

Synacor, Inc.
Form 10-K
March 14, 2019

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

(Mark One)

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended December 31, 2018

OR

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

For the transition period from _____ to _____

Commission File Number 001-33843

Synacor, Inc.

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization)	16-1542712 (I.R.S. Employer Identification No.)
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40 La Riviere Drive, Suite 300 Buffalo, New York (Address of principal executive offices)	14202 (Zip Code)
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(716) 853-1362

(Registrant's telephone number, including area code)

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

(Title of each class)	(Name of each exchange on which registered)
Common Stock, \$0.01 par value	The Nasdaq Global Market

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

None.

(Title of Class)

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

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

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

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

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

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

Large accelerated filer Accelerated filer

Non-accelerated filer Smaller reporting company
Emerging growth company

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

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

The aggregate market value of shares of common stock held by non-affiliates as of June 29, 2018, the last business day of the registrant's most recently completed second fiscal quarter, computed by reference to the closing sale price of

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\$2.00 per share on The Nasdaq Global Market on June 29, 2018, was approximately \$65.0 million. For purposes of this disclosure, shares of common stock held by persons who held more than 10% of the outstanding shares of common stock at such time and shares held by executive officers and directors of the registrant have been excluded because such persons may be deemed to be affiliates. This determination of executive officer or affiliate status is not necessarily a conclusive determination for other purposes.

As of March 8, 2019, there were 39,052,682 shares of the registrant's common stock issued and outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Certain portions of the definitive Proxy Statement to be used in connection with the registrant's 2019 Annual Meeting of Stockholders are incorporated by reference into Part III of this Form 10-K to the extent stated. That Proxy Statement will be filed within 120 days of registrant's fiscal year ended December 31, 2018.

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SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K includes forward-looking statements that reflect our current views with respect to future events or our future financial performance, are based on information currently available to us, and involve known and unknown risks, uncertainties and other factors that may cause our actual results, levels of activity, performance or achievements to differ materially from any future results, levels of activity, performance or achievements expressed or implied by these forward-looking statements. All statements, other than statements of historical fact, are statements that could be deemed forward-looking statements, including statements containing the words “believes,” “can,” “expects,” “anticipates,” “estimates,” “intends,” “objective,” “plans,” “possibly,” “potential,” “predicts,” “likely,” “may,” “might,” “would,” “should,” “could,” and similar expressions or phrases (including the negatives of such expressions or phrases). We intend all such forward-looking statements to be covered by the safe harbor provisions for forward-looking statements contained in Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act, and the Private Securities Litigation Reform Act of 1995. Forward-looking statements include, but are not limited to, statements in the sections of this Annual Report on Form 10-K titled “Trends Affecting Our Business” and “Key Initiatives” as well as statements about:

- our expected future financial performance;
- our expectations regarding our operating expenses;
- our strategies and business plan;
- our ability to maintain or broaden relationships with existing customers and develop relationships with new customers;
- our success in anticipating market needs or developing new or enhanced services and products to meet those needs;
- our expectations regarding market acceptance of our services and products;
- our ability to recruit and retain qualified technical and other key personnel;
- our competitive position in our industry, as well as innovations by our competitors;
- our success in managing growth;
- our expansion in international markets;
- our ability to successfully integrate assets and personnel from our acquisitions;
- our success in identifying and managing potential acquisitions;
- our capacity to protect our confidential information and intellectual property rights;
- our need to obtain additional funding and our ability to obtain funding in the future on acceptable terms; and
- anticipated trends and challenges in our business and the markets in which we operate.

Any forward-looking statements contained in this Annual Report on Form 10-K are based upon our historical performance and our current plans, estimates and expectations. The inclusion of this forward-looking information should not be regarded as a representation by us or any other person that the future plans, estimates or expectations contemplated by us will be achieved. All forward-looking statements involve risks, assumptions and uncertainties. Given these risks, assumptions and uncertainties, you should not place undue reliance on any forward-looking statements. The occurrence of the events described, and the achievement of the expected results, depend on many factors, some or all of which are not predictable or within our control.

Actual results may differ materially from expected results. See “Risk Factors” and elsewhere in this Annual Report on Form 10-K for a more complete discussion of these risks, assumptions and uncertainties and for other risks, assumptions and uncertainties. These risks, assumptions and uncertainties are not necessarily all of the important factors that could cause actual results to differ materially from those expressed in any of our forward-looking statements.

Other unknown or unpredictable factors also could harm our results. In light of these risks, uncertainties and assumptions, the forward-looking events discussed in this Annual Report on Form 10-K might not occur, and we therefore qualify all of our forward-looking statements by these cautionary statements. Any forward-looking statement

made by us in this Annual Report on Form 10-K speaks only as of the date on which it is made. Except as required by law, we undertake no obligation to update publicly or revise any forward-looking statements, whether as a result of new information, future events or otherwise.

Unless expressly indicated or the context requires otherwise, the terms “Synacor,” “Company,” “we,” “us,” and “our” in this document refer to Synacor, Inc., a Delaware corporation, and, where appropriate, our wholly-owned subsidiaries.

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PART I

ITEM 1. BUSINESS

Our Business

We enable our customers to better engage with their consumers. Our customers include video, internet and communications providers, device manufacturers, governments and enterprises. We are their trusted technology development, multiplatform services and revenue partner. Our customers use our technology platforms and services to scale their businesses and extend their subscriber relationships. We deliver managed portals, advertising solutions, email and collaboration platforms, and cloud-based identity management.

We enable our customers to provide their consumers engaging, multiscreen experiences with products that require scale, actionable data and sophisticated implementation. Through our Managed Portals and Advertising solutions, we enable our customers to earn incremental revenue by monetizing media among their consumers. At the same time, because consumers have high expectations for their online experience as a result of advances in video, mobile and social, we provide, through our recurring and fee-based revenue solutions, a suite of products and services that helps our customers successfully meet those high expectations by enabling them to deliver to their consumers access to the same digital content across all devices, including PCs, tablets, smartphones and connected TVs.

Products and Services

Our Managed Portals and Advertising solutions provide our customers with substantial revenue opportunities generated by their consumers' engagement across devices. Managed Portals and Advertising solutions generated 61% of our revenue for 2018.

Our Managed Portals are intended to be daily destinations for consumers and are delivered across devices and under our customers' own brand names. To help our customers increase their consumers' engagement, we deliver relevant content, such as top news, entertainment, and long and short-form video and apps, on our Managed Portals. We have licensing and distribution agreements with a wide range of programmers and content and service providers. In addition, consumers have the ability through our portals to manage their email and messaging, pay bills, receive special promotions and perform other account management needs.

We monetize the online traffic generated by consumers through search advertising, digital advertising (including video), and syndicated content on our Managed Portals. As we monetize our customers' online traffic on our Managed Portals, we share a portion of this revenue with our customers, resulting in a mutually beneficial partnership.

Our recurring and fee-based Revenue solutions generated 39% of our revenue for 2018 and are comprised of our Cloud-based Identity Management solutions, Email/Collaboration Services, and paid content and premium services:

Cloud ID Authentication

Consumers can watch TV on a myriad of devices, but many find the login process frustrating. Synacor Cloud ID addresses this issue by offering home-based auto-authentication and social login, which improve the consumer experience by reducing login failures.

Once a consumer is authenticated, our Search & Discovery Metadata Platform helps them find their desired content successfully and easily. We curate videos every day and have compiled more than 10 million video assets from hundreds of sources. We believe that we fill an important role for our customers as use of streaming video increases and consumers' video content consumption preferences shift away from traditional viewing habits.

Email/Collaboration

Our Email/Collaboration Services include white-label hosting, security and migration. With the acquisition of certain assets related to the Zimbra Email/Collaboration products and services business (the “Zimbra assets” or “Zimbra”) in 2015, our software and managed service offering now supports a network of more than 1,900 channel partners (value-added resellers, or VARs, and Business Service Providers, or BSPs), and over 4,000 enterprise, government and nonprofit customers, and it powers approximately 530 million mailboxes.

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Our Strategy

Our strategy is, with operational and financial discipline, to:

- increase value for existing customers by optimizing consumer experience and monetization;
- innovate on Synacor-as-a-platform for advanced services;
- win new customers in current and related verticals; and
- extend our product portfolio into emerging growth areas.

Increasing value for existing customers by optimizing user experience and monetization

With respect to our Managed Portals and Advertising solutions, more than 95% of our customers' consumers have upgraded to our latest-generation portal. Our portal, with its engaging user experience and responsive design for desktop and mobile web, and our mobile apps, have video threaded throughout and is designed to optimize consumer engagement and monetization. We are also decreasing the implementation time for customers to launch our latest-generation portal.

Innovating on Synacor-as-a-platform for advanced services

Our Cloud ID Authentication platform is reported as having some of the highest consumer login success rates in the industry.

In 2017, we expanded our Cloud ID relationships with content providers, service providers, OTT players, and device manufacturers. We delivered Authentication services for HBO GO, providing, for example, authentication in connection with the Game of Thrones' record-breaking seventh season premiere. Additionally, Apple uses Synacor's Authentication services to support Apple Single Sign-On. The current wave of multichannel video programming distributors, or MVPDs, launched by Apple are almost all running on Synacor's Cloud ID Advanced Authentication platform. Our Authentication services also support three of the top five OTT players including Sling TV and PlayStation Vue, simplifying the consumer log-in experience.

Our acquisitions of the Zimbra assets in 2015 and certain assets from Technorati in 2016 resulted in innovations in our email/collaboration and digital advertising capabilities, respectively.

Winning new customers in current and related verticals

We have an established presence among broadband and pay-TV providers in the U.S. and Canada. Some of these providers use our complete suite of solutions, and others use only certain components. We view this as a growth opportunity within our existing customer base.

In 2018, Synacor added 426 new Zimbra Email and Collaboration Suite customers around the world.

Extending our product portfolio into emerging growth areas

We plan to capitalize on opportunities such as international expansion and delivery of business services. Through our acquisition of the Zimbra assets we have expanded our international customer base, and we believe this represents an opportunity to find new customers for our Managed Portals and Advertising solutions.

Technology and Operations

Technology Architecture

To route traffic through our network in the most efficient manner, we use load-balancing products. These products spread work among multiple servers and link controllers that monitor the availability and performance of multiple connections. Our technology is reliable, fault tolerant and scalable through the addition of more servers as usage grows. In 2018 and 2017, we spent \$24.5 million and \$27.4 million, respectively (exclusive of depreciation and amortization) on technology and development activities. The cost of these activities is generally not borne directly by our customers.

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Data Center Facilities

We currently operate and maintain six data centers in regionally diverse locations and have a network operations center that is staffed 24 hours a day, seven days a week. Our primary data centers are located in shared facilities in Allen, Texas; Atlanta, Georgia; Dallas, Texas; Lewis Center, Ohio; Toronto, Canada; and Watertown, Massachusetts. All systems are fully monitored for reporting continuity and fault isolation. The data centers are each in a physically secure facility using monitoring, environmental alarms, closed circuit television and redundant power sources. Our network operations center also is located in a secure facility.

Customers

Our Managed Portals and Advertising customers principally consist of high-speed internet service providers, such as AT&T, Windstream, Mediacom and CenturyLink, as well as consumer electronics manufacturers, such as Toshiba America Information Systems, Inc. (Toshiba). Contracts with these customers typically have an initial term of two to three years from the deployment of our Managed Portals and frequently provide for one or more automatic renewal terms of one to two years each. Our Managed Portals and Advertising customer contracts typically contain service level agreements that call for specific system “up times” and 24 hours per day, seven days per week support. As of December 31, 2018, we had agreements with over 50 Managed Portals and Advertising customers.

Our recurring and fee-based customers consist of high-speed internet service providers along with enterprises, government and nonprofit organizations, either directly or through resellers. Contracts with these customers typically have an initial term of one to three years and frequently provide for one or more automatic renewal terms of one to two years each. Our recurring and fee-based customer contracts also typically contain service level agreements that call for specific system “up times” and 24 hours per day, seven days per week support. As of December 31, 2018, we had agreements, both directly and indirectly through resellers, with over 120 high-speed internet service providers and over 4,000 enterprise, government and nonprofit customers.

For 2018, revenue attributable to two of our customers exceeded 10% of our revenue each, and on a combined basis accounted for approximately 24% of our revenue, or \$34.6 million.

Content and Service Providers

We license the content available in our Managed Portals, including free and paid content offerings and premium services, from numerous third-party content and service partners. These partners provide a variety of content, including news and information, entertainment, sports, music, video, games, shopping, travel, autos, careers and finance. Our relationships with content providers give consumers access to over one hundred thousand short-form videos and articles each month. To obtain this content, we enter into a variety of licensing arrangements with the content providers. These arrangements are typically one to three years in duration with payment terms that may be based on traffic, advertising revenue share, number of subscribers, flat fee payments over time, or some combination thereof. In addition to using licensed content to populate our Managed Portals, we also provide premium services and paid content that subscribers may purchase for additional fees. As of December 31, 2018, we had arrangements with over 65 content providers, such as The Associated Press, CNN, Tribune Content Agency, Gracenote, and Bankrate.

Sales and Marketing

Managed Portals and Advertising Solutions

Our sales and marketing efforts focus on five primary areas: customer acquisitions, client services, account management, marketing and advertising sales. Our customer acquisition team consists of direct sales personnel who

call upon prospective customers, typically large and mid-sized high-speed internet service providers and consumer electronics manufacturers. A significant amount of time and effort is devoted to researching and analyzing the requirements and objectives of each prospective customer. Each bid is specifically customized for the prospective customer, and often requires many months of interaction and negotiation before an agreement is reached.

Once an agreement is reached, our client services team, working closely with the customer acquisition team, assumes responsibility for managing the customer relationship during the time of the initial deployment and integration period, which is usually three to six months. During this period, the customer's technology is assessed and, if required, modifications are proposed to make it compatible with our technology. The client services team is responsible for the quality of the client deployment, customer relationship management during the time of deployment, and integration and project management associated with upgrades and enhancements.

After deployment, our account management team takes over management of the customer relationship, analyzing the ways in which a customer could further benefit from increased use of our products and services. The account management team is responsible for ongoing customer relationship management, upgrades and enhancements to the available products and services, as well as tracking the financial elements and performance of the customer relationship.

Our marketing team works closely with our account management team to deliver marketing programs that support our customers' sales efforts as well as their consumers' interaction with these products and services. We assist our customers in developing marketing materials and advertising that can be accessed by consumers through different media outlets, including the internet, print, television and radio. We also assist our customers in training their customer service representatives to introduce and sell premium services and our paid content offerings to new and existing customers.

Our advertising sales team sells advertising inventory directly to advertisers, frequently through the advertising agencies representing those advertisers. These advertisers may be small companies with the advertising locally or regionally focused on the Managed Portals of one customer, or large companies with nationwide advertising on the Managed Portals of many customers. We have a team of direct advertising sales employees and independent advertising sales representatives focused on this effort and will continue to develop this team and attempt to grow the amount of advertising revenue generated with our customers. As of December 31, 2018, we had arrangements with over 100 advertising partners such as AppNexus, Comcast Spotlight, Criteo, DoubleClick, NCC Media, Mediavest, and Telaria.

