the related contract term or the estimated expected life of the customer relationship. For those implementation services that have standalone value, the related revenue is recognized as revenue upon completion of service. Therefore, the cost incurred in providing these services is expensed in periods prior to the recognition of the corresponding revenue. Our cost associated with providing implementation services has been significantly higher as a percentage of revenue than our cost associated with providing our monthly subscription services due to the labor associated with implementation.

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, 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. We record expense for commissions at the time of contract signing. Additional expenses include advertising, lead generation, promotional event programs, corporate

communications, travel, and allocated overhead. For instance, our most significant promotional event is our annual user and partner conference, One Place, which we have held 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, 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 implementation 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 2017, 2016, and 2015. Net operating loss carryforwards for federal income tax purposes were \$253.9 million at December 31, 2017. State net operating loss carryforwards were approximately \$221.2 million at December 31, 2017. 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.

On December 22, 2017, the Tax Cuts & Jobs Act ("Tax Reform") was enacted. Among other things, we expect that the primary provision of Tax Reform to affect us will be the reduction to the U.S. corporate income tax rate from 35% to 21%. Accordingly, we revalued our deferred tax assets and liabilities to reflect the enacted tax rate and adjusted our valuation allowance. As of December 31, 2017, we have completed our accounting for the income tax effects of Tax Reform except for the impact of state tax conformity of each change and further evaluation of executive compensation. We are not able to determine a reasonable estimate for these items and expect to complete our analysis during 2018 as states make known their conformity with federal tax laws and additional transition guidance is provided related to executive compensation.

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, | | |
|--|-------------------------|-------------|-------------|
| | 2017 | 2016 | 2015 |
| Revenue | \$ 256,735 | \$ 233,335 | \$ 185,143 |
| Cost of revenue ⁽¹⁾ | 124,156 | 120,681 | 102,851 |
| Gross profit | 132,579 | 112,654 | 82,292 |
| Operating expenses: | | | |
| Sales and marketing ⁽¹⁾ | 69,280 | 55,488 | 58,589 |
| Research and development ⁽¹⁾ | 49,549 | 56,584 | 52,250 |
| General and administrative ⁽¹⁾ | 27,268 | 32,750 | 25,727 |
| Total operating expenses | 146,097 | 144,822 | 136,566 |
| Loss from operations | (13,518) | (32,168) | (54,274) |
| Other income (expense): | | | |
| Interest income | 182 | 138 | 188 |
| Interest expense on building lease financing obligations | (7,450) | (6,826) | (7,092) |
| Interest expense on other borrowings | (4,931) | (1,095) | (877) |
| Other expense | (140) | (90) | (4) |
| Total other expense, net | (12,339) | (7,873) | (7,785) |
| Loss before income taxes | (25,857) | (40,041) | (62,059) |
| Income tax expense | 15 | 17 | 25 |
| Net loss | \$ (25,872) | \$ (40,058) | \$ (62,084) |

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

| | Year Ended December 31, | | |
|----------------------------|-------------------------|----------|----------|
| | 2017 | 2016 | 2015 |
| Cost of revenue | \$ 2,508 | \$ 2,798 | \$ 1,950 |
| Sales and marketing | 4,953 | 3,213 | 2,861 |
| Research and development | 2,990 | 4,532 | 2,399 |
| General and administrative | 5,686 | 7,545 | 3,244 |

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, | | |
|--|-------------------------|----------|----------|
| | 2017 | 2016 | 2015 |
| Revenue | 100.0 % | 100.0 % | 100.0 % |
| Cost of revenue | 48.4 | 51.7 | 55.6 |
| Gross profit | 51.6 | 48.3 | 44.4 |
| Operating expenses: | | | |
| Sales and marketing | 27.0 | 23.8 | 31.6 |
| Research and development | 19.3 | 24.3 | 28.2 |
| General and administrative | 10.6 | 14.0 | 13.6 |
| Total operating expenses | 56.9 | 62.1 | 73.8 |
| Loss from operations | (5.3) | (13.8) | (29.3) |
| Other income (expense): | | | |
| Interest income | 0.1 | 0.1 | 0.1 |
| Interest expense on building lease financing obligations | (2.9) | (2.9) | (3.8) |
| Interest expense on other borrowings | (1.9) | (0.5) | (0.5) |
| Other expense | (0.1) | - | - |
| Total other expense, net | (4.8) | (3.4) | (4.2) |
| Loss before income taxes | (10.1) | (17.2) | (33.5) |
| Income tax expense | - | - | - |
| Net loss | (10.1) % | (17.2) % | (33.5) % |

Our Segments

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

| | Year Ended December 31, | | |
|---|-------------------------|------------|------------|
| | 2017 | 2016 | 2015 |
| Revenue from external customers by segment: | | | |
| Employer | \$ 163,978 | \$ 140,522 | \$ 94,842 |
| Carrier | 92,757 | 92,813 | 90,301 |
| Total net revenue from external customers | \$ 256,735 | \$ 233,335 | \$ 185,143 |
| Gross profit by segment | | | |
| Employer | \$ 68,735 | \$ 53,031 | \$ 33,655 |
| Carrier | 63,844 | 59,623 | 48,637 |
| Total gross profit by segment | \$ 132,579 | \$ 112,654 | \$ 82,292 |

Comparison of Years Ended December 31, 2017 and 2016

Revenue

| | Year Ended December 31, | | | | | | Period-to-Period Change | |
|-----------------------|-------------------------|-----------------------|------------|-----------------------|-----------|------------|-------------------------|------------|
| | 2017 | | 2016 | | Amount | Percentage | Amount | Percentage |
| | Amount | Percentage of Revenue | Amount | Percentage of Revenue | | | | |
| | (in thousands) | | | | | | | |
| Software services | \$ 218,443 | 85.1 % | \$ 201,797 | 86.5 % | \$ 16,646 | 8.2 % | | |
| Professional services | 38,292 | 14.9 | 31,538 | 13.5 | 6,754 | 21.4 | | |
| Total revenue | \$ 256,735 | 100.0 % | \$ 233,335 | 100.0 % | \$ 23,400 | 10.0 % | | |

Growth in software services revenue was primarily attributable to existing customers adding covered users to our offerings, or volume increases, and also to existing customers purchasing additional products as well as to the net addition of new customers, as the number of large employer and carrier customers increased to 974 as of December 31, 2017 from 886 as of December 31, 2016.

The increase in professional services revenue was in part attributable to the recognition of \$2.5 million of implementation services provided to newly activated customers and new products provided to existing customers, and the remainder from providing consulting services and enhancements to existing customers.

Segment Revenue

| | Year Ended December 31, | | | | | | Period-to-Period Change | |
|---------------|-------------------------|-----------------------|------------|-----------------------|-----------|------------|-------------------------|------------|
| | 2017 | | 2016 | | Amount | Percentage | Amount | Percentage |
| | Amount | Percentage of Revenue | Amount | Percentage of Revenue | | | | |
| | (in thousands) | | | | | | | |
| Employer | \$ 163,978 | 63.9 % | \$ 140,522 | 60.2 % | \$ 23,456 | 16.7 % | | |
| Carrier | 92,757 | 36.1 | 92,813 | 39.8 | (56) | (0.1) | | |
| Total revenue | \$ 256,735 | 100.0 % | \$ 233,335 | 100.0 % | \$ 23,400 | 10.0 % | | |

Growth in our employer revenue was primarily attributable to a \$17.6 million increase in our employer software services revenue driven mostly by new customers and volume increases, as well as additional products sold to existing customers. Additionally, employer professional services revenue increased \$5.8 million due to implementation revenue from new customers and customer consulting to existing customers.

The slight decrease in carrier revenue was primarily attributable to a \$0.9 million increase in professional services revenue, offset by a decrease of \$1.0 million in software services revenue. The

professional services revenue increase was primarily driven by additional support and discovery services to existing customers. Carrier software services revenue decreased as volume decreases from existing customers exceeded increases in revenue from new customers.

Cost of Revenue

| | Year Ended December 31, | | | | | | Period-to-Period Change | |
|-----------------|-------------------------|-----------------------|--|------------|-----------------------|----------|-------------------------|------------|
| | 2017 | | | 2016 | | | Amount | Percentage |
| | Amount | Percentage of Revenue | | Amount | Percentage of Revenue | | | |
| | (in thousands) | | | | | | | |
| Cost of revenue | \$ 124,156 | 48.4 % | | \$ 120,681 | 51.7 % | \$ 3,475 | 2.9 % | |

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 a decrease in stock-based compensation of \$0.3 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, | | | | | | Period-to-Period Change | |
|-----------------------|-------------------------|-----------------------|--|------------|-----------------------|-----------|-------------------------|------------|
| | 2017 | | | 2016 | | | Amount | Percentage |
| | Amount | Percentage of Revenue | | Amount | Percentage of Revenue | | | |
| | (in thousands) | | | | | | | |
| Software services | \$ 134,051 | 61.4 % | | \$ 122,686 | 60.8 % | \$ 11,365 | 9.3 % | |
| Professional services | (1,472) | (3.8) | | (10,032) | (31.8) | 8,560 | (85.3) | |
| Gross profit | \$ 132,579 | 51.6 % | | \$ 112,654 | 48.3 % | \$ 19,925 | 17.7 % | |

The increase in software services gross profit was driven by a \$16.6 million, or 8.2%, increase in software services revenue. This increase was partially offset by a \$5.3 million, or 6.7%, increase in software services cost of revenue. Software services cost of revenue included \$1.7 million of stock-based compensation expense for each of the years ended December 31, 2017 and 2016, and \$10.4 million and \$8.9 million of depreciation and amortization for the years ended December 31, 2017 and 2016, respectively.

The improvement in professional services gross loss was driven by a \$6.8 million, or 21.4%, increase in professional services revenue and a decrease in professional services cost of revenue of \$1.8 million. Professional services cost of revenue included \$0.8 million and \$1.1 million of stock-based compensation expense for the years ended December 31, 2017 and 2016, respectively. In addition, professional services cost of revenue included \$1.4 million and \$1.2 million in depreciation and amortization for the years ended December 31, 2017 and 2016, respectively.

As discussed in "Components of Operating Results—Cost of Revenue", we expense our cost of revenue as we incur the costs. However, recognition of the related revenue from implementation services performed before a customer is operating on our platform generally is deferred until the commencement of the monthly subscription. We recognize the revenue ratably over the longer of the related contract term or the estimated expected life of the customer relationship, which is 7 years. Therefore, we expense the cost incurred in providing these services prior to the recognition of the corresponding revenue.