Email/Collaboration

We market our Email/Collaboration product through both direct and indirect sales channels. Our regional sales and marketing teams host several events each year with partners and run various campaigns to generate sales leads. Once a lead has been identified, our internal sales representatives work closely with our regional partners on better identifying the opportunity and gathering customer requirements.

We sell to internet service providers primarily through a direct sales force consisting of regional account executives. Sales cycles can be six months or longer. We sell to prospective government, nonprofit and enterprise customers through a two-tier indirect model via over 1,900 channel partners (VARs and BSPs). Our VARs sell on-premise licenses to end customers while our BSPs sell a cloud service to the end customer. Sales cycles can range from thirty days to six months, depending on size and scope.

Government Regulation

We generally are not regulated other than under international, federal, state and local laws applicable to the internet or e-commerce or to businesses in general. Some regulatory authorities have enacted or proposed specific laws and regulations governing the internet and online entertainment. These laws and regulations cover issues such as taxation, pricing, content, distribution, quality and delivery of services and products, electronic contracts, intellectual property rights, user privacy and information security.

Federal laws regarding the internet that could have an impact on our business include the following: the Digital Millennium Copyright Act of 1998, which is intended to reduce the liability of online service providers of third-party content, including content that may infringe copyrights or rights of others; the Children's Online Privacy Protection Act, which imposes additional restrictions on the ability of online services to collect user information from minors; and the Protection of Children from Sexual Predators Act, which requires online service providers to report evidence of violations of federal child pornography laws under certain circumstances.

There are numerous federal, state and local laws, rules and guidelines around the world regarding privacy and the collection, storing, sharing, use, processing, disclosure, destruction and security of personal information and other subscriber data, the scope of which are changing, subject to differing interpretations, and may be inconsistent between countries or conflict with other rules. For example, the European General Data Protection Regulation (“GDPR”) took effect in May 2018 and applies to all of our products and services used by people in Europe. The GDPR includes operational requirements for companies that receive or process personal data of residents of the European Union that are different from those previously in place in the European Union, and includes significant penalties for non-compliance. Similarly, there are a number of legislative proposals in the European Union, the United States, at both the federal and state levels, as well as other jurisdictions that could impose new obligations in areas affecting our business, such as liability for copyright infringement. In addition, some countries are considering or have passed legislation implementing data protection requirements or requiring local storage and processing of data or similar requirements that could increase the cost and complexity of delivering our services.

Additionally, the California Consumer Privacy Act (“CCPA”), which will go into effect on January 1, 2020, will require companies to provide new data disclosure, access and deletion rights to California consumers, afford such consumers the ability to opt-out of certain sales of personal information, and impose significant penalties for non-compliance or data breaches. Legislators have proposed amendments to the CCPA and it remains unclear what modifications may be made to the legislation or how it will be interpreted.

The United States Department of Commerce designed the EU-US Privacy Shield and the Swiss-U.S. Privacy Shield with the European Commission and the Swiss Federal Data Protection and Information Commissioner, respectively, in order to facilitate (but do not, alone, constitute) compliance with certain of the applicable data protection requirements under the GDPR. We certified compliance with the EU-US Privacy Shield in December 2016 and the Swiss-U.S. Privacy Shield in June 2017, but whether Privacy-Shield certification will continue to be a valid means to transfer European data to the United States is uncertain.

We strive to comply with all applicable laws, policies, legal obligations and industry codes of conduct relating to privacy and data protection to the extent possible. Laws such as the GDPR, the CCPA or other user privacy or security laws could require us to incur additional expenditures for compliance, result in governmental enforcement actions, significant fines, loss of access to data transfer mechanisms or litigation, restrict our and our customers’ ability to market products to their consumers, create uncertainty in internet usage and reduce the demand for our services and products or require us to make changes to our data and security practices and our services and products, including Managed Portals.

Intellectual Property

We believe that the protection of our intellectual property is critical to our success. We rely on copyright, trademark and patent enforcement, contractual restrictions and trade secret, trade dress and domain name laws to protect our brand and other proprietary and intellectual property rights. We have entered into confidentiality and invention assignment agreements with our employees and contractors, and nondisclosure agreements and other agreements containing confidentiality protections with certain parties with whom we conduct business in order to limit access to, and disclosure of, our proprietary information and technology, such as trade secrets, confidential information, know-how and technical information. We have applied for patents to protect certain of our intellectual property. In addition, we have acquired intellectual property, including patents and trademarks, through our acquisitions including Zimbra, Technorati, NimbleTV and Teknision. We have three trademark registrations in the United States for SYNACOR (U.S. Registration Numbers 5108679, 2845578 and 2811272).

We endeavor to protect our internally-developed systems and maintain our trademarks. We generally control access to and use of our proprietary software and other confidential information through the use of internal and external controls, including contractual protections with employees, contractors, customers and partners, and our software is protected by United States and international copyright laws.

In addition to legal protections, we believe that factors such as the technological and creative skills of our personnel, new product developments, frequent product enhancements and reliable product support and services are essential to establishing and maintaining a technology leadership position.

Competition

The market for internet-based services and products in which we operate is highly competitive and involves rapidly-changing technologies and customer and consumer requirements, as well as evolving industry standards and frequent product introductions. While we believe that our technology offers considerable value and flexibility to our customers by helping them to extend their consumer relationships to a wide variety of internet-based services, we face

competition at four levels:

- When one of our prospective or existing customers considers another supplier, including one of our partners, for elements of the services or products which we provide.
- When consumers choose to rely on other vendors for similar products and services.
- When content and service providers prefer to establish direct relationships with one or more of our customers.
- When one of our customers decides to make the significant headcount and technology investment to develop products and services in-house similar to those that we provide.

Our technology competes primarily with high-speed internet service providers that have internal information technology staff capable of developing similar solutions in-house.

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Managed Portals and Advertising Solutions

In addition, with respect to our Managed Portals and Advertising solutions, we compete with companies such as Facebook, Inc.; Google; Verizon Media; Hulu; Netflix; Amazon; and MSN, a division of Microsoft Corporation, or Microsoft, which have destination websites of their own or are capable of delivering content, service offerings and search or advertising models similar to ours.

We also compete with providers of paid content and services over the internet, especially companies with the capability of bundling paid content and premium services in much the same manner that we do. These companies include WatchESPN, F-Secure Corporation, Exent Technologies Ltd., Zynga Inc., MLB Advanced Media, Symantec Corporation, McAfee, Inc., Activision Blizzard, Inc. and Electronic Arts Inc. In some cases we have performed software integrations with these companies on behalf of our customers or, as in the case of F-Secure Corporation, we have partnered with them in order to offer their services more broadly to all our customers.

We believe the principal competitive factors in our markets include a company's ability to:

- reinforce the brands of our cable, satellite, telecom and consumer electronics customers;
- produce products that are flexible and easy to use;
- offer competitive fees for Managed Portal development and operation;
- generate additional revenue for our customers;
- enable our customers to be involved in designing the "look and feel" of their online presence;
- offer services and products that meet the changing needs of our customers and their consumers, including emerging technologies and standards;
- provide high-quality product support to assist the customer's service representatives; and
- aggregate content to deliver more compelling bundled packages of paid content.

We believe that we distinguish ourselves from potential competitors in three principal ways. First, we provide a white-label solution that, unlike the co-branded approach of most of our competitors, creates a consumer experience that reinforces our customers' and partners' brands. Second, we give customers control over the sign-on process and billing function for a wide range of internet services and content by integrating with their internal systems (where applicable) thereby allowing our customers to "own the consumer." Finally, our solutions are flexible and neutral, meaning that we allow deliverables that are customized to our customers' specific needs, as well as advanced video solutions that are either end-to-end or a la carte.

Email/Collaboration

With respect to our Email/Collaboration solutions, we compete primarily with Google and Microsoft in the enterprise and government markets, and with Open-Xchange and OpenWave in the internet service provider markets.

We believe the principal competitive factors in the email/collaboration market include a company's ability to:

- provide customers the ability to perform security and compliance audits of our source code;
- deliver anti-spam, anti-virus and encryption technologies;
- provide products and services at lowest possible total cost of ownership (TCO);
- provide local partners the ability to store data within the legal jurisdiction of the country where their customers do business;
- provide an enterprise-ready solution suitable for large-scale deployments including such enterprise features such as delegated administration, detailed logging, and performance and availability transparency;
- offer access to real-time performance and availability statistics;
- afford customers and partners the ability to rebrand their cloud collaboration experience; and

make available to partners both integrations and extensions to the collaboration cloud environment specific to customers' needs.

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We believe that we distinguish ourselves from potential competitors in several ways. First, we offer our Email/Collaboration products and services a la carte, enabling customers to buy only the services they need, providing for a much lower TCO. Second, our Zimbra Email/Collaboration solution is a complete feature-rich, enterprise-ready solution scalable up to 40 million mailboxes. Finally, our products are customizable and extendable and designed to meet very high standards of security.

Employees

As of December 31, 2018, we had 257 employees in the United States and 153 based internationally. Of these employees, 407 were full-time employees. None of our employees are represented by a labor union, and we consider current employee relations to be good.

Corporate Information

Synacor's predecessor company was originally formed as a New York corporation, and in November 2002, Synacor re-incorporated under the laws of the State of Delaware. Our headquarters are located at 40 La Riviere Drive, Buffalo, New York 14202, and our telephone number is (716) 853-1362.

Available Information

Our internet website address is <http://www.synacor.com>. We provide free access to various reports that we file with or furnish to the Securities and Exchange Commission, or SEC, through our website, as soon as reasonably practicable after they have been filed or furnished. These reports include, but are not limited to, our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and any amendments to those reports. Our SEC reports can be accessed through the investor relations section of our website, or through <http://www.sec.gov>. Information on our website does not constitute part of this Annual Report on Form 10-K or any other report we file or furnish with the SEC. Stockholders may request copies of these documents from:

Synacor, Inc.

Investor Relations Department

40 La Riviere Drive

Suite 300

Buffalo, New York 14202

ITEM 1A. RISK FACTORS

Our business and financial results are subject to numerous risks and uncertainties, including those described below, which could adversely and materially affect our business, financial condition or results of operations. You should carefully consider these risks and uncertainties, including the following risk factors and all other information contained in this Annual Report on Form 10-K, together with any other documents we file with the SEC.

Risks Related to Our Business

A loss of any significant Managed Portals and Advertising customer could negatively affect our financial performance.

Although we have diversified our product portfolio and our customer base, we continue to derive a substantial portion of our revenue from a small number of Managed Portal customers. Revenue attributable to these customers includes the recurring and fee-based revenue earned directly from them, as well as the search and digital advertising revenue earned through our relationships with our advertising partners, such as Google, based on traffic generated from our Managed Portals. For 2017, revenue attributable to two customers each exceeded 10% of our total revenue, and on a combined basis accounted for approximately 28% of our revenue, or \$39.4 million. For 2018, revenue attributable to two customers each exceeded 10% of our total revenue, and on a combined basis accounted for approximately 24% of our revenue, or \$34.6 million.

Our contracts with our Managed Portals and Advertising customers generally have an initial term of approximately two to three years from the launch of their Managed Portals and frequently provide for one or more automatic renewal terms of one to two years each. If a key contract is not renewed or is otherwise terminated, or if revenue from a significant customer declines because of competitive or other reasons, including the customer's desire to reprioritize or deemphasize monetization of the portal, our revenue would decline and our ability to achieve or sustain profitability would be impaired. In addition to the loss of recurring and fee-based revenue, we would also lose significant revenue from the related search and digital advertising services that we provide. In addition to the decline of revenue, we may have to impair our long-lived assets, to the extent that such assets are used exclusively to support these customers, which would adversely impact our results of operations and financial position.

We derive a substantial portion of our revenue from our partnership with AT&T. In May 2016 we entered into a Portal and Advertising Services Agreement (as amended, the "AT&T Agreement") with AT&T that would automatically renew at the end of the initial term on March 28, 2019 unless AT&T were to provide a notice of non-renewal at least 180 days prior to that date. On August 24, 2018 AT&T delivered notice to us to prevent automatic renewal of the AT&T Agreement. Since September we have been and continue to be in active renewal negotiations with AT&T. Assuming that we agree on revised terms and conditions, such agreed upon terms and conditions would be embodied in a new definitive agreement, under which we would continue to provide the portal and advertising services after the expiration of the current AT&T Agreement. If our contract with AT&T is not renewed or is otherwise terminated, or if revenue from the AT&T relationship were to decline due to competitive or other reasons, our results of operations and financial position would be adversely affected.

Our search advertising partner, Google, accounts for a significant portion of our revenue, and any loss of, or diminution in, our business relationship with Google would adversely affect our financial performance.

We rely on traffic on our Managed Portals to generate search and digital advertising revenue, a substantial portion of which is derived from text-based links to advertisers' websites as a result of internet searches. We have a revenue-sharing relationship with Google under which we include a Google-branded search tool on our Managed Portals. When a consumer makes a search request using this tool, we deliver it to Google, and Google returns search results to us that include advertiser-sponsored links. If the consumer clicks on a sponsored link, Google receives

payment from the sponsor of that link and shares a portion of that payment with us. We then typically share a portion of that payment with the applicable customer. Our Google-related search advertising revenue attributable to our customers, which consists of the portion of the payment from the sponsor that Google shares with us, accounted for approximately 13%, 14%, and 12% of our revenue in 2018, 2017, and 2016 or \$19.0 million, \$20.1 million, and \$15.9 million respectively. Google may terminate our agreement if we experience a change in control, if we enter into an agreement providing for a change in control, if we do not maintain certain search and digital advertising revenue levels or if we fail to conform to Google's search policies and advertising policies. Google may from time to time change its existing, or establish new, methodologies and metrics for valuing the quality of internet traffic. Any changes in these methodologies, metrics and advertising technology platforms could decrease the advertising rates that we receive and/or the amount of revenue that we generate from digital advertisements. If advertisers were to discontinue their advertising via internet searches, if Google's revenue from search-based advertising were to decrease, if Google's share of the search revenue were to be increased or if our agreement with Google were to be terminated for any reason or renewed on less favorable terms, our business, financial condition and results of operations would be adversely affected. Moreover, consumers' increased use of search tools other than the Google-branded search tool we provide would have similar effects.

We have a history of significant pre-tax net losses and may not be profitable in future periods.

We have reported pre-tax net income in only three years, 2009, 2011 and 2012, in amounts of \$0.3 million, \$3.9 million, and \$5.6 million, respectively. In all other years, we have incurred losses, and at December 31, 2018 our cumulative U.S. federal net operating loss carryforward was \$36.6 million. We have previously taken cost saving measures, including reductions in workforce. However, our expenses have increased and may increase in future periods as we implement initiatives designed to grow our business including, among other things, the ongoing costs and expenses we must incur in connection with providing Managed Portal and Advertising solutions to AT&T, acquisitions of complementary businesses (such as our acquisition of the Zimbra assets and our acquisition of assets from Technorati), the development and marketing of new services and products, licensing of content, expansion of our infrastructure and international expansion. If our revenue does not sufficiently increase to offset these expected increases in operating expenses, or if we are not able to sufficiently reduce costs in the event our revenue increases fail to materialize, we may incur significant losses and may not be profitable. For example, although our revenue has increased year over year since 2014, we have not yet returned to profitability. We may not be able to return to or maintain profitability in the future. Any failure to achieve or maintain profitability may adversely affect our business, financial condition, results of operations and impact our ability to utilize our net operating loss carryforwards. As a result of our pre-tax cumulative losses, we have established a full valuation allowance against our net deferred income tax asset, which includes our net operating loss carryforwards.

Many individuals are using devices other than personal computers and software applications other than internet browsers to access the internet. If users of these devices and software applications do not widely adopt the applications and other solutions we develop for them, our business could be adversely affected.

The number of people who access the internet through devices other than PCs, including tablets, smartphones and connected TVs, has increased dramatically and is projected to continue to increase. Similarly, individuals are increasingly accessing the internet through apps other than internet browsers, such as those available for download through Apple Inc.'s App Store and the Android Market. Our Managed Portals include our responsive desktop and mobile web products and also our mobile native iOS and Android apps. If consumers do not use our mobile products at all or use these products less frequently than previously, our financial results could be negatively affected. Additionally, as new devices and new apps are continually being released, it is difficult to predict the problems we may encounter in developing new versions of our apps and other solutions for use on these alternative devices and apps, and we may need to devote significant resources to the creation, support and maintenance of such apps and solutions. If users of these devices and apps do not widely adopt the apps and other solutions we develop, our business, financial condition and results of operations could be adversely affected.

Consumer tastes continually change and are unpredictable, and sales of our Managed Portals and Advertising solutions may decline if we fail to enhance our service and content offerings to achieve continued consumer acceptance.

Our business depends on aggregating and providing services and content that our customers will place on our Managed Portals, including television programming, news, entertainment, sports and other content that their consumers find engaging, and premium services and paid content that their consumers will buy. Accordingly, we must continue to invest significant resources in licensing efforts, research and development and marketing to enhance our service and content offerings, and we must make decisions about these matters well in advance of product releases to implement them in a timely manner. Our success depends, in part, on unpredictable and volatile factors beyond our control, including consumer preferences, competing content providers and websites and the availability of other news, entertainment, sports and other services and content. While we work with our customers to have their consumers' homepages set to our Managed Portals, a consumer may easily change that setting, which would likely decrease the use of our Managed Portals. Similarly, consumers who change their device's operating system or internet browser may

no longer have our Managed Portals set as their default homepage, and unless they change it back to our Managed Portals, their usage of our Managed Portals would likely decline and our results of operations could be negatively impacted. Consumers who acquire new consumer electronics devices no longer have our Managed Portals initially set as their default homepage, and unless they change the default to our Managed Portals, their usage of our Managed Portals would likely decline and our results of operations could be negatively impacted.

If our services are not responsive to the requirements of our customers or the preferences of their consumers, or the services are not brought to market in a timely and effective manner, our business, financial condition and results of operations would be harmed. Even if our services and content are successfully introduced and initially adopted, a subsequent shift in the preferences of our customers or their consumers could cause a decline in the popularity of our services and content that could reduce our revenue and harm our business, financial condition and results of operations.

Our revenue growth will be adversely affected if we are unable to expand the breadth of our services and products or to introduce new services and products on a timely basis.

To retain our existing customers, attract new customers and increase revenue, we must continue to develop and introduce new services and products on a timely basis and continue to develop additional features to our existing product base. If our existing and prospective customers do not perceive that we will deliver committed enhancements to our services and products on schedule, or if they do not perceive our services and products to be of sufficient value and quality, we may lose the confidence of our existing customers and fail to increase sales to these existing customers, existing customers may be able to terminate their agreements with us, and we may not be able to attract new customers, each of which would adversely affect our operating results.

Our sales cycles and the contracting process with new customers are long and unpredictable and may require us to incur expenses before executing a customer agreement, which makes it difficult to project when, if at all, we will obtain new customers and when we will generate additional revenue and cash flows from those customers.

We market our services and products directly to high-speed internet service and communications providers, consumer electronics manufacturers, and directly and indirectly to enterprises, and governmental and nonprofit organizations. New customer relationships typically take time to obtain and finalize because of the burdensome cost of migrating from an existing solution to our platform. Due to operating procedures in many organizations, a significant time period may pass between selection of our services and products by key decision-makers and the signing of a contract. The length of time between the initial customer sales call and the realization of significant sales is difficult to predict and can range from several months to several years. As a result, it is difficult to predict when we will obtain new customers and when we will begin to generate revenue and cash flows from these potential new customers.

As part of our sales cycle for our Managed Portals and Advertising customers, we may incur significant expenses in the form of compensation and related expenses and equipment acquisition before executing a definitive agreement with a prospective customer so that we may be ready to launch shortly following execution of a definitive agreement. If conditions in the marketplace generally or with a specific prospective customer change negatively, it is possible that no definitive agreement will be executed, and we will be unable to recover any expenses incurred before a definitive agreement is executed, which would in turn have an adverse effect on our business, financial condition and results of operations.

Many of our customers are high-speed internet service providers, and consolidation within the cable and telecommunications industries could adversely affect our business, financial condition and results of operations.

Our revenue from high-speed internet service and communications providers, including our search and digital advertising revenue generated by online consumer traffic on our Managed Portals and our revenue from our Email/Collaboration offerings, accounted for approximately 69% in 2018, approximately 63% in 2017 and approximately 63% in 2016. The cable and telecommunications industries have experienced consolidation over the past several years, and we expect that this trend will continue. As a result of consolidation, some of our customers may be acquired by companies with which we do not have existing relationships and which may have relationships with one of our competitors or may have the in-house capability to perform the services we provide. As a result, such acquisitions could cause us to lose customers and the associated revenue. Under our agreements with some of our customers, including CenturyLink, they have the right to terminate the agreement if we are acquired by one of their competitors.

Consolidation may also require us to renegotiate our agreements with our customers as a result of enhanced customer leverage. We may not be able to offset the effects of any such renegotiations, and we may not be able to attract new customers to counter any revenue declines resulting from the loss of customers or their subscribers.

We rely, to a significant degree, on indirect sales channels for the distribution of our Email/Collaboration products, and disruption within these channels could adversely affect our business, financial condition, operating results and cash flows.

We use a variety of indirect distribution methods for our offerings, including channel partners, such as cloud service providers, distributors, and value added resellers. A number of these partners in turn distribute our offerings via their own networks of channel partners with whom we have no direct relationship. These relationships allow us to offer our technologies to a much larger customer base than we would otherwise be able through our direct sales and marketing efforts.

We rely, to a significant degree, on each of our channel partners to select, screen and maintain relationships with its distribution network and to distribute our offerings in a manner that is consistent with applicable law and regulatory requirements and our quality standards. If our channel partners or a partner in its distribution network violate applicable law or regulatory requirements or misrepresent the functionality of our offerings, our reputation could be damaged and we could be subject to potential liability. Furthermore, our channel partners may offer their own products and services that are competitive with our offerings or may not distribute and market our offerings effectively. Our existing channel partner relationships do not, and any future channel partner relationships may not, afford us any exclusive marketing or distribution rights. In addition, if a channel partner is acquired by a competitor or its business units are reorganized or divested, our revenue derived from that partner may be adversely impacted.

Recruiting and retaining qualified channel partners and training them in the use of our technologies require significant time and resources. If we fail to devote sufficient resources to support and expand our network of channel partners, our business may be adversely affected. In addition, because we rely on channel partners for the indirect distribution of our technologies, we may have little or no contact with the ultimate end-users of our technologies, thereby making it more difficult for us to establish brand awareness, ensure proper delivery and installation of our software, support ongoing customer requirements, estimate end-user demand, respond to evolving customer needs and obtain renewals from end-users.

Most of our sales to government entities have been made indirectly through our channel partners. Government entities may have statutory, contractual, or other legal rights to terminate contracts with our channel partners for convenience or due to a default, and any such termination may adversely impact our future operating results. Governments routinely investigate and audit government contractors' administrative processes, and any unfavorable audit could result in the government refusing to continue buying our offerings, a reduction of revenue or fines or civil or criminal liability if the audit uncovers improper or illegal activities.

If our indirect distribution channel is disrupted, we may be required to devote more resources to distribute our offerings directly and support our customers, which may not be as effective and could lead to higher costs, reduced revenue and growth that is slower than expected.

As technology continues to evolve, the use of our products by our current and prospective consumer electronics manufacturer customers may decrease and our business could be adversely affected.

The consumer electronics industry is subject to rapid change, and our contracts for Managed Portals and Advertising solutions with our consumer electronics manufacturer customers are not exclusive. As consumer electronics manufacturers continue to develop new technologies and introduce new models and devices, there can be no assurance that we will be able to develop solutions that will persuade consumer electronics manufacturers that are our customers at such time to utilize our technology for those new devices. If our current and prospective consumer electronics manufacturer customers elect not to integrate our solutions into their new products, our business, financial condition and results of operations could be adversely affected.

Moreover, updates to internet browser technology may adversely affect our business. For example, upgrades to the Windows 10 operating system default to Microsoft's latest Edge browser and displace users' previous browser settings including default homepages, which can lead to decreased search and digital advertising revenue. Unless consumers change their browser settings back to our Managed Portals, their usage of our Managed Portals would likely decline and our results of operations could be negatively impacted.

We invest in features and functionality designed to increase consumer engagement with our Managed Portals; however, these investments may not lead to increased revenue.

Our future growth and profitability will depend in large part on the effectiveness and efficiency of our efforts to provide a compelling consumer experience that increases consumer engagement with our Managed Portals. We have made and will continue to make substantial investments in features and functionality for our technology that are designed to drive consumer engagement. For example, we invested more than \$10.0 million in start-up expenses, development expenses and capital expenditures relating to our contract with AT&T.

Not all of these activities directly generate revenue, and we cannot assure you that we will reap sufficient rewards from these investments to make them worthwhile. If the expenses that we incur in connection with these activities do not result in increased consumer engagement that in turn results in revenue increases that exceed these expenses, our business, financial condition and results of operations will be adversely affected.

Our services and products may become less competitive or even obsolete if we fail to respond to technological developments.

Our future success will depend, in part, on our ability to modify or enhance our services and products to meet customer and consumer needs, to add functionality and to address technological advancements that would improve their performance. For example, if our smartphone and tablet products fail to capture the increased search activity on such devices or if our services and products do not adapt to the increasing video usage on the internet or to take into account evolving developments in social networking, then they could begin to appear obsolete. Similarly, if we fail to develop new ways to deliver content and services through apps other than traditional internet browsers, consumers could seek alternative means of accessing content and services.

To remain competitive, we will need to develop new services and products and adapt our existing ones to address these and other evolving technologies and standards. However, we may be unsuccessful in identifying new opportunities or in developing or marketing new services and products in a timely or cost-effective manner. In addition, our product innovations may not achieve the market penetration or price levels necessary for profitability. If we are unable to develop enhancements to, and new features for, our existing services and products or if we are unable to develop new services and products that keep pace with rapid technological developments or changing industry standards, our services and products may become obsolete, less marketable and less competitive, and our business will be harmed.

We depend on third parties for content that is critical to our business, and our business could suffer if we do not continue to obtain high-quality content at a reasonable cost.

We license the content that we aggregate on our Managed Portals from numerous third-party content providers, and our future success is highly dependent upon our ability to maintain and enter into new relationships with these and other content providers. In some cases, we are required under our contracts, including our contract with AT&T, to provide our customers' consumers access to certain types of content. In the future, some of our content providers may not give us access to high-quality content, may fail to adapt to changes in consumer tastes or may increase the royalties, fees or percentages that they charge us for their content, any of which could have an adverse effect on our operating results. Our rights to the content that we offer to our customers and their consumers are not exclusive, and the content providers could license their content to our competitors. Our content providers could even grant our competitors exclusive licenses. In addition, our customers are not prohibited from entering into content deals directly with our content providers. Any failure to enter into or maintain satisfactory arrangements with content providers would adversely affect our ability to provide a variety of attractive services and products to our customers. Our reputation and operating results could suffer as a result, and it may be more difficult for us to develop new relationships with potential customers.

Our Zimbra Email/Collaboration solution was developed as an open-source software product. As such, it may be relatively easy for competitors, some of which may have greater resources than we have, to compete with us.

One of the characteristics of open source software is that anyone may modify and redistribute the existing open source software and use it to compete with us. Such competition can develop without the degree of overhead and lead time required by traditional proprietary software companies. In addition, some of these competitors may make their open source software available for free download and use on an ad hoc basis or may position their open source software as a loss leader. We cannot guarantee that we will be able to compete successfully against current and future competitors or that competitive pressure and/or the availability of open source software will not result in price reductions, reduced operating margins and loss of market share, any one of which could adversely affect our business, financial condition, operating results and cash flows.

Our revenue and operating results may fluctuate, which makes our results difficult to predict and could cause our results to fall short of expectations.

As a result of the rapidly changing nature of the markets in which we compete, our quarterly and annual revenue and operating results are likely to fluctuate from period to period. These fluctuations may be caused by a number of factors, many of which are beyond our control, including but not limited to the various factors set forth in this “Risk Factors” section, as well as:

- any failure to maintain strong relationships and favorable revenue-sharing arrangements with our Managed Portals and Advertising partners, in particular Google, including a reduction in the quantity or pricing of sponsored links that consumers click on or a reduction in the pricing of digital advertisements by advertisers;
- the timing of our investment in, or the timing of our monetization of, our products and services, such as our end-to-end video solutions portfolio or our Zimbra Email/Collaboration product;
- any failure of significant customers to renew their agreements with us;
- our ability to attract new customers;

- our ability to increase sales of premium services and paid content to our existing customers' consumers;
- any development by our significant customers of the in-house capacity to replace the solutions we provide;
 - the release of new product and service offerings by our competitors or our customers;
- variations in the demand for our services and products and the implementation cycles of our services and products by our customers;
- changes to internet browser technology that may render our Managed Portals less competitive;
- changes in our pricing policies or those of our competitors;
- changes in the prices our customers charge their consumers for email, premium services and paid content;
- service outages, other technical difficulties or security breaches;
- limitations relating to the capacity of our networks, systems and processes;
- our failure to accurately estimate or control costs, including costs related to the implementation of our solutions for new customers;
- maintaining appropriate staffing levels and capabilities relative to projected growth;
- the timing of costs related to the development or acquisition of technologies, services or businesses to support our existing customers and potential growth opportunities; and
- general economic, industry and market conditions and those conditions specific to internet usage and online businesses.