Segment Gross Profit

| | Year Ended December 31, | | | | | | Period-to-Period Change | |
|--------------|-------------------------|-----------------------|----------------|--------|-----------------------|--------|-------------------------|------------|
| | 2017 | | | 2016 | | | Amount | Percentage |
| | Amount | Percentage of Revenue | (in thousands) | Amount | Percentage of Revenue | Amount | | |
| Employer | \$ 68,735 | 41.9 % | \$ 53,031 | 37.7 % | \$ 15,704 | 29.6 % | | |
| Carrier | 63,844 | 68.8 | 59,623 | 64.2 | 4,221 | 7.1 | | |
| Gross profit | \$ 132,579 | 51.6 % | \$ 112,654 | 48.3 % | \$ 19,925 | 17.7 % | | |

The increase in employer gross profit was driven by a \$23.5 million, or 16.7%, increase in employer revenue being only partially offset by a \$7.8 million, or 8.9%, increase in employer cost of revenue as we continued to achieve economies of scale. 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 \$5.8 million of depreciation and amortization for the years ended December 31, 2017 and December 31, 2016, respectively.

The increase in carrier gross profit was driven by a decrease in carrier cost of revenue of \$4.3 million, or 12.8%, in combination with carrier revenue being essentially flat. 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 \$4.2 million in depreciation and amortization for the years ended December 31, 2017 and 2016, respectively.

Operating Expenses

| | Year Ended December 31, | | | | | | Period-to-Period Change | |
|----------------------------|-------------------------|-----------------------|----------------|--------|-----------------------|----------|-------------------------|------------|
| | 2017 | | | 2016 | | | Amount | Percentage |
| | Amount | Percentage of Revenue | (in thousands) | Amount | Percentage of Revenue | Amount | | |
| Sales and marketing | \$ 69,280 | 27.0 % | \$ 55,488 | 23.8 % | \$ 13,792 | 24.9 % | | |
| Research and development | \$ 49,549 | 19.3 % | \$ 56,584 | 24.3 % | \$ (7,035) | (12.4) % | | |
| General and administrative | \$ 27,268 | 10.6 % | \$ 32,750 | 14.0 % | \$ (5,482) | (16.7) % | | |

The increase in sales and marketing expense was attributable to \$9.0 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 external development and engineering consulting decreased \$3.2 million.

The decrease in general and administrative expense was partly attributable to a \$1.8 million decrease in salaries and personnel-related costs, which includes a decrease in stock-based compensation expense of \$1.3 million. Sales tax expense decreased \$1.6 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.

Comparison of Years Ended December 31, 2016 and 2015

Revenue

| | Year Ended December 31, | | | | Period-to-Period Change | |
|-----------------------|-------------------------|-----------------------|------------|-----------------------|-------------------------|------------|
| | 2016 | | 2015 | | Amount | Percentage |
| | Amount | Percentage of Revenue | Amount | Percentage of Revenue | | |
| | (in thousands) | | | | | |
| Software services | \$ 201,797 | 86.5 % | \$ 161,477 | 87.2 % | \$ 40,320 | 25.0 % |
| Professional services | 31,538 | 13.5 | 23,666 | 12.8 | 7,872 | 33.3 |
| Total revenue | \$ 233,335 | 100.0 % | \$ 185,143 | 100.0 % | \$ 48,192 | 26.0 % |

Growth in software services revenue was primarily attributable to existing customers adding covered users to our offerings, or volume increases, and also to existing customers purchasing additional products as well as to the net addition of new customers, as the number of large employer and carrier customers increased to 886 as of December 31, 2016 from 777 as of December 31, 2015.

The increase in professional services revenue was in part attributable to the recognition of \$7.5 million of implementation services provided to newly activated customers, new products provided to existing customers and \$4.3 million attributable to the acceleration of the customer relationship period for certain customers.

Segment Revenue

| | Year Ended December 31, | | | | Period-to-Period Change | |
|---------------|-------------------------|-----------------------|------------|-----------------------|-------------------------|------------|
| | 2016 | | 2015 | | Amount | Percentage |
| | Amount | Percentage of Revenue | Amount | Percentage of Revenue | | |
| | (in thousands) | | | | | |
| Employer | \$ 140,522 | 60.2 % | \$ 94,842 | 51.2 % | \$ 45,680 | 48.2 % |
| Carrier | 92,813 | 39.8 | 90,301 | 48.8 | 2,512 | 2.8 |
| Total revenue | \$ 233,335 | 100.0 % | \$ 185,143 | 100.0 % | \$ 48,192 | 26.0 % |

Growth in our employer revenue was primarily attributable to a \$42.9 million increase in our employer software services revenue driven primarily by new customers and volume increases, as well as additional products sold to existing customers. Additionally, employer professional services revenue increased \$2.7 million, including a \$0.7 million increase from services with standalone value.

The increase in carrier revenue in absolute terms was primarily attributable to a \$5.1 million increase in professional services revenue, offset by a decrease of \$2.6 million in software services revenue. The professional services revenue increase was primarily driven by implementations related to additional products with existing customers and the acceleration of the customer relationship period for certain customers. Carrier software services revenue decreased as volume decreases from existing customers exceeded increases in revenue from new customers.