For these reasons and because the market for our services and products is relatively new and rapidly changing, it is difficult to predict our future financial results.

Expansion into international markets, which is an important part of our strategy, but where we have limited experience, will subject us to risks associated with international operations.

We plan to continue to expand our product offerings internationally, particularly in Asia, Canada, Latin America and Europe. Although our exposure to and expertise in international markets have increased as a result of our acquisition of the Zimbra assets in September 2015, we still have limited experience in marketing and operating all of our services and products in international markets, and we may not be able to successfully develop or grow our business in these markets. Our success in these markets will be directly linked to the success of our relationships with potential customers, resellers, content partners and other third parties.

As the international markets in which we operate continue to grow, we expect that competition in these markets will intensify. Local companies may have a substantial competitive advantage because of their greater understanding of, and focus on, the local markets. Some of our domestic competitors who have substantially greater resources than we do may be able to more quickly and comprehensively develop and grow in international markets. International expansion may also require significant financial investment including, among other things, the expense of developing localized products, the costs of acquiring foreign companies and the integration of such companies with our operations, expenditure of resources in developing customer and content relationships and the increased costs of supporting remote operations.

Other risks of doing business in international markets include the increased risks and burdens of complying with different legal and regulatory standards, difficulties in managing and staffing foreign operations, recruiting and retaining talented direct sales personnel, limitations on the repatriation of funds and fluctuations of foreign exchange rates, varying levels of internet technology adoption and infrastructure and our ability to enforce contracts and our intellectual property rights in foreign jurisdictions. Additionally there are risks associated with fundamental changes to international markets, such as those that may occur as a result of the United Kingdom's potential withdrawal from the European Union ("Brexit"). Brexit may adversely affect global economic and market conditions and could contribute to volatility in the foreign exchange markets, which we may be unable to effectively manage.

In addition, our success in international expansion could be limited by barriers to international expansion such as tariffs, adverse tax consequences and technology export controls. If we cannot manage these risks effectively, the costs of doing business in some international markets may be prohibitive or our costs may increase disproportionately to our revenue. Some of our business partners also have international operations and are subject to the risks described above. Even if we are able to successfully manage the risks of international operations, our business may be adversely affected if our business partners are not able to successfully manage these risks.

Failure to comply with the United States Foreign Corrupt Practices Act could subject us to penalties and other adverse consequences.

We are subject to the United States Foreign Corrupt Practices Act, which generally prohibits U.S. companies from engaging in bribery or other prohibited payments to foreign officials for the purpose of obtaining or retaining business. Corruption, extortion, bribery, pay-offs, theft and other fraudulent practices may occur with respect to our expansion into international markets. Our employees or other agents may engage in such conduct for which we might be held responsible. If our employees or other agents are found to have engaged in such practices, we could suffer severe penalties and other consequences, including adverse publicity and damage to our reputation that may have an adverse effect on our business, financial condition and results of operations.

Our agreements with some of our customers, content providers, and service providers require fixed payments, which could adversely affect our financial performance.

Certain of our agreements with Managed Portals and Advertising customers and content providers require us to make fixed payments to them. The aggregate amount of such fixed payments for the year ending December 31, 2018 is approximately \$2.7 million. We are required to make these fixed payments regardless of the achievement of any revenue objectives or subscriber or usage levels. If we do not achieve our financial objectives, these contractual commitments would constitute a greater percentage of our revenue than originally anticipated and would adversely affect our profitability.

Our agreements with some of our customers and content providers contain penalties for non-performance, which could adversely affect our financial performance.

We have entered into service level agreements with many of our customers. These agreements generally call for specific system “up times” and 24 hours per day, seven days per week support and include penalties for non-performance. We may be unable to fulfill these commitments due to circumstances beyond our control, which could subject us to substantial penalties under those agreements, harm our reputation and result in a reduction of revenue or the loss of customers, which would in turn have an adverse effect on our business, financial condition and results of operations. To date, we have never incurred any material penalties.

In addition, certain of our agreements with customers contain penalties for certain types of non-performance which, if not timely rectified, could result in substantial financial penalties to us.

Increasing regulatory focus on privacy issues and expanding laws could impact our business models, subject us to additional expenses and expose us to increased liability.

We are subject to laws and regulations that dictate whether, how, and under what circumstances we can transfer, process and/or receive certain data that is critical to our operations, including data shared between countries or regions in which we operate and data shared among our products and services. In addition, the interpretation and application of consumer and data protection laws in the U.S., Europe and elsewhere are often uncertain and in flux. Government regulators, privacy advocates and class action attorneys are increasingly scrutinizing how companies collect, process, use, store, share and transmit personal data. This increased scrutiny may result in new interpretations of existing laws, thereby further impacting Synacor’s business.

Globally, new and emerging laws, such as the General Data Protection Regulation (“GDPR”) in Europe, state laws in the U.S. on privacy, data and related technologies, such as the California Consumer Privacy Act (“CCPA”), potential U.S. federal legislation regarding consumer privacy, as well as industry self-regulatory codes create new compliance obligations and expand the scope of potential liability, either jointly or severally with our customers and suppliers. For example, the CCPA may precipitate additional privacy regulation by federal, state and local governments, which may increase our compliance costs and strain our technical capabilities, and such regulations may conflict with each other making it impossible to comply with all such regulations. Ensuring compliance with such laws is an ongoing commitment which involves substantial costs, and it is possible that despite our efforts, governmental authorities or third parties will assert that our business practices fail to comply. Any failure or perceived failure by us to comply with privacy regulations, our privacy policies or other related obligations (including in our agreements with customers), or any compromise of security that results in the unauthorized release or transfer of personal information or other subscriber data, may result in governmental enforcement actions, significant fines, loss of access to data transfer mechanisms, litigation or public statements against us by consumer advocacy groups or others and could cause our customers to lose trust in us, or, in some situations, terminate their agreements with us, all of which would have an adverse effect on our business.

System failures or capacity constraints could harm our business and financial performance.

The provision of our services and products depends on the continuing operation of our information technology and communications systems. Any damage to or failure of our systems could result in interruptions in our service. Such interruptions could harm our business, financial condition and results of operations, and our reputation could be damaged if people believe our systems are unreliable. Our systems are vulnerable to damage or interruption from snow storms, terrorist attacks, floods, fires, power loss, telecommunications failures, security breaches, computer malware, computer hacking attacks, computer viruses, computer denial of service attacks or other attempts to, or events that, harm our systems. Our data centers are also subject to break-ins, sabotage and intentional acts of vandalism and to potential disruptions if the operators of the facilities have financial difficulties. Although we maintain insurance to cover a variety of risks, the scope and amount of our insurance coverage may not be sufficient to cover our losses resulting from system failures or other disruptions to our online operations. For example, the limit on our business interruption insurance is approximately \$26 million for cyber loss (and \$38 million for physical loss). Any system failure or disruption and any resulting losses that are not recoverable under our insurance policies may harm our business, financial condition and results of operations. To date, we have never experienced any material losses.

Not all of our data centers are on full second-site redundancy, only certain customers require this capability. We regularly back-up our systems and store the system back-ups in Atlanta, Georgia; Watertown, Massachusetts; Dallas and Allen, Texas; Lewis Center, Ohio; and Toronto, Canada. If we were forced to relocate to an alternate site and to rely on our system back-ups to restore the systems, we would experience significant delays in restoring the functionality of our platform and could experience loss of data, which could harm our business and our operating results.

Security breaches, computer viruses and computer hacking attacks could harm our business, financial condition and results of operations.

Security breaches, computer malware and computer hacking attacks are prevalent in the technology industry. Any security breach caused by hacking, which involves efforts to gain unauthorized access to information or systems, or to cause intentional malfunctions or loss or corruption of data, software, hardware or other computer equipment, and the inadvertent transmission of computer viruses could harm our business, financial condition and results of operations. We have previously experienced hacking attacks on our systems, and may in the future experience hacking attacks. Though it is difficult to determine what harm may directly result from any specific interruption or breach, any failure to maintain performance, reliability, security and availability of our technology infrastructure to the satisfaction of our customers and their consumers may harm our reputation and our ability to retain existing customers and attract new customers.

We may not maintain acceptable website performance for our Managed Portals and Advertising customers, which may negatively impact our relationships with our customers and harm our business, financial condition and results of operations.

A key element to our continued growth is the ability of our customers' consumers in all geographies to access our Managed Portals and other offerings within acceptable load times. We refer to this as website performance. We may in the future experience platform disruptions, outages and other performance problems due to a variety of factors, including infrastructure changes, human or software errors, capacity constraints due to an overwhelming number of users accessing our technology simultaneously, and denial of service or fraud or security attacks.

In some instances, we may not be able to identify the cause or causes of these website performance problems within an acceptable period of time. It may become increasingly difficult to maintain and improve website performance,

especially during peak usage times, and as our solutions become more complex and our user traffic increases. If our Managed Portals and Advertising solutions are unavailable when consumers attempt to access them or do not load as quickly as they expect, consumers may seek other alternatives to obtain the information for which they are looking, and may not use our products and services as often in the future, or at all. This would negatively impact our relationships with our customers. We expect to continue to make significant investments to maintain and improve website performance. To the extent that we do not effectively address capacity constraints, upgrade our systems as needed and continually develop our technology and network architecture to accommodate actual and anticipated changes in technology, our business and operating results may be harmed.

We rely on our management team and need additional personnel to expand our business, and the loss of key officers or an inability to attract and retain qualified personnel could harm our business, financial condition and results of operations.

We depend on the continued contributions of our senior management and other key personnel, especially Himesh Bhise, our President and Chief Executive Officer, Steve Davi, Executive Vice President, Technology and Timothy J. Heasley, our Chief Financial Officer. The loss of the services of any of our executive officers or other key employees could harm our business and our

prospects. All of our executive officers and key employees are at-will employees, which means they may terminate their employment relationship with us at any time.

Our future success also depends on our ability to identify, attract and retain highly skilled technical, managerial, finance, marketing and creative personnel. Further, we will need to hire personnel outside the United States to continue to pursue an international expansion strategy. We face intense competition for qualified individuals from numerous technology, marketing and media companies, and we may incur significant costs to attract them. We may be unable to attract and retain suitably qualified individuals, or we may be required to pay increased compensation in order to do so. If we were to be unable to attract and retain the qualified personnel we need to succeed, our business could suffer.

Volatility or lack of performance in the trading price of our common stock may also affect our ability to attract and retain qualified personnel. Many of our senior management personnel and other key employees have become, or will become, vested in a substantial amount of stock or stock options. Employees may be more likely to leave us if the shares they own or the shares underlying their options have significantly declined in value relative to the original purchase prices of the shares or the exercise prices of the options or if the exercise prices of the options that they hold are significantly above the trading price of our common stock. If we are unable to retain our employees, our business, financial condition and results of operations would be harmed.

If we fail to manage our growth effectively, our business, financial condition and results of operations may suffer.

Through much of our history, our business expansion had resulted from organic growth. More recently, however, we have sought to, and may continue to seek to, grow through strategic acquisitions. For example, in the first quarter of 2016, we acquired certain assets from Technorati, and in 2015, we acquired the Zimbra assets and certain assets of NimbleTV. Our goal of returning to growth may place significant demands on our management and our operational and financial infrastructure. Our ability to manage our growth effectively and to integrate new technologies and acquisitions (such as the assets acquired from Technorati, Zimbra, and NimbleTV) into our existing business will require us to continue to expand our operational, financial and management information systems and to continue to retain, attract, train, motivate and manage key employees. Growth could strain our ability to:

- develop and improve our operational, financial and management controls;
- enhance our reporting systems and procedures;
- recruit, train and retain highly skilled personnel;
- maintain our quality standards; and
- maintain customer and content owner satisfaction.

Managing our growth will require significant expenditures and allocation of valuable management resources. If we fail to achieve the necessary level of efficiency in our organization as it grows, our business, financial condition and results of operations would be harmed.

We may expand our business through acquisitions of, or investments in, other companies or new technologies, or joint ventures or other strategic alliances with other companies, which may divert our management's attention or prove not to be successful.

In February 2016 we acquired substantially all of the assets of, and hired certain personnel from, Technorati; and in 2015 we acquired the Zimbra assets and hired certain related personnel and we purchased assets from, and hired the personnel of, NimbleTV. We may decide to pursue other acquisitions of, investments in, or joint ventures involving other technologies and businesses in the future. Such transactions could divert our management's time and focus from operating our business.

Our ability as an organization to integrate acquisitions is relatively unproven. Integrating an acquired company, business or technology is risky and may result in unforeseen operating difficulties and expenditures, including, among other things, with respect to:

- incorporating new technologies into our existing business infrastructure;
- consolidating corporate and administrative functions;
- coordinating our sales and marketing functions to incorporate the new business or technology;

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- maintaining morale, retaining and integrating key employees to support the new business or technology and managing our expansion in capacity; and
- maintaining standards, controls, procedures and policies (including effective internal control over financial reporting and disclosure controls and procedures).

In addition, a significant portion of the purchase price of companies we may acquire may be allocated to acquired goodwill and other intangible assets, which must be assessed for impairment at least annually. In the future, if our acquisitions do not yield expected returns, we may be required to take charges to our earnings based on this impairment assessment process, which could harm our operating results.

Future acquisitions could result in potentially dilutive issuances of our equity securities, including our common stock, or the incurrence of debt, contingent liabilities, amortization expenses or acquired in-process research and development expenses, any of which could harm our business, financial condition and results of operations. Future acquisitions may also require us to obtain additional financing, which may not be available on favorable terms or at all.

We may require additional capital to grow our business, and this capital may not be available on acceptable terms or at all.

The operation of our business and our growth strategy may require significant additional capital, especially if we were to accelerate our expansion and acquisition plans. For example, we invested more than \$10.0 million in operating expenses and capital expenditures preparing to support AT&T as a customer, and an additional \$4.6 million in the development of internal-use software and software for sale or license to other customers. If the cash generated from operations and otherwise available to us is not sufficient to meet our capital requirements, we will need to seek additional capital, potentially through debt or equity financings, to fund our growth. We may not be able to raise needed capital on terms acceptable to us or at all. Financings, if available, may be on terms that are dilutive or potentially dilutive to our stockholders, and the prices at which new investors would be willing to purchase our securities may cause our existing stockholders to suffer substantial dilution. The holders of new securities may also receive rights, preferences or privileges that are senior to those of existing holders of our common stock. As with our credit facility with Silicon Valley Bank, any debt financing obtained by us in the future could contain financial or other covenants that may potentially restrict our operations, and if we do not effectively manage our business to comply with those covenants, our business, financial condition and results of operations could be adversely affected.

While we successfully raised approximately \$20.0 million in an underwritten public offering of 6,187,846 shares of our common stock in April and May of 2017, the net proceeds of that offering may not be sufficient to meet our objectives, including funding our growth plans and potential acquisitions as they may arise.

In addition, while we are in compliance at December 31, 2018 with the financial covenants contained in our credit facility with Silicon Valley Bank, our future financial performance, including our future capital expenditures, may potentially cause us to become not in compliance with those covenants, possibly restricting our ability to borrow under our credit facility.

If new or existing sources of financing are required but are insufficient or unavailable, we could be required to delay, abandon or otherwise modify our growth and operating plans to the extent of available funding, which would harm our ability to grow our business.

Our business depends, in part, on our ability to protect and enforce our intellectual property rights.

The protection of our intellectual property is critical to our success. We rely on copyright and service mark enforcement, contractual restrictions and trade secret laws to protect our proprietary rights. We have entered into

confidentiality and invention assignment agreements with our employees and contractors, and nondisclosure agreements with certain parties with whom we conduct business to limit access to and disclosure and distribution of our proprietary information. Additionally, we have applied for patents to protect certain of our intellectual property. We have registered several marks and filed many other trademark applications in the United States. We have not applied for copyright protection in any jurisdiction including in the United States. However, if we are unable to adequately protect our intellectual property, it may be possible for a third party to copy or otherwise obtain and use our intellectual property without authorization, and, our business may suffer from the piracy of our technology and the associated loss in revenue.

Protecting against the unauthorized use of our intellectual property and other proprietary rights is expensive, difficult and, in some cases, impossible. The steps we take may not prevent misappropriation or infringement of our property rights. Litigation may be necessary in the future to enforce or defend our intellectual property rights, to protect our trade secrets or to determine the validity and scope of the proprietary rights of others. Such litigation could be costly and divert management resources, either of which could harm

our business. Furthermore, many of our current and potential competitors have the ability to dedicate substantially greater resources to enforce their intellectual property rights than we do. Accordingly, despite our efforts, we may not be able to prevent third parties from infringing upon or misappropriating our intellectual property.

We are not currently involved in any legal proceedings with respect to protecting our intellectual property; however, we may from time to time become a party to various legal proceedings with respect to protecting our intellectual property arising in the ordinary course of our business.

Any claims from a third party that we are infringing upon its intellectual property, whether valid or not, could subject us to costly and time-consuming litigation or expensive licenses or force us to curtail some services or products.

Companies in the internet and technology industries tend to own large numbers of patents, copyrights, trademarks and trade secrets, and frequently enter into litigation based on allegations of infringement or other violations of intellectual property rights. We have been subject to claims that the presentation of certain licensed content on our Managed Portals infringes certain patents of a third party, none of which have resulted in material direct settlement or payments by us or any determination of infringement by us, and as we face increasing competition, the possibility of further intellectual property rights claims against us grows. Our technologies may not be able to withstand any third party claims or rights against their use. Any intellectual property claims, with or without merit, could be time-consuming, expensive to litigate or settle and could divert management resources and attention. An adverse determination also could prevent us from offering our services and products to others and may require that we procure substitute products or services for our customers.

In the case of any intellectual property rights claim, we may have to pay damages or stop using technology found to be in violation of a third party's rights. We may have to seek a license for the technology, which may not be available to us on reasonable terms and may significantly increase our operating expenses. The technology also may not be available for license to us at all. As a result, we may also be required to develop alternative non-infringing technology, which could require significant effort and expense. If we cannot license or develop technology for the infringing aspects of our business, we may be forced to limit our service and product offerings and may be unable to compete effectively. Any of these consequences could harm our operating results.

In addition, we typically have contractual obligations to our customers to indemnify and defend them with respect to third-party intellectual property infringement claims that arise from our customers' use of our products or services. Such claims, whether valid or not, could harm our relationships with our customers, have resulted and could result in the future in us or our customers having to enter into licenses with the claimants and have caused and could cause us in the future to incur additional costs or experience reduced revenue. To date, neither the increase in our costs nor any reductions in our revenue resulting from such claims have been material. Such claims could also subject us to costly and time-consuming litigation as well as diverting management attention and resources. Satisfying our contractual indemnification obligations could also give rise to significant liability, and thus harm our business and our operating results.

We are not currently subject to any material legal proceedings with respect to third party claims that we or our customers' use of our products and services are infringing upon their intellectual property; however, we may from time to time become a party to various legal proceedings with respect to such claims arising in the ordinary course of our business.

Any unauthorized disclosure or theft of personal information we gather could harm our reputation and subject us to claims or litigation.

We collect, and have access to, personal information of subscribers, including names, addresses, account numbers, credit card numbers and email addresses. Unauthorized disclosure of such personal information, whether through breach of our systems by an unauthorized party, employee theft or misuse, or otherwise, could harm our business. If there were an inadvertent disclosure of personal information, or if a third party were to gain unauthorized access to the personal information we possess, our operations could be seriously disrupted and we could be subject to claims or litigation arising from damages suffered by subscribers or our customers. In addition, we could incur significant costs in complying with the multitude of state, federal and foreign laws regarding the unauthorized disclosure of personal information. Finally, any perceived or actual unauthorized disclosure of the information we collect could harm our reputation, substantially impair our ability to attract and retain customers and have an adverse impact on our business.

We collect and may access personal information and other data, which subjects us to governmental regulation and other legal obligations related to privacy and compliance costs, and our actual or perceived failure to comply with such obligations could result in liability or otherwise harm our business.

We collect, and have access to, personal information of subscribers, including names, addresses, account numbers, credit card numbers and email addresses. There are numerous federal, state and local laws, rules and guidelines around the world regarding

privacy and the collection, storing, sharing, use, processing, disclosure, destruction and security of personal information and other subscriber data, the scope of which are changing, subject to differing interpretations, and may be inconsistent between countries or conflict with other rules. Ensuring compliance with such laws is an ongoing commitment which involves substantial costs, and it is possible that despite our efforts, governmental authorities or third parties will assert that our business practices fail to comply.

Any failure to convince advertisers of the benefits of advertising with us would harm our business, financial condition and results of operations.

We have derived and expect to continue to derive a substantial portion of our revenue from digital advertising, including advertising on our Managed Portals. Such advertising accounted for approximately 48%, 45%, and 46% of our revenue for the years ended December 31, 2018, 2017, and 2016, respectively. Our ability to attract and retain advertisers and, ultimately, to generate advertising revenue depends on a number of factors, including:

- increasing the numbers of consumers using our Managed Portals;
- maintaining consumer engagement on those Managed Portals;
- competing effectively for advertising spending with other online and offline advertising providers.

If we are unable to provide high-quality advertising opportunities and convince advertisers and agencies of our value proposition, we may not be able to retain existing advertisers or attract new ones, which would harm our business, financial condition and results of operations.

Migration of high-speed internet service providers' consumers from one high-speed internet service provider to another could adversely affect our business, financial condition and results of operations.

Consumers may become dissatisfied with their current high-speed internet service provider and may switch to another provider. In the event that there is substantial subscriber migration from our existing customers to service providers with which we do not have relationships, the fees that we receive on a per-subscriber basis, and the related revenue, including search and digital advertising revenue, could decline.

If we are unable to implement and maintain effective internal control over financial reporting, investors may lose confidence in the accuracy and completeness of our financial reports and the market price of our common stock could be adversely affected.

As a public company, we are required to maintain internal control over financial reporting and to disclose any material weaknesses in such internal control. A material weakness is defined as a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of our financial statements will not be prevented or detected on a timely basis. Section 404 of the Sarbanes-Oxley Act of 2002, or the Sarbanes-Oxley Act, requires that we evaluate and determine the effectiveness of our internal control over financial reporting and provide a management report on internal control over financial reporting. The Sarbanes-Oxley Act also requires that our management report on internal control over financial reporting be attested to by our independent registered public accounting firm.

During our assessment of internal control over financial reporting as of December 31, 2018, we identified two material weaknesses in our internal control over financial reporting: (i) ineffective control activities due to the lack of timeliness and consistency in executing business process controls, and (ii) ineffective monitoring controls to ascertain whether the components of internal control were present and functioning. We are working to remediate these material weaknesses. For more information about these material weaknesses and our remediation efforts, see Item 9A. "Controls and Procedures." Although we plan to complete this remediation process as quickly as possible, we cannot at this time estimate how long it will take, and our efforts may not be successful in remediating these material weaknesses. As part

of the remediation process, we may incur additional costs in improving our internal control over financial reporting.

Many of the internal controls we have implemented pursuant to the Sarbanes-Oxley Act are process controls with respect to which a material weakness may be found regardless of whether any error has been identified in our reported financial statements. This may be confusing to investors and result in damage to our reputation, which may harm our business. Additionally, the proper design and assessment of internal controls over financial reporting are subject to varying interpretations, and as a result, application in practice may evolve over time as new guidance is provided by regulatory and governing bodies and as common practices evolve. This could result in continuing uncertainty regarding the proper design and assessment of internal controls over financial reporting and higher costs necessitated by ongoing revisions to internal controls.

We must continue to monitor and assess our internal control over financial reporting. If we are unable to successfully remediate these material weaknesses or if we identify additional material weaknesses, we may not detect errors on a timely basis and our financial statements may be materially misstated. This could harm our operating results, cause us to fail to meet our SEC reporting obligations or Nasdaq listing requirements on a timely basis, adversely affect our reputation, cause our stock price to decline or result in inaccurate financial reporting or material misstatements in our annual or interim financial statements.

Notwithstanding the material weaknesses identified during our assessment, we have concluded, and our auditors have expressed an unqualified opinion, that the Consolidated Financial Statements included in this Annual Report on Form 10-K present fairly, in all material respects, the financial position of the Company at December 31, 2018 and December 31, 2017 and the consolidated results of operations and cash flows for each of the three fiscal years in the period ended December 31, 2018 in conformity with U.S. generally accepted accounting principles.

Our ability to use our net operating loss carryforwards and certain other tax attributes may be limited as a result of future transactions in our stock which may be outside our control.

As of December 31, 2018, we had substantial federal and state net operating loss carryforwards. Under Sections 382 and 383 of the Internal Revenue Code of 1986, as amended, or the Code, if a corporation undergoes an “ownership change,” the corporation’s ability to use its pre-change net operating loss carryforwards to offset its post-change income and taxes may be limited. In general, an “ownership change” generally occurs if there is a cumulative change in our ownership by “five-percent stockholders” that exceeds 50 percentage points over a rolling three-year period. For these purposes, a five-percent stockholder is generally any person or group of persons that at any time during the applicable testing period has owned 5% or more of our outstanding stock. In addition, persons who own less than 5% of the outstanding stock are grouped together as one or more “public groups,” which are also treated as five-percent stockholders. Similar rules may apply under state tax laws. We may experience ownership changes in the future as a result of future transactions in our stock, some of which may be outside our control. As a result, our ability to use our pre-change net operating loss carryforwards to offset United States federal and state taxable income and taxes may be subject to limitations.

Risks Related to Our Industry

The growth of the market for our services and products depends on the continued growth of the internet as a medium for content, advertising, commerce and communications.

Expansion in the sales of our services and products depends on the continued acceptance of the internet as a platform for content, advertising, commerce and communications. The acceptance of the internet as a medium for such uses could be adversely impacted by delays in the development or adoption of new standards and protocols to handle increased demands of internet activity, security, privacy protection, reliability, cost, ease of use, accessibility and quality of service. The performance of the internet and its acceptance as such a medium has been harmed by viruses, worms, and similar malicious programs, and the internet has experienced a variety of outages and other delays as a result of damage to portions of its infrastructure. If for any reason the internet does not remain a medium for widespread content, advertising, commerce and communications, the demand for our services and products would be significantly reduced, which would harm our business.

The growth of the market for our services and products depends on the development and maintenance of the internet infrastructure.

Our business strategy depends on continued internet and high-speed internet access growth. Any downturn in the use or growth rate of the internet or high-speed internet access would be detrimental to our business. If the internet continues to experience significant growth in number of users, frequency of use and amount of data transmitted, the internet infrastructure might not be able to support the demands placed on it and the performance or reliability of the internet may be adversely affected. The success of our business therefore depends on the development and maintenance of a sound internet infrastructure. This includes maintenance of a reliable network backbone with the necessary speed, data capacity and security, as well as timely development of complementary products, such as routers, for providing reliable internet access and services. Consequently, as internet usage increases, the growth of the market for our products depends upon improvements made to the internet as well as to individual customers' networking infrastructures to alleviate overloading and congestion. In addition, any delays in the adoption of new standards and protocols required to govern increased levels of internet activity or increased governmental regulation may have a detrimental effect on the internet infrastructure.

A majority of our revenue is derived from our Managed Portals and Advertising solutions; our revenue would decline if advertisers do not continue their usage of the internet as an advertising medium.

We have derived and expect to continue to derive a majority of our revenue from search and digital advertising, including advertising on our Managed Portals. Such search and digital advertising revenue accounted for approximately 61%, 60% and 59% of our revenue for the years ended December 31, 2018, 2017 and 2016, or \$87.5 million, \$83.6 million, and \$74.9 million respectively.

However, the prospects for continued demand and market acceptance for internet advertising are uncertain. If advertisers do not continue to increase their usage of the internet as an advertising medium, our revenue would decline. Advertisers that have traditionally relied on other advertising media may not advertise on the internet. As the internet evolves, advertisers may find online advertising to be a less attractive or less effective means of promoting their services and products than traditional methods of advertising and may not continue to allocate funds for internet advertising. Many historical predictions by industry analysts and others concerning the growth of the internet as a commercial medium have overstated the growth of the internet and you should not rely upon them. This growth may not occur or may occur more slowly than estimated.

Most of our search revenue is based on the number of paid “clicks” on sponsored links that are included in search results generated from our Managed Portals. Generally, each time a consumer clicks on a sponsored link, the search provider that provided the commercial search result receives a fee from the advertiser who paid for such sponsored link and the search provider pays us a portion of that fee. We, in turn, typically share a portion of the fee we receive with our customer. If an advertiser receives what it perceives to be a large number of clicks for which it needs to pay, but that do not result in a desired activity or an increase in sales, the advertiser may reduce or eliminate its advertisements through the search provider that provided the commercial search result to us. This reaction would lead to a loss of revenue to our search providers and consequently to lesser fees paid to us, which would have a negative effect on our financial results.

Market prices for online advertising may decrease due to competitive or other factors. In addition, if a large number of internet users use filtering software that limits or removes advertising from the users’ view, advertisers may perceive that internet advertising is not effective and may choose not to advertise on the internet.

The market for internet-based services and products in which we operate is highly competitive, and if we cannot compete effectively, our sales may decline and our business may be harmed.