Cost of Revenue

| | Year Ended December 31, | | | | Period-to-Period Change | |
|-----------------|-------------------------|-----------------------|------------|-----------------------|-------------------------|------------|
| | 2016 | | 2015 | | Amount | Percentage |
| | Amount | Percentage of Revenue | Amount | Percentage of Revenue | | |
| | (in thousands) | | | | | |
| Cost of revenue | \$ 120,681 | 51.7 % | \$ 102,851 | 55.6 % | \$ 17,830 | 17.3 % |

The increase in cost of revenue in absolute terms was in part attributable to a \$14.4 million 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 \$0.9 million. The remaining increase was attributable to other operating expenses related to security, technology infrastructure, depreciation and amortization, and facilities costs to support

our organization. However, 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, | | | | | | Period-to-Period Change | |
|-----------------------|-------------------------|-----------------------|----------------|--------|-----------------------|--------|-------------------------|--|
| | 2016 | | | 2015 | | | | |
| | Amount | Percentage of Revenue | (in thousands) | Amount | Percentage of Revenue | Amount | Percentage | |
| Software services | \$ 122,686 | 60.8 % | \$ 102,301 | 63.4 % | \$ 20,385 | 19.9 % | | |
| Professional services | (10,032) | (31.8) | (20,009) | (84.5) | 9,977 | (49.9) | | |
| Gross profit | \$ 112,654 | 48.3 % | \$ 82,292 | 44.4 % | \$ 30,362 | 36.9 % | | |

The increase in software services gross profit was driven by a \$40.3 million, or 25.0%, increase in software services revenue. This increase was partially offset by a \$19.9 million, or 33.7%, increase in software services cost of revenue. Software services cost of revenue included \$1.7 million and \$0.9 million of stock-based compensation expense for the years ended December 31, 2016 and 2015, respectively, and \$8.9 million and \$7.7 million of depreciation and amortization for the years ended December 31, 2016 and 2015, respectively.

The improvement in professional services gross loss was driven by a \$7.9 million, or 33.3%, increase in professional services revenue and a decrease in professional services cost of revenue of \$2.1 million. Professional services cost of revenue included \$1.1 million and \$1.0 million of stock-based compensation expense for the years ended December 31, 2016 and 2015, respectively. In addition, professional services cost of revenue included \$1.2 million and \$1.4 million in depreciation and amortization for the years ended December 31, 2016 and 2015, respectively.

As discussed in “Components of Operating Results—Cost of Revenue”, we expense our cost of revenue as we incur the costs. However, recognition of the related revenue from implementation services performed before a customer is operating on our platform is generally deferred until the commencement of the monthly subscription. Beginning at that time, we recognize the revenue ratably over the longer of the related contract term or the estimated expected life of the customer relationship, which is 7 years. Therefore, we expense the cost incurred in providing these services prior to the recognition of the corresponding revenue.

Segment Gross Profit

| | Year Ended December 31, | | | | | | Period-to-Period Change | |
|--------------|-------------------------|-----------------------|----------------|--------|-----------------------|--------|-------------------------|--|
| | 2016 | | | 2015 | | | | |
| | Amount | Percentage of Revenue | (in thousands) | Amount | Percentage of Revenue | Amount | Percentage | |
| Employer | \$ 53,031 | 37.7 % | \$ 33,655 | 35.5 % | \$ 19,376 | 57.6 % | | |
| Carrier | 59,623 | 64.2 | 48,637 | 53.9 | 10,986 | 22.6 | | |
| Gross profit | \$ 112,654 | 48.3 % | \$ 82,292 | 44.4 % | \$ 30,362 | 36.9 % | | |

The increase in employer gross profit was driven by a \$45.7 million, or 48.2%, increase in employer revenue being only partially offset by a \$26.3 million, or 43.0%, increase in employer cost of revenue as we continued to achieve economies of scale. 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 \$5.8 million and \$4.6 million of depreciation and amortization for the years ended December 31, 2016 and December 31, 2015, respectively. In addition, our employer cost of revenue included \$2.0 million and \$1.0 million of stock-based compensation expense for the years ended December 31, 2016 and 2015, respectively.

The increase in carrier gross profit was driven by an increase in carrier revenue of \$2.5 million, or 2.8%, in combination with a decrease in carrier cost of revenue of \$8.5 million, or 20.3%. The decrease in cost of revenue was primarily attributable to a decrease in customer-specific development, as opposed to platform enhancements and development. Our carrier cost of revenue included \$4.2 million and \$4.5 million in depreciation and amortization for the years ended December 31, 2016 and December 31, 2015, respectively. In addition, our carrier cost of revenue included \$0.8 million and \$0.9 million of stock-based compensation expense for the years ended December 31, 2016 and 2015, respectively.

Operating Expenses

| | Year Ended December 31, | | | | | |
|----------------------------|-------------------------|-----------------------|-----------|-----------------------|--------------------------------|------------|
| | 2016 | | | 2015 | | |
| | Amount | Percentage of Revenue | Amount | Percentage of Revenue | Period-to-Period Change Amount | Percentage |
| | (in thousands) | | | | | |
| Sales and marketing | \$ 55,488 | 23.8 % | \$ 58,589 | 31.6 % | \$ (3,101) | (5.3) % |
| Research and development | \$ 56,584 | 24.3 % | \$ 52,250 | 28.2 % | \$ 4,334 | 8.3 % |
| General and administrative | \$ 32,750 | 14.0 % | \$ 25,727 | 13.9 % | \$ 7,023 | 27.3 % |

The decrease in sales and marketing expense was attributable to lower compensation expenses, including the impact of a significant carrier deal that occurred in the first quarter of 2015 and a large employer deal that occurred in the third quarter of 2015, as well as the departure of the Chief Commercial Officer in the fourth quarter of 2015. Additionally, we experienced efficiencies that reduced travel-related expenses by \$0.9 million and experienced a \$0.6 million decrease in other operating expenses.

The increase in research and development expense in absolute terms was primarily attributable to a \$4.5 million increase in salaries and personnel-related costs, including an increase in stock-based compensation of \$2.1 million comprised of \$0.5 million for the accrual of separation benefits related to the departure of our former Chief Technology Officer and \$1.6 million attributable to equity awards granted to new and existing research and development associates. These increases were offset by a \$2.0 million increase of personnel-related cost capitalized as part of software development. Additionally, we experienced a \$0.9 million increase in engineering consulting fees for assistance in product development and a \$0.9 million increase in technology infrastructure costs.

The increase in general and administrative expense was primarily attributable to a \$5.7 million increase in salaries and personnel-related costs comprised of a \$4.3 million increase in stock-based compensation expense and a \$1.2 million increase due to additional general and administrative headcount and the accrual of separation benefits related the retirement of our former Chief Financial Officer. The increase in stock-based compensation is partly attributable to the issuance of stock-based awards in lieu of cash compensation to certain senior executives and a \$3.5 million increase in stock-based compensation expense due to additional grants. We also experienced a \$1.2 million increase in facilities costs, depreciation expense and technology infrastructure costs.

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 the majority of our revenue from software services fees, which consist primarily of monthly subscription fees paid by customers for access to and usage of our cloud-based benefits software solutions for a specified contract term. We also derive revenue from professional services which primarily include fees related to the integration of customers' systems with our platform, which typically includes discovery, configuration, deployment, testing, and training.

We recognize revenue when there is persuasive evidence of an arrangement, the service has been provided, the fees to be paid by the customer are fixed and determinable and collectability is reasonably assured. We consider delivery of our cloud-based software services has commenced once access to a configured and live instance on our platform has been delivered.

Our arrangements generally contain multiple elements comprised of software services and professional services. We evaluate each element in an arrangement to determine whether it represents a separate unit of accounting. An element constitutes a separate unit of accounting when the delivered item has standalone value and delivery of the undelivered element is probable and within our control.

When multiple deliverables included in an arrangement are separable into different units of accounting, the arrangement consideration is allocated to the identified units of accounting based on their relative selling price. Multiple deliverable arrangements accounting guidance provides a hierarchy to use when determining the relative selling price for each unit of accounting. Vendor-specific objective evidence ("VSOE") of selling price, based on the price at which the item is regularly sold by the vendor on a standalone basis, should be used if it exists. If VSOE of selling price is not available, third-party evidence ("TPE") of selling price is used to establish the selling price if it exists. VSOE and TPE do not currently exist for any of our deliverables. Accordingly, for arrangements with multiple deliverables that can be separated into different units of accounting, the arrangement fee is allocated to the separate units of accounting based on our best estimate of selling price. The amount of arrangement fee allocated is limited by contingent revenues, if any.

Effective July 1, 2015, we determined that we had established standalone value for Benefitfocus Marketplace implementation services in the Employer segment as they are now sold separately from the software services. This was primarily due to the system integrators that have been trained and certified to perform these implementation services, the successful completion of an implementation by a trained system integrator, and the sale of several software subscription arrangements to customers in the Employer segment without our implementation services. Accordingly, revenues related to implementation services for the Benefitfocus Marketplace solution in the Employer segment that are delivered after July 1, 2015 are recognized separately from the revenues earned from the Employer software subscription services. Revenues related to such implementation services are recognized at the time that the professional services have been completed and the related software services have commenced. Prior to July 1, 2015, we did not have standalone value for implementation services related to the Benefitfocus Marketplace solution as we had historically performed these services to support customers' implementation of this solution. The incremental revenue from recognition of services upon delivery compared to recognition over the customer relationship period of 7 years was \$2.3 million for the twelve months ended December 31, 2015.

Certain of our other professional services, including implementation services related to the Carrier segment, are not sold separately from the software services and there is no alternative use for them. As such, we have determined that those professional services do not have standalone value. Accordingly, software services and professional services are combined and recognized as a single unit of accounting. We generally recognize software services fees monthly based on the number of employees covered by the relevant benefits plans at contracted rates for a specified period of time, once the criteria for revenue recognition described above have been satisfied. We recognize revenue on Benefitfocus Marketplace implementation services in the Employer segment that have standalone value at the time the services have been completed. We defer recognition of revenue for fees from professional services that do not have standalone value and begin recognizing such revenue once the services are delivered and the related software services have commenced, ratably over the longer of the contract term or the estimated expected life of the customer relationship. Costs incurred by us in connection with providing such professional services are charged to expense as incurred and are included in "Cost of revenue."