Competition in the market for internet-based services and products in which we operate is intense and involves rapidly changing technologies and customer and subscriber requirements, as well as evolving industry standards and frequent product introductions. Our competitors may develop solutions that are similar or superior to our technology. Our primary competitors include high-speed internet service providers with internal information technology staff capable of developing solutions similar to our technology. Other competitors include: Google; Verizon Media; and MSN, a division of Microsoft. Advantages some of our existing and potential competitors hold over us include the following:

- significantly greater revenue and financial resources;
- stronger brand and consumer recognition;
- the capacity to leverage their marketing expenditures across a broader portfolio of services and products;
- ability to offer their products at significantly lower prices or at no cost;
- more extensive proprietary intellectual property from which they can develop or aggregate content without having to pay fees or paying significantly lower fees than we do;
- pre-existing relationships with content providers that afford them access to content while blocking the access of competitors to that same content;
- pre-existing relationships with high-speed internet service providers that afford them the opportunity to convert such providers to competing services and products;
- lower labor and development costs; and
- broader global distribution and presence.

If we are unable to compete effectively or we are not as successful as our competitors in our target markets, our sales could decline, our margins could decline and we could lose market share, any of which would harm our business, financial condition and results of operations.

Government regulation of the internet continues to evolve, and new laws and regulations could significantly harm our financial performance.

Over time, we expect state, federal and international legislative bodies to continue to enact more stringent laws and regulations relating to the internet. The adoption or modification of laws related to the internet could harm our business, financial condition and results of operations by, among other things, increasing our costs and administrative burdens. Due to the increasing popularity and use

of the internet, many laws and regulations relating to the internet are being debated at the international, federal and state levels, which are likely to address a variety of issues such as:

• user privacy and expression;

- ability to collect and/or share necessary information that allows us to conduct business on the internet;

• export compliance;

• pricing and taxation;

• fraud;

• advertising;

• intellectual property rights;

• consumer protection;

• protection of minors;

• content regulation;

• information security; and

• quality of services and products.

Several federal laws that could have an impact on our business have been adopted. For example, the Digital Millennium Copyright Act of 1998 reduces the liability of online service providers of third-party content, including content that may infringe copyrights or rights of others, but requires strict compliance with certain provisions to qualify for the safe harbor provisions; the Children's Online Privacy Protection Act imposes additional restrictions on the ability of online services to collect user information from minors under the age of 13; and the Protection of Children from Sexual Predators Act requires online service providers to report evidence of violations of federal child pornography laws under certain circumstances.

It could be costly for us to comply with existing and potential laws and regulations, and they could harm our marketing efforts and our attractiveness to advertisers by, among other things, restricting our ability to collect demographic and personal information from consumers or to use or disclose that information in certain ways. If we were to violate these laws or regulations, or if it were alleged that we had, we could face private lawsuits, fines, penalties and injunctions and our business could be harmed.

Finally, the applicability to the internet and other online services of existing laws in various jurisdictions governing issues such as property ownership, sales and other taxes, libel and personal privacy is uncertain. Any new legislation or regulation, the application of laws and regulations from jurisdictions whose laws do not currently apply to our business, or the application of existing laws and regulations to the internet and other online services could also increase our costs of doing business, discourage internet communications, reduce demand for our services and expose us to substantial liability.

Increased regulation and industry standards related to internet privacy issues may prevent us from, or may increase the cost of, providing our current products and solutions to our customers, thereby harming our business.

The regulatory framework for privacy issues worldwide is currently in flux and is likely to remain so for the foreseeable future. Practices regarding the collection, use, storage, sharing, processing, disclosure, destruction and security of personal information by companies operating over the internet have come under increased public scrutiny and, as a result, there are an increasing number of regulations and industry standards that affect our business. Regulators, including the Federal Trade Commission and regulators in the EEA and other countries, have restricted and continue to restrict our ability to use personal information and therefore may limit or inhibit our ability to operate our business. In addition, many nations and economic regions have privacy protections that are more stringent or otherwise at odds with those in the United States.

For example, the EEA traditionally has imposed stricter obligations and provided for more onerous penalties than the United States. The European General Data Protection Regulation (“GDPR”) took effect in May 2018 and applies to all of our products and services used by people in Europe. The GDPR includes operational requirements for companies that receive or process personal data of residents of the European Union that are different from those previously in place in the European Union, and includes significant penalties for non-compliance. Similarly, there are a number of legislative proposals in the European Union, the United States, at both the federal and state level, as well as other jurisdictions that could impose new obligations in areas affecting our business, such as liability for copyright infringement. In addition, some countries are considering or have passed legislation implementing data protection requirements or requiring local storage and processing of data or similar requirements that could increase the cost and complexity of delivering our services. Complying with new privacy and security requirements, whether imposed by regulation,

contract or industry standard, will require additional expenditures and may result in a greater compliance burden for companies with employees or users in the EEA.

The United States and other countries have been looking to the GDPR as precedent for new data protection regulation. For example, the California Consumer Privacy Act (“CCPA”), which will go into effect on January 1, 2020, will require companies to provide new data disclosure, access and deletion rights to California consumers, afford such consumers the ability to opt-out of certain sales of personal information, and impose significant penalties for non-compliance or data breaches. Legislators have proposed amendments to the CCPA and it remains unclear what modifications may be made to the legislation or how it will be interpreted. The CCPA may precipitate additional privacy regulation by federal, state and local governments, which may increase our compliance costs and strain our technical capabilities, and it is possible that such regulations may conflict with each other.

We will incur significant expenses to comply with privacy and security standards and protocols imposed by law, regulation, industry standards or contractual obligations. Our business, including our ability to operate and expand internationally, could be adversely affected if legislation or regulations are adopted, interpreted or implemented in a manner that is inconsistent with our current business practices and that require changes to these practices, our services or our privacy policies.

Risks Related to Ownership of Our Common Stock

Concentration of ownership among our directors and officers and their respective affiliates could limit our other stockholders’ ability to influence the outcome of key corporate decisions, such as an acquisition of our company.

Our directors and executive officers and their respective affiliates, beneficially own or directly or indirectly control (including by voting proxy), as of March 8, 2019, approximately 26% of our outstanding common stock (including exercisable options). These stockholders, if they were to act together, would have the ability to influence significantly the outcome of matters submitted to our stockholders for approval, including the election of directors and any merger, consolidation or sale of all or substantially all of our assets. In addition, these stockholders, if they act together, would have the ability to influence significantly the management and affairs of our company. Accordingly, this concentration of ownership might harm the trading price of our common stock by:

- delaying, deferring or preventing a change in our control;
 - impeding a merger, consolidation, takeover or other business combination involving us;
 - preventing the election of directors who are nominated by our stockholders; or
 - discouraging a potential acquirer from making a tender offer or otherwise attempting to obtain control of us.
- Our business could be negatively affected as a result of actions of stockholders or others.

In June and July 2014, entities associated with JEC Capital Partners and Ratio Capital Partners indicated, through filings with the Securities and Exchange Commission, or the SEC, that they each beneficially owned approximately 5% of our outstanding shares of common stock and in November 2018, 180 Degree Capital Corp, or 180 Degree, indicated, through filings with the SEC, that it beneficially owned approximately 7% of our outstanding shares of common stock. There can be no assurance that JEC Capital Partners, Ratio Capital Partners, 180 Degree, or another third party will not make an unsolicited takeover proposal in the future or take other action to acquire control of us or to otherwise influence our management and policies. Considering and responding to any future proposal is likely to result in significant additional costs to us, and future acquisition proposals, other stockholder actions to acquire control and the litigation that often accompanies them, if any, are likely to be costly and time-consuming and may disrupt our operations and divert the attention of management and our employees from executing our strategic plan.

Additionally, perceived uncertainties as to our future direction as a result of stockholder activism or actual or potential changes to the composition of our board of directors, may lead to the perception of a change in the direction of our business or other instability, which may be exploited by our competitors, cause concern to our current or potential customers, and make it more difficult to attract and retain qualified personnel. If customers choose to delay, defer or reduce their reliance on, the services we provide or do business with our competitors instead of us because of any such issues, then our business, operating results and financial condition would be adversely affected.

On March 1, 2019, we entered into an agreement, or the 180 Degree Agreement, with 180 Degree, which beneficially owns approximately 7.3% of the outstanding of our common stock. Immediately following the execution of the 180 Degree Agreement, pursuant to resolutions previously approved by our board of directors (i) the total number of directors constituting the board of directors was increased from eight (8) to nine (9) directors in accordance with our Amended and Restated Bylaws, and (ii) Kevin M. Rendino, or the 180 Degree Designee, was appointed and elected to serve as a Class III director of Synacor with an initial term that comes up for re-election at the 2020 annual meeting of stockholders, or the 2020 Annual Meeting. The board of directors has

determined that Mr. Rendino qualifies as “independent” under the applicable independence rules of (i) the Securities and Exchange Commission and (ii) listing standards of The Nasdaq Stock Market, LLC.

While the 180 Degree Agreement is in effect, if the 180 Degree Designee is unable or unwilling to serve as a director or resigns as a director, subject to the terms and conditions of the 180 Degree Agreement, 180 Degree has the right to nominate a replacement director, subject to the approval of the board of directors, not to be unreasonably withheld, provided that such nominee meets certain qualification requirements under the 180 Degree Agreement.

The 180 Degree Agreement applies during a period that begins on the date of the 180 Degree Agreement and extends until 10 days prior to the deadline for the submission of stockholder nominations for directors for the 2020 Annual Meeting pursuant to our Bylaws; provided that if we offer to nominate the 180 Degree Designee for re-election at the 2020 Annual Meeting, then that period will be automatically extended until the day following the 2020 Annual Meeting. So long as the 180 Degree Designee (or a replacement) is on the board of directors, we agreed that we will recommend, support and solicit proxies for the election of the 180 Degree Designee in the same manner as the other directors recommended by the board of directors for election at the applicable annual meeting of stockholders for which the 180 Degree Designee (or a replacement) is up for re-election to the board of directors.

The 180 Degree Agreement further provides that 180 Degree will appear in person or by proxy at all annual and special stockholder meetings during the applicable period and vote all of its shares in favor of any proposal supported by a majority of the board of directors; provided that 180 Degree has the right to vote in its sole discretion with respect to any tender or exchange offer, merger, acquisition, recapitalization, restructuring, disposition, distribution, spin-off, asset sale, joint venture or other business combination involving Synacor or any of its affiliates (each of the foregoing, an “Extraordinary Transaction”).

While the 180 Degree Agreement is in effect, 180 Degree agreed not to, among other things, (i) solicit proxies regarding any matter to come before any annual or special meeting of stockholders, (ii) enter into a voting agreement or any group with stockholders other than 180 Degree affiliates and current group members, (iii) (A) nominate or recommend for nomination any person for election, (B) submit proposals for consideration or otherwise bring any business before, nor (C) engage in certain activities related to “withhold” or similar campaigns, at any annual or special meeting, (iv) seek to make, or encourage any third party in making, any offer or proposal with respect to any Extraordinary Transaction or (v) acquire beneficial ownership of any of our common or other equity securities in excess of 10.0% of the then outstanding shares of our common stock.

Each of the parties to the 180 Degree Agreement also agreed to mutual non-disparagement obligations.

Future sales of our common stock may cause the trading price of our common stock to decline.

Certain of our stockholders who held shares of our preferred stock before the consummation of our public offering (and who now hold shares of our common stock) may be able to sell these shares in the public market without registration under Rule 144.

In addition, the shares that are either subject to outstanding options or warrants or that may be granted in the future under our equity plans will become eligible for sale in the public market to the extent permitted by the provisions of various vesting agreements.

If a substantial number of any of these additional shares described are sold, or if it is perceived that a substantial number of such shares will be sold, in the public market, the trading price of our common stock could decline.

Some provisions of our certificate of incorporation, bylaws and Delaware law may discourage, delay or prevent a merger or acquisition or prevent the removal of our current board of directors and management.

Our amended and restated certificate of incorporation and amended and restated bylaws contain provisions that may discourage, delay or prevent a merger or acquisition or prevent the removal of our current board of directors and management. We have a number of anti-takeover devices in place that will hinder takeover attempts, including:

- our board of directors is classified into three classes of directors with staggered three-year terms;
- our directors may only be removed for cause, and only with the affirmative vote of a majority of the voting interest of stockholders entitled to vote;
- only our board of directors and not our stockholders will be able to fill vacancies on our board of directors;
- only our chairman of the board, our chief executive officer or a majority of our board of directors, and not our stockholders, are authorized to call a special meeting of stockholders;
- our stockholders will be able to take action only at a meeting of stockholders and not by written consent;

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our amended and restated certificate of incorporation authorizes undesignated preferred stock, the terms of which may be established and shares of which may be issued without stockholder approval; and advance notice procedures apply for stockholders to nominate candidates for election as directors or to bring matters before an annual meeting of stockholders.

These provisions and other provisions in our charter documents could discourage, delay or prevent a transaction involving a change in our control. Any delay or prevention of a change in control transaction could cause stockholders to lose a substantial premium over the then-current trading price of their shares. These provisions could also discourage proxy contests and could make it more difficult for our stockholders to elect directors of their choosing or to cause us to take other corporate actions such stockholders desire.

In addition, we are subject to Section 203 of the Delaware General Corporation Law, which, subject to some exceptions, prohibits “business combinations” between a Delaware corporation and an “interested stockholder,” which is generally defined as a stockholder who becomes a beneficial owner of 15% or more of a Delaware corporation’s voting stock, for a three-year period following the date that the stockholder became an interested stockholder. Section 203 could have the effect of delaying, deferring or preventing a change in control that our stockholders might consider to be in their best interests.

We have not paid cash dividends on our capital stock, and we do not expect to do so in the foreseeable future.

We have not historically paid cash dividends on our capital stock, and we have agreed not to pay any dividends or make any other distributions in our loan agreement with Silicon Valley Bank. We anticipate that we will retain all future earnings and cash resources for the future operation and development of our business, and as a result, we do not anticipate paying any cash dividends to holders of our capital stock for the foreseeable future. Any future determination regarding the payment of any dividends will be made at the discretion of our board of directors and will depend on our financial condition, results of operations, capital requirements, general business conditions, bank covenants and other factors that our board may deem relevant. Consequently, investors must rely on sales of their common stock after price appreciation, which may never occur, as the only way to realize any future gains on their investment.

The trading price and volume of our common stock has been and will likely continue to be volatile, and the value of an investment in our common stock may decline.

The trading price of our common stock has been, and is likely to continue to be, volatile and could decline substantially within a short period of time. For example, since shares of our common stock were sold in our initial public offering in February 2012 at a price of \$5.00 per share through the close of business on March 8, 2019, our trading price has ranged from \$1.03 to \$18.00. The trading price of our common stock may be subject to wide fluctuations in response to various factors, some of which are beyond our control, including but not limited to the various factors set forth in this “Risk Factors” section, as well as:

- variations in our financial performance;
- announcements of technological innovations, new services and products, strategic alliances, asset acquisitions, or significant agreements by us or by our competitors;
- announcements regarding our existing customer contracts, including, for example, the disclosures related to the agreement we entered into with AT&T in May 2016 to provide desktop and mobile portal solutions;
- changes in the estimates of our operating results or changes in recommendations or withdrawal of research coverage by securities analysts;
- market conditions in our industry, the industries of our customers and the economy as a whole; and
- adoption or modification of laws, regulations, policies, procedures or programs applicable to our business or announcements relating to these matters.