We also earn commissions from brokerage services from our voluntary benefit insurance offerings. We recognize revenue when these commissions are earned.

We will adopt the new revenue accounting standard on January 1, 2018. The new standard will significantly affect how we recognize revenue for our products and services. The expected effects of the new accounting standard are included in Note 2 to our consolidated financial statements appearing elsewhere in this Annual Report on Form 10-K.

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 have issued two types of stock-based awards under our stock plans: stock options and restricted stock units. 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. Generally, options vest 25% on the one-year anniversary of the grant date with the balance vesting over the following 36 months. We previously granted options that vest 100% on the fifth anniversary of the grant date. Restricted stock unit awards generally vest 25% on each anniversary of the grant date over 4 years.

In 2017, 2016 and 2015, we granted performance restricted stock units that vest 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.

We did not grant any stock options in 2017, 2016 or 2015. As of December 31, 2017, all outstanding options are fully vested and expensed.

On January 1, 2017, we adopted Financial Accounting Standards Board ("FASB") Accounting Standard Update ("ASU") 2016-09, "Improvements to Employee Share-Based Payment Accounting," and elected to account for forfeitures as they occur. Prior to that date, we based our estimate of pre-vesting forfeitures, or forfeiture rate, on our analysis of historical behavior by stock award holders. We applied the estimated forfeiture rate to the total estimated fair value of the awards, as derived from the Black-Scholes model, to compute the stock-based compensation expense, net of pre-vesting forfeitures, to be recognized in our consolidated statements of operations.

Based upon the closing stock price of \$27.00 on December 29, 2017, the last trading day of 2017, the aggregate intrinsic value of outstanding options to purchase shares of our common stock as of December 31, 2017 was \$4.7 million, all of which was related to vested options. The aggregate intrinsic value of outstanding restricted stock units as of December 31, 2017 was \$52.3 million, of which all were unvested.

Liquidity and Capital Resources

Sources of Liquidity

As of December 31, 2017, our primary sources of liquidity were our cash and cash equivalents totaling \$55.3 million, \$32.0 million in accounts receivables, net of allowance, and unused availability under a revolving line of credit of \$38.8 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 April 2017, we amended our revolving line of credit agreement. The amendment altered definitions in the agreement, including Consolidated EBITDA and Liquidity, and changed the Minimum Liquidity and Minimum Consolidated EBITDA requirements. It also included consents by the lenders to certain administrative actions by us, including with respect to intellectual property and certain of our bank accounts. Additionally, the amendment modified the definition of Excluded Assets in the Guarantee and Collateral Agreement, dated as of February 20, 2015, which was entered into in connection with the revolving line of credit agreement.

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.

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.

Cash Flows

Our cash flows for the years ended December 31, 2017, 2016 and 2015 were as follows:

| | Year Ended December 31, | | |
|--|-------------------------|-----------------|-------------------|
| | 2017 | 2016 | 2015 |
| | (in thousands) | | |
| Cash (used in) provided by: | | | |
| Operating activities | \$ (5,937) | \$ (22,826) | \$ (31,545) |
| Investing activities | (6,279) | 25,516 | (50,245) |
| Financing activities | 10,698 | 6,089 | 78,790 |
| Net (decrease) increase in cash and cash equivalents | <u>\$ (1,518)</u> | <u>\$ 8,779</u> | <u>\$ (3,000)</u> |

Operating Activities

For 2017, our operating activities used \$5.9 million of cash, as \$39.8 million for non-cash adjustments were more than offset by our net loss of \$25.9 million and \$19.8 million of cash used in changes in working capital. Adjustments for non-cash items primarily consisted of depreciation and amortization expense of \$15.9 million, accrual of interest on financing obligations of \$7.5 million, and non-cash stock compensation expense of \$16.1 million. The cash used in changes in working capital primarily consisted of a decrease in deferred revenue of \$17.1 million, a decrease in accounts payable and accrued expenses not associated with the purchase of property and equipment of \$3.0 million, and a decrease in accrued compensation and benefits of \$3.1 million as the result of timing of payments of accrued amounts. Changes in working capital that provided cash totaled \$3.6 million and were primarily comprised of decreases of accounts receivable and other non-current assets.

For 2016, our operating activities used \$22.8 million of cash, as \$38.8 million for non-cash adjustments were more than offset by our net loss of \$40.0 million and \$21.6 million of cash used in changes in working capital. Adjustments for non-cash items primarily consisted of depreciation and amortization expense of \$13.1 million, accrual of interest on financing obligations of \$6.8 million, and non-cash stock compensation expense of \$18.1 million. The cash used in changes in working capital primarily consisted of a decrease in deferred revenue of \$17.7 million, an increase in accounts receivable of \$3.9 million, and a decrease in accrued compensation and benefits of \$3.3 million as the result of timing of payments of accrued amounts. Changes in working capital that provided cash totaled \$5.2 million and were primarily comprised of an increase of accrued expenses and other non-current liabilities and a decrease in prepaid expenses.

For 2015, our operating activities used \$31.5 million, as changes in working capital provided \$1.3 million cash and adjustments for non-cash items of \$29.3 million partially offset a net loss of \$62.1 million. The cash provided by changes in working capital primarily consisted of an increase in accrued compensation and benefits of \$3.3 million, an increase in accrued expenses of \$3.0 million, and an increase in accounts payable of \$3.4 million, offset by an increase in accounts receivable of \$7.8 million. The increase in accrued compensation and benefits resulted from an increase in the number of associates. The increases in accrued expenses and accounts payable are the result of timing of the receipt of invoices and the timing of payments. The increase in accounts receivable resulted from a few significant invoices related to new contracts and the normal timing of customer payments.