In addition, if the market for technology stocks or the stock market in general experiences loss of investor confidence, the trading price of our common stock could decline for reasons unrelated to our business, financial condition or results of operations. The trading price of our common stock might also decline in reaction to events that affect other companies in our industry even if these events do not directly affect us. Some companies that have had volatile market prices for their securities have had securities class actions filed against them. Such a suit filed against us, regardless of its merits or outcome, could cause us to incur substantial costs and could divert management's attention.

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

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

The requirements of being a public company, including increased costs and demands upon management as a result of complying with federal securities laws and regulations applicable to public companies, may adversely affect our financial performance and our ability to attract and retain directors.

As a public company, we are subject to the reporting requirements of the Securities Exchange Act of 1934, as amended, or the Exchange Act, the Sarbanes-Oxley Act, the Dodd-Frank Wall Street Reform and Consumer Protection Act, or the Dodd-Frank Act, and the rules and regulations of The Nasdaq Global Market. The Sarbanes-Oxley Act, as well as rules subsequently implemented by the SEC and Nasdaq, impose additional requirements on public companies, including enhanced corporate governance practices. For example, the Nasdaq listing requirements require that listed companies satisfy certain corporate governance requirements relating to independent directors, audit committees, distribution of annual and interim reports, stockholder meetings, stockholder approvals, solicitation of proxies, conflicts of interest, stockholder voting rights and codes of business conduct. Our management team has limited experience managing a publicly-traded company or complying with the increasingly complex laws pertaining to public companies. In addition, most of our current directors have limited experience serving on the boards of public companies.

The requirements of these rules and regulations have increased and will continue to increase our legal, accounting and financial compliance costs, make some activities more difficult, time-consuming and costly and may also place undue strain on our personnel, systems and resources. Our management and other personnel must devote a substantial amount of time to these requirements. In particular, we have incurred and expect to continue to incur significant expenses and devote substantial management effort toward ensuring compliance with the requirements of Section 404 of the Sarbanes-Oxley Act, including remediating the material weaknesses described in Item 9A. "Controls and Procedures." For example, we have assigned additional personnel within our finance department to the implementation, administration and evaluation of our internal control over financial reporting, and we engaged an outside public accounting firm to provide us with the services of accounting support personnel.

Moreover, the rules and regulations applicable to public companies also make it more difficult and more expensive for us to maintain directors' and officers' liability insurance, and we may be required to accept reduced coverage or incur substantially higher costs to maintain coverage. If we are unable to maintain adequate directors' and officers' insurance, our ability to recruit and retain qualified directors, especially those directors who may be considered independent for purposes of Nasdaq rules, and officers may be significantly curtailed.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

Our corporate headquarters are located at 40 La Riviere Drive, Buffalo, New York 14202. We lease approximately 31,000 square feet of office space at this address pursuant to an agreement that expires November 2021.

We also maintain administrative and product development offices in New York, New York; Ottawa, Ontario, Canada; Westford, Massachusetts; Frisco, Texas; Los Angeles, California; Pune, India; London, United Kingdom; Tokyo, Japan; Paris, France; and Singapore. Our data centers are located in Allen, Texas; Atlanta, Georgia; Dallas, Texas; Lewis Center, Ohio; Toronto, Canada; and Watertown, Massachusetts.

We believe that our facilities are adequate to meet our current needs and that suitable additional or substitute space will be available as needed.

ITEM 3. LEGAL PROCEEDINGS

We are awaiting a decision of an arbitration tribunal following a binding arbitration that took place on July 30, 2018 between us and Maxit Technology Incorporated and Maxit Technology Holdings Limited, or Maxit, who were formerly our joint venture partners in China. After unsuccessful settlement discussions between the parties, on January 25, 2016, Maxit requested arbitration under the Rules of the International Chamber of Commerce. In its request for arbitration, Maxit asserted claims for breach of contract, breach of the covenant of good faith and fair dealing, breach of fiduciary duty, and negligent misrepresentation, all arising out of our alleged failure to provide capital and software as required by the joint venture agreement. In its request, Maxit sought an award of money damages based on its share of the lost potential value of the joint venture, as well as a percentage of revenue from any future sales to customers originally introduced by Maxit, along with interest and legal expenses. Maxit alleges that its share of the lost potential value is approximately \$15 million. Based in part on an independent appraisal, we assessed the lost potential value at only \$0.6 million, for which half of this amount (based on 50/50 ownership) has been reserved in our financial statements. We contested Maxit's claims vigorously, and while it is not possible at this time to predict the outcome of the arbitration, we continue to believe that Maxit's claims are without merit. We anticipate a decision by the arbitration tribunal before the end of the second quarter of 2019.

We and our Chief Executive Officer and former Chief Financial Officer were named as defendants in a federal securities class action lawsuit filed April 4, 2018 in the United States District Court for the Southern District of New York. The class includes persons who purchased our shares between May 4, 2016 and March 15, 2018. The plaintiff alleged that we made materially false and misleading statements regarding our contract with AT&T and the timing of revenue to be derived therefrom, and that as a result class members suffered losses because Synacor shares traded at artificially inflated prices. The plaintiff sought an unspecified amount of damages, as well as interest, attorneys' fees and legal expenses. The court appointed a lead plaintiff and approved plaintiff's selection of lead counsel on July 6, 2018. On October 16, 2018 the court appointed new lead counsel and confirmed the lead plaintiff. The plaintiff filed an amended complaint on November 2, 2018, and we filed a motion to dismiss on December 17, 2018. We dispute these claims and intend to defend them vigorously. The liabilities related to this lawsuit are covered by D&O insurance after we reach our deductible.

We do not believe that the outcome of these claims will have a material adverse effect on our consolidated financial position, results of operations or cash flows based on the status of proceedings at this time. However, regardless of the outcome, such proceedings can have an adverse impact on us because of defense and settlement costs, diversion of resources and other factors.

In addition, we are, from time to time, party to litigation arising in the ordinary course of business. For example, third parties might allege that we are infringing their patent rights or that we are otherwise violating their intellectual property rights, including trade names and trademarks. Such third parties may resort to litigation. We accrue contingent liabilities when it is probable that future expenditures will be made and such expenditures can be reasonably estimated.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND
ISSUER PURCHASES OF EQUITY SECURITIES

Market Information

Our common stock has been listed on The Nasdaq Global Market, or Nasdaq, under the symbol "SYNC" since February 10, 2012. Prior to that time, there was no public market for our stock.

Holders of Record

As of March 8, 2019, there were 100 holders of record of our common stock. The number of holders of record of our common stock does not reflect the number of beneficial holders whose shares are held by depositors, brokers or other nominees.

Securities Authorized for Issuance under Equity Compensation Plans

The information required to be disclosed by Item 201(d) of Regulation S-K regarding our equity securities authorized for issuance under our equity incentive plans is incorporated herein by reference to the section entitled "Securities Authorized for Issuance Under Equity Compensation Plans" in our definitive Proxy Statement for our Annual Meeting of Stockholders to be filed with the Commission within 120 days after the end of fiscal year 2018 pursuant to Regulation 14A.

Recent Sales of Unregistered Securities

None.

Use of Proceeds

Not applicable.

Issuer Purchases of Equity Securities

None.

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ITEM 6. SELECTED FINANCIAL DATA

You should read the following selected consolidated historical financial data below in conjunction with “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and the financial statements, related notes and other financial information included in this Annual Report on Form 10-K. The selected consolidated financial data in this section is not intended to replace the financial statements and is qualified in its entirety by the financial statements and related notes included in this Annual Report on Form 10-K.

We derived the selected consolidated financial data for the years ended December 31, 2018, 2017, and 2016 and as of December 31, 2018 and 2017 from our audited consolidated financial statements and related notes, which are included in this Annual Report on Form 10-K. We derived the selected consolidated financial data for the years ended December 31, 2015 and 2014 and as of December 31, 2016, 2015 and 2014 from our audited consolidated financial statements and related notes, which are not included in this Annual Report on Form 10-K. Our historical results are not necessarily indicative of the results to be expected in the future.

	Year Ended December 31,				
	2018 (5)	2017	2016	2015 (4)	2014
	(in thousands except share and per share data)				
Consolidated Statements of Operations					
Data:					
Revenue	\$ 143,879	\$ 140,027	\$ 127,373	\$ 110,245	\$ 106,579
Costs and operating expenses:					
Cost of revenue (1)	72,547	70,053	59,146	54,423	57,939
Technology and development (1)(2)	24,510	27,642	25,612	20,007	26,259
Sales and marketing (2)	24,116	24,941	22,846	16,272	10,807
General and administrative (1)(2)	19,454	17,800	19,695	15,543	14,249
Depreciation and amortization	9,641	9,820	9,235	6,901	5,126
Gain on sale of domain	—	—	—	—	(1,000)
Total costs and operating expenses	150,268	150,256	136,534	113,146	113,380
Loss from operations	(6,389)	(10,229)	(9,161)	(2,901)	(6,801)
Gain on sale of investment	—	1,987	—	—	—
Interest expense	(338)	(433)	(318)	(245)	(218)
Other expense	(212)	(2)	(42)	(16)	(28)
Loss before income taxes	(6,939)	(8,677)	(9,521)	(3,162)	(7,047)
Provision for income taxes	616	1,100	1,219	239	4,821
Loss in equity interest	—	—	—	(73)	(1,063)
Net loss	\$(7,555)	\$(9,777)	\$(10,740)	\$(3,474)	\$(12,931)
Net loss per share:					
Basic	\$(0.19)	\$(0.27)	\$(0.36)	\$(0.12)	\$(0.47)
Diluted	\$(0.19)	\$(0.27)	\$(0.36)	\$(0.12)	\$(0.47)
Weighted average shares used to compute net loss					
per share:					
Basic	38,895,301	36,381,299	30,251,685	28,213,838	27,389,793
Diluted	38,895,301	36,381,299	30,251,685	28,213,838	27,389,793
Other Financial Data:					
Adjusted EBITDA (3)	\$8,464	\$2,337	\$3,179	\$7,593	\$2,180

	As of December 31,				
	2018	2017	2016	2015 (4)	2014
	(in thousands)				
Consolidated Balance Sheet Data:					
Cash and cash equivalents	\$15,921	\$22,476	\$14,315	\$15,697	\$25,600
Accounts receivable, net	25,567	31,696	27,386	24,341	20,479
Property and equipment, net	18,707	20,505	14,406	14,377	15,128
Total assets	91,463	108,780	93,399	89,026	66,238
Long-term debt and capital lease obligations	3,695	5,815	6,996	7,581	1,383
Total stockholders' equity	51,171	54,345	39,649	46,104	42,482

Notes:

(1) Exclusive of depreciation and amortization shown separately.

(2) Includes stock-based compensation as follows:

	Year Ended December 31,				
	2018	2017	2016	2015 (4)	2014
	(in thousands)				
Technology and development	\$489	\$744	\$921	\$936	\$1,621
Sales and marketing	474	636	784	942	599
General and administrative	841	1,110	1,066	1,237	1,375
	\$1,804	\$2,490	\$2,771	\$3,115	\$3,595

(3) We define adjusted EBITDA as net loss plus: provision for income taxes, interest expense, other expense, depreciation and amortization, asset impairments, loss in equity interest, stock-based compensation, losses on disposal of property and equipment, acquisition costs and certain one-time items such as restructuring costs and certain legal and professional services costs, and minus gains on sales of investments. Please see “Adjusted EBITDA” below for more information and for a reconciliation of adjusted EBITDA to net loss, the most directly comparable financial measure calculated and presented in accordance with GAAP.

(4) Results for 2015 include the results of operations relating to the acquired Zimbra assets since the closing of the acquisition in September 2015.

(5) Results for 2018 include the impact of the adoption new accounting standard in fiscal year 2018 related to revenue recognition. Refer to Note 1, The Company and Summary of Significant Accounting Policies, of the Notes to the Consolidated Financial Statements referred to in Item 8 of this report for additional information.

Adjusted EBITDA

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

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

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

- although depreciation and asset impairments are non-cash charges, the assets being depreciated or impaired may have to be replaced in the future, and adjusted EBITDA does not reflect capital expenditure requirements for such

replacements or for new capital expenditure requirements;

adjusted EBITDA does not reflect changes in, or cash requirements for, our working capital needs;

adjusted EBITDA does not consider the potentially dilutive impact of equity-based compensation;

adjusted EBITDA does not reflect the impact of tax payments that may represent a reduction in cash available to us;

adjusted EBITDA does not reflect the impact of principal or interest payments required to service our capital leases or long-term debt borrowings (if any);

adjusted EBITDA does not reflect the impact of the cost of business acquisitions on the cash available to us;

adjusted EBITDA does not reflect the impact of non-recurring items, such as the costs associated with reductions in workforce, on the cash available to us; and

other companies, including companies in our industry, may calculate adjusted EBITDA differently, which reduces its usefulness as a comparative measure.

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

	Year Ended December 31,				
	2018	2017	2016	2015	2014
	(in thousands)				
Reconciliation of Adjusted EBITDA:					
Net loss	\$(7,555)	\$(9,777)	\$(10,740)	\$(3,474)	\$(12,931)
Provision for income taxes	616	1,100	1,219	239	4,821
Interest expense	338	433	318	245	218
Other expense	212	2	42	16	28
Depreciation and amortization	9,832	9,820	9,235	6,901	5,126
Capitalized software impairment	552	256	334	—	—
Stock-based compensation expense	1,804	2,490	2,771	3,115	3,595
Gain on sale of investment	—	(1,987)	—	—	—
Loss in equity interest	—	—	—	73	1,063
Gain on sale of domain	—	—	—	—	(1,000)
Restructuring Costs	1,111	—	—	—	1,260
Acquisition costs	—	—	—	478	—
Certain legal expenses*	1,400	—	—	—	—
Certain professional services fees†	154	—	—	—	—
Adjusted EBITDA	\$8,464	\$2,337	\$3,179	\$7,593	\$2,180

*“Certain legal expenses” includes legal fees and other related expenses associated with legal proceedings outside the ordinary course of our business, including the class action securities litigation, and arbitration costs related to the dissolution of a former joint venture.

†“Certain professional services fees” includes fees and expenses related to merger and acquisition activities.

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

The following discussion of our results of operations and financial condition should be read in conjunction with the information set forth in "Selected Financial Data" and our financial statements and the notes thereto included in this Annual Report on Form 10-K. This discussion contains forward-looking statements based upon our current expectations, estimates and projections that involve risks and uncertainties. Actual results could differ materially from those anticipated in these forward-looking statements due to, among other considerations, the matters discussed under "Risk Factors" and "Special Note Regarding Forward-Looking Statements."