Investing Activities

For 2017, investing activity used \$6.2 million as purchases of property and equipment of \$8.2 million were partially offset by maturity of short-term investments of \$2.0 million.

For 2016, investing activities provided \$25.5 million as proceeds from the maturity of short-term investments of \$40.2 million were partially offset by purchases of property and equipment of \$12.7 million and investments in marketable securities of \$2.0 million.

Net cash used in investing activities totaled \$50.2 million for 2015 as net purchases of marketable securities were \$35.5 million and cash purchases of property and equipment were \$14.7 million.

Financing Activities

For 2017, net cash provided by financing activities was \$10.7 million, as cash from the exercise of stock options of \$3.7 million and net borrowings under the revolving line of credit of \$16.0 million were partially offset by payments on capital lease and financing obligations of \$9.0 million. Cash from the exercise of stock options included \$1.8 million related to the exercise of options by our Executive Chairman that were set to expire in February 2017.

For 2016, net cash provided by financing activities was \$6.1 million, as the result of cash from the exercise of stock options of \$6.9 million and net borrowings under the revolving line of credit of \$10.0 million, partially offset by payments on capital lease and financing obligations. Cash from the exercise of stock options included \$5.1 million related to the exercise of options by an executive officer that were set to expire in February 2017.

For 2015, net cash provided by financing activities was \$78.8 million, primarily as a result of \$74.5 million from the issuance of common stock and a warrant in a private placement to Mercer, and net draws on the revolving line of credit of \$12.6 million offset by payments on financing and capital lease obligations of \$9.9 million.

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, 2017. Future events could cause actual payments to differ from these estimates.

| Contractual Obligations | Payment due by period | | | | |
|--|-----------------------|------------------|------------------|------------------|-------------------|
| | Total | Less than 1 year | 1-3 years | 3-5 years | More than 5 years |
| | (in thousands) | | | | |
| Long-term debt--Revolving line of credit (1) | \$ 56,246 | \$ - | \$ 56,246 | \$ - | \$ - |
| Operating lease obligations | 14,224 | 1,400 | 2,564 | 1,925 | 8,335 |
| Capital lease obligations | 50,953 | 5,089 | 8,197 | 5,970 | 31,697 |
| Financing obligations, build-to-suit leases | 108,658 | 6,359 | 13,297 | 14,107 | 74,895 |
| Financing obligations, other | 1,709 | 1,400 | 309 | - | - |
| Purchase commitments | 6,570 | 5,602 | 968 | - | - |
| Total | \$ 238,360 | \$ 19,850 | \$ 81,581 | \$ 22,002 | \$ 114,927 |

(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.

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 \$15.7 million as of December 31, 2017.

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, 2017, other than as disclosed in Note 15, 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 May 2014, the FASB issued ASU No. 2014-09, "Revenue from Contracts with Customers (Topic 606)," which amends the revenue recognition requirements in the FASB Accounting Standards Codification. Under the new standard, revenue is recognized when a customer obtains control of promised goods or services and is recognized in an amount that reflects the consideration that the entity expects to receive in exchange for those goods and services. In addition, the new standard requires disclosure of the nature, amount, timing, and uncertainty of revenue and cash flows arising from contracts with customers. The FASB has issued several amendments to the new standard, including clarification on accounting for licenses of intellectual property and identifying performance obligations.

We will adopt the new standard effective January 1, 2018 using the full retrospective transition method and recast each prior reporting period presented.

The more significant impacts of the new standard to our consolidated financial statements are currently expected to be as follows:

- We currently recognize revenue from certain professional services in the Carrier segment over time, which is the customer relationship period. Under the new standard, revenue from certain of these services will be recognized over the contract term of the associated software services contract, including any extension periods representing a material right, or in some cases over the period of delivery of the professional fees, both of which are typically shorter than the customer relationship period.
- We currently recognize insurance broker commission revenue over the policy period. Under the new standard, the revenue related to broker commissions will be recognized 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 will be recognized earlier under the new standard in comparison to the current guidance.
- The new standard provides guidance on accounting for certain revenue-related costs, including when to capitalize costs associated with obtaining and fulfilling a contract. The majority of these costs are currently expensed as incurred. Under the new standard, Carrier segment assets recognized for the costs to obtain a contract, which includes sales commissions, will be amortized on a systematic basis that is consistent with the transfer of the services to which the assets relate, considering anticipated renewals when applicable. Carrier segment assets recognized for costs to fulfill a contract, which include internal costs related to implementing carrier products, will be amortized on a systematic basis that is consistent with the transfer of the services to which the asset relates, which is generally expected to be five years. Costs to fulfill contracts in the Employer segment will be expensed as incurred.

Our historical net cash flows provided by or used in operating, investing, and financing activities will not be impacted by adoption of the new revenue standard.

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. ASU 2016-02 will be effective for us beginning January 1, 2019, but early adoption is permitted. We are currently evaluating the impact of this update on our consolidated financial statements.

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.

PART IV

Item 15. Exhibits, Financial Statement Schedules.**(b) Exhibits.**

The exhibits listed below are filed or incorporated by reference herein.

| Exhibit Number | Exhibit Title | Incorporated by Reference (Unless Otherwise Indicated) | | | |
|----------------|--|---|------------|---------|--------------------|
| | | Form | File | Exhibit | Filing Date |
| 2.1 | Agreement and Plan of Merger, dated August 29, 2013, by and among Benefitfocus.com, Inc., Benefitfocus, Inc., and Benefitfocus Mergeco, Inc. | S-1/A | 333-190610 | 2.1 | September 5, 2013 |
| 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 | Warrant for the Purchase of Shares of Common Stock of Benefitfocus, Inc. issued February 24, 2015. | 10-K | — | 4.5 | February 27, 2015 |
| 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 | Form of Grant Notice and Stock Option Agreement under the 2012 Stock Plan, as amended.# | S-1 | 333-190610 | 10.6 | August 14, 2013 |
| 10.5 | Form of Management Incentive Bonus Program.# | S-1 | 333-190610 | 10.7 | August 14, 2013 |
| 10.5.1 | Benefitfocus, Inc. Management Incentive Bonus Program.# | DEF 14A | — | — | April 25, 2014 |
| 10.6 | 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 |
| 10.7 | Employment Agreement, dated January 19, 2007, by and between Benefitfocus.com, Inc. and Shawn A. Jenkins.# | S-1 | 333-190610 | 10.9 | August 14, 2013 |
| 10.7.1 | Employment Agreement, dated November 20, 2017, by and between Benefitfocus.com, Inc. and Shawn A. Jenkins.# | 10-K | — | 10.7.1 | March 15, 2018 |
| 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 |

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| 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 | Benefitfocus, Inc. Amended and Restated 2012 Stock Plan.# | DEF 14A | — | — | April 25, 2014 |
| 10.15 | Form of Independent Director Compensation Agreement. | 8-K | — | 10.21 | June 23, 2014 |
| 10.16 | Securities Purchase Agreement, dated as of February 24, 2015, by and among Benefitfocus, Inc. and Mercer LLC. | 10-K | — | 10.20 | February 27, 2015 |
| 10.17 | 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 |
| 10.18 | Employment Agreement, dated June 25, 2014, by and between Benefitfocus.com, Inc. and Ray August.# | 8-K | — | 10.22 | April 8, 2015 |
| 10.18.1 | 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 |
| 10.19 | 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 |

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| 10.19.1 | <u>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.</u> | 8-K | — | 10.25 | June 16, 2015 |
| 10.19.2 | <u>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.</u> | 10-K | — | 10.23 | February 25, 2016 |
| 10.19.3 | <u>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.</u> | 8-K | — | 10.26 | March 29, 2016 |
| 10.19.4 | <u>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.+</u> | 8-K | — | 10.29 | October 31, 2016 |
| 10.19.5 | <u>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.</u> | 8-K | — | 10.32 | December 14, 2016 |

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| 10.19.6 | 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 |
| 10.20 | 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 |
| 10.21 | Employment Agreement, dated April 26, 2016, by and between Benefitfocus.com, Inc. and Dennis B. Story.# | 10-Q | — | 10.26 | May 5, 2016 |
| 10.22 | Benefitfocus, Inc. 2016 Employee Stock Purchase Plan.# | DEF14A | — | — | April 22, 2016 |
| 10.23 | 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 |
| 10.24 | Employment Agreement effective September 15, 2016, by and between Benefitfocus.com, Inc. and Jeffrey M. Laborde.# | 10-Q | — | 10.30 | November 4, 2016 |
| 10.25 | Lease between DIEC II, LLC and Benefitfocus.com, Inc., dated as of December 12, 2016. | 8-K | — | 10.31 | December 14, 2016 |
| 10.26 | Employment Agreement, dated June 30, 2017, by and between Benefitfocus.com and Jonathon Dussault.# | 10-Q | — | 10.29 | August 8, 2017 |
| 21.1 | List of Subsidiaries of Registrant. | 10-K | — | 21.1 | March 15, 2018 |

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| 23.1 | Consent of Ernst & Young LLP. | 10-K | — | 23.1 | March 15, 2018 |
| 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. | 10-K | — | 101.INS | March 15, 2018 |
| 101.SCH | XBRL Taxonomy Extension Schema Document. | 10-K | — | 101.SCH | March 15, 2018 |
| 101.CAL | XBRL Taxonomy Extension Calculation Linkbase Document. | 10-K | — | 101.CAL | March 15, 2018 |
| 101.DEF | XBRL Taxonomy Extension Definition Linkbase Document. | 10-K | — | 101.DEF | March 15, 2018 |
| 101.LAB | XBRL Taxonomy Extension Label Linkbase Document. | 10-K | — | 101.LAB | March 15, 2018 |
| 101.PRE | XBRL Taxonomy Extension Presentation Linkbase Document. | 10-K | — | 101.PRE | March 15, 2018 |

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 U.S. Securities and Exchange Commission.

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.

Date: March 16, 2018

Benefitfocus, Inc.

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

**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/A 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: March 16, 2018

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

**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/A 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: March 16, 2018

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

**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/A for the year ended December 31, 2017, 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: March 16, 2018

/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)