Overview

We generate search and digital advertising revenue from consumer traffic on our Managed Portals and Advertising solutions, which we collect from our search partner, Google Inc., or Google, our advertising network providers and directly from advertisers. We typically share a portion of this Managed Portals and Advertising revenue with our customers. Growth in this portion of our business is dependent on expansion of relationships with our existing customers and new customers adopting our Managed Portals and Advertising solutions and increased engagement by their consumers with these solutions.

We also generate revenue from our recurring and fee-based revenue solutions for the use of our technology, email and messaging, premium services and paid content. We generate this revenue in the form of licensing fees including perpetual licenses, subscription licenses, maintenance and support fees and professional services. As we expand our Cloud ID, syndicated content, Email/Collaboration and other premium services offerings, we expect to generate increased recurring and fee-based revenue from our customers.

As we obtain new customers and those new customers introduce our Managed Portals and Advertising solutions to their consumers, and as new customers migrate their consumers from their existing technology to our technology over a period of time, we expect usage of our solutions and revenue from those Managed Portals and Advertising solutions to increase. Moreover, a new customer may initially launch a selection of our services and products, rather than our entire suite of offerings and subsequently broaden their service and product offerings over time. When a customer launches a new service or product, marketing and promotional activities may be required to generate awareness and interest among consumers.

Revenue attributable to our customers includes the recurring and fee-based revenue earned directly from them, as well as the Managed Portals and Advertising revenue generated through our relationships with our search and digital advertising partners (such as Google for search advertising and advertising networks, advertising agencies and advertisers for digital advertising). This revenue is attributable to our customers because it is produced from the traffic on our Managed Portals. These search and advertising partners provide us with advertisements that we then deliver with search results and other content on our Managed Portals. Since our search advertising partner, Google, and our advertising network partners generate their revenue by selling those advertisements, we create a revenue stream for these partners. In 2018, search revenue through our relationship with Google generated \$19.0 million, or approximately 13% of our revenue, compared to 2017, which generated \$20.1 million, or approximately 14% of our revenue. In 2018, our Managed Portals and Advertising solutions and other services revenue generated by our partnership with one customer accounted for \$41.9 million, or approximately 29% of our revenue, compared to 2017, which generated \$25.4 million, or approximately 18% of our revenue.

Financial Highlights

Highlights and significant developments for the twelve months ended December 31, 2018

Revenue was \$143.9 million, a 3% increase over the prior year

Operating expenses, exclusive of depreciation and amortization, decreased 3% from the prior year to \$68.1 million

Net loss decreased 23% from the prior year to \$7.6 million

Loss per share was \$0.19 compared to \$0.27 for 2017

Cash from operating activities was \$2.1 million, compared to \$0.3 million of cash used in operating activities in 2017

Adjusted EBITDA increased to \$8.5 million, up \$6.1 million from 2017

The initiatives described below under “Key Initiatives” are expected to contribute to our ability to maintain and grow revenue and return to operating profitability via increases in advertising revenue, increases in customers and our consumer reach, and increases in availability of products across more devices. We expect the period in which we experience a return on future investments in each of

these initiatives to differ. For example, more direct advertising at higher rates would be expected to have an immediate and direct impact on profitability while expansion into international markets may require an investment that involves a longer term return.

Trends Affecting Our Business

Our customers, predominantly high-speed internet service providers that also offer television services, are facing increasing competition from companies that deliver video content over the internet, more commonly referred to as “over-the-top,” or OTT. These new competitors include a number of large and growing companies, such as Google, Netflix, Inc., or Netflix, Hulu, LLC, or Hulu, and Amazon.com Inc., or Amazon. With the increased availability of high-speed internet access and over-the-top programming, consumers’ video content consumption preferences may shift away from current viewing habits.

As a result, many of our customers and potential customers are compelled to find new ways to deliver services and content to their consumers via the internet. We expect this pressure to become even greater as more video content becomes available online. We expect to continue to benefit from this trend as customers adopt our solutions to package and deliver video programming and other related authentication services on our Managed Portals.

Another trend affecting our customers and our business is the proliferation of internet-connected devices, especially mobile devices. Smartphones, tablets and connected TVs have made it more convenient for consumers to access services and content online, including television programming. To remain competitive, our customers and potential customers must have the capability to deliver their services and products to consumers on these new devices. Our technology enables them to extend their presence beyond traditional personal computers, and we expect that some portion of our revenue growth will come from traffic on these devices.

Our business is also affected by growth in advertising on the internet, for which the proliferation of high-speed internet access and internet-connected devices will be the principal drivers. We believe we have experienced a decline in search advertising revenue due to consumers’ internet searching habits increasingly transitioning to mobile devices. However, the launch of the AT&T portal has resulted in an increase in search advertising revenue. In addition, we believe there continue to be growth opportunities for advertising related to the video, images and text on our Managed Portals and hosted email/collaboration products. We expect our results of operations will benefit from the growth in the number of mobile internet users as our customers adopt our mobile and tablet offerings.

Key Initiatives

Our strategy is supported by four key pillars to drive our business, with operational discipline and sound financial footing as its base. We plan to:

- increase value for existing customers by optimizing consumer experience and monetization;
- innovate on Synacor-as-a-platform for advanced services;
- win new customers in current and related verticals; and
- extend our product portfolio into emerging growth areas.

Key Business Metrics

In addition to the line items in our financial statements, we also review various metrics to evaluate our business, determine the allocation of resources and make decisions regarding business strategies. We believe disclosing these metrics are useful for investors and analysts because they provide increased transparency and a better understand of the underlying trends in our business. The following table shows our key business metrics for December 31, 2018, 2017, and 2016.

	Year Ended December		
	31,		
	2018	2017	2016
	(in millions)		
Multiplatform Unique Visitors	224.8	223.7	208.4
Recurring Software Revenue	\$35.8	\$32.3	\$31.9

Multiplatform Unique Visitors represents the number of customers who have visited one of our Managed Portals from either mobile or desktop sources or who have viewed an advertisement through our advertising network, at least once, computed on an average monthly basis during a particular time period. As the number of Multiplatform Unique Visitors increases, we expect that we will generate additional revenue from our Managed Portals and Advertising solutions.

Recurring Software Revenue consists of fees recognized over time for the use of or access to software and services such as e-mail and messaging, security, Cloud ID, and other paid content. As Recurring Software Revenue increases, we expect an increasing base of predictable revenue.

Components of our Results of Operations

Revenue

We derive our revenue from two categories: revenue generated from search and digital advertising activities and recurring and fee-based revenue, each of which is described below. The following table shows the revenue in each category, both in amount and as a percentage of revenue, for 2018, 2017 and 2016.

	Year Ended December 31,					
	2018		2017		2016	
	(in thousands)					
Revenue:						
Search and digital advertising	\$87,461		\$83,556		\$74,889	
Recurring and fee-based	56,418		56,471		52,484	
Total revenue	\$143,879		\$140,027		\$127,373	
Percentage of revenue:						
Search and digital advertising	61	%	60	%	59	%
Recurring and fee-based	39		40		41	
Total revenue	100	%	100	%	100	%

Search and Digital Advertising Revenue

We use internet advertising to generate revenue from the traffic on our Managed Portals and Advertising solutions, categorized as search advertising and digital advertising.

In the case of search advertising, we have a revenue-sharing relationship with Google, pursuant to which we include a Google-branded search tool on our Managed Portals. When a consumer makes a search query using this tool, we deliver the query to Google and they return search results to consumers that include advertiser-sponsored links. If the consumer clicks on a sponsored link, Google receives payment from the sponsor of that link and shares a portion of that payment with us. The net payment we receive from Google is recognized as revenue.

Digital advertising includes video, image and text advertisements delivered on one of our Managed Portals, or in the case of syndicated advertising, delivered on ad space from other publishers. Advertising inventory is filled with advertisements sourced by our direct sales force, independent advertising sales representatives and advertising network partners. Revenue is generated for us when an advertisement displays, otherwise known as an impression, or when consumers view or click an advertisement, otherwise known as an action. Digital advertising revenue is calculated on a cost per impression or cost per action basis. Revenue is recognized based on amounts received from advertising customers as the impressions are delivered or the actions occur, according to contractually-determined rates.

Recurring and Fee-Based Revenue

Recurring and fee-based revenue includes subscription fees and other fees that we receive from customers for the use of our proprietary technology, including the use of, or access to, email, Cloud ID, security services, games and other premium services and paid content. Revenue for services such as Cloud ID, security services, games and other premium services and paid content is recognized as the service is being offered or consumed. Based on our agreements with our customers, our fees are generally determined by multiplying a per-subscriber per-month fee by the number of subscribers using the particular services being offered or consumed. In other cases, the fee is fixed.

Revenue is also recognized from the licensing and distribution of our Email/Collaboration products and services, including perpetual licenses. Revenue from perpetual licenses is recognized upon transfer of control of the license.

Our perpetual licenses agreement generally contain an obligation to provide support to the customer. We recognize the associated support revenue ratably over the service period. Our subscription licenses generally contain an obligation to provide support to the customer as well. We recognize the revenue associated with subscription licenses in the same manner as our perpetual licenses such that revenue associated with the license is recognized upon transfer of control, and the revenue associated with support is recognized ratably over the service period. Refer to our critical accounting policy Revenue Recognition (below), for more details.

Costs and Expenses

Cost of Revenue

Cost of revenue consists primarily of revenue sharing, content acquisition costs, co-location facility costs, royalty costs, and product support costs. Revenue sharing consists of amounts accrued and paid to customers for the internet traffic on Managed Portals we operate on our customers' behalf and where we are the primary obligor, resulting in the generation of search and digital advertising revenue. The revenue-sharing agreements with customers are primarily variable payments based on a percentage of the search and digital advertising revenue. Content-acquisition agreements may be based on a fixed payment schedule, on the number of subscribers per month, or a combination of both. Fixed-payment agreements are expensed on a straight-line basis over the term defined in the agreement. Agreements based on the number of subscribers are expensed on a monthly basis. Co-location facility costs consist of rent and operating costs for our data center facilities. Royalty costs consist of amounts due to other parties for the license of our email software with third party technology enabled. Product support costs consist of employee and operating costs directly related to our maintenance and professional services support.

Technology and Development

Technology and development expenses consist primarily of compensation-related expenses incurred for the research and development of, enhancements to, and maintenance and operation of our products, equipment and related infrastructure. Technology and development expenses also include certain costs of operating data centers.

Sales and Marketing

Sales and marketing expenses consist primarily of compensation-related expenses to our direct sales and marketing personnel, as well as costs related to advertising, industry conferences, promotional materials and other sales and marketing programs. Advertising cost is expensed as incurred.

General and Administrative

General and administrative expenses consist primarily of compensation-related expenses for executive management, finance, accounting, human resources, professional fees and other administrative functions.

Depreciation and Amortization

Depreciation and amortization includes depreciation and amortization of our computer hardware and software, including our capitalized internally-developed software, furniture and fixtures, intangible assets, leasehold improvements and other property, as well as depreciation on capital leased assets.

Other Expense

Other expense consists primarily of changes in valuation of contingent consideration we expect to receive, foreign exchange gains and losses, net of interest income earned.

Interest Expense

Interest expense primarily consists of interest on bank debt and capital leases.

Gain on Sale of Investment

We sold our \$1.0 million investment in the preferred stock of Blazer & Flip Flops, Inc. during 2017, recognizing a gain of \$2.0 million on the sale.

Provision for Income Taxes

Income tax provision consists of federal and state income taxes in the United States and taxes in certain foreign jurisdictions, as well as any changes to deferred tax assets or liabilities, and deferred tax valuation allowances. Our income tax provision also includes amounts withheld for payment of income taxes upon payment of our invoices by our customers in certain foreign jurisdictions. Those amounts increase the amount of our foreign tax credit which would defray our U.S. tax liability if we were presently a U.S. taxpayer. However, because the deferred income tax assets relating to our federal tax attributes, including our foreign tax credits, are fully

reserved, any such foreign tax withholdings are charged to our income tax provision. Such amounts paid may be carried forward to offset future federal income tax liabilities for a period of ten years. Finally, we record a deferred income tax provision to reflect the recognition of deferred tax liabilities relating to goodwill and certain intangible assets that cannot be predicted to reverse for book purposes during our loss carry-forward periods.

Critical Accounting Policies

The preparation of consolidated financial statements in conformity with U.S. GAAP requires estimates and assumptions that affect the reported amounts and classifications of assets and liabilities, revenue and expenses, and the related disclosures of contingent liabilities in the financial statements and accompanying notes. The SEC has defined a company's critical accounting policies as the ones that are most important to the portrayal of the company's financial condition and results of operations, and which require the company to make its most difficult and subjective judgments, often as a result of the need to make estimates of matters that are inherently uncertain. Based on this definition, we have identified the following critical accounting policies and estimates addressed below. We also have other key accounting policies, which involve the use of estimates, judgments, and assumptions that are significant to understanding our results. See Note 1, The Company and Summary of Significant Accounting Policies, of the Notes to the Consolidated Financial Statements. Although we believe that our estimates, assumptions, and judgments are reasonable, they are based upon information available at the time. Actual results may differ significantly from these estimates under different assumptions, judgments or conditions.

Revenue Recognition

In May 2014, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update ("ASU") No. 2014-09, Revenue from Contracts with Customers (Topic 606), which modifies how all entities recognize revenue, and consolidates revenue recognition guidance into one ASC Topic (ASC Topic 606, Revenue from Contracts with Customers) ("ASC 606"). We adopted ASC 606 on January 1, 2018. Revenue is recognized when control of the promised goods or services is transferred to our customers, in an amount that reflects the consideration we expect to be entitled to in exchange for those goods or services.

The terms of our arrangements with our customers, Google and our advertising network partners are specified in written agreements. These written agreements constitute the persuasive evidence of the arrangements with our customers that are a pre-condition to the recognition of revenue. The arrangements are generally based on the number of impressions delivered or the number of actions, such as clicks, taken by users. For contracts that are based on actions taken by users, revenue is recognized when a user clicks on an ad. For contracts that are based on impressions, revenue is recognized when a user has clicked on the ad for contracts that are based on actions taken by users. Revenue is recognized from the display of impression-based ads in the contracted period in which the impressions are delivered. Impressions are generally considered delivered when an ad is displayed to a user. Occasionally, a customer will notify us of subsequent adjustments to previously reported subscriber data. These adjustments, once accepted by us, will result in adjustments to revenue and cost of revenue. The historical occurrences of such adjustments, and the amounts involved, have not been significant.

Although transition prices used in our revenue recognition formulas are generally fixed pursuant to the written arrangements with our customers, Google and our advertising network partners, the number of subscribers or the amount of search and digital advertising revenue that are subject to our pricing arrangements are not known until the reporting period has ended. Although this data is, in most cases, available prior to the completion of our periodic financial statements, this data may need to be estimated. When made, these estimates are based upon our historical experience with the relevant party. Adjustments to these estimates have historically not been significant. The receipt of this volume data also serves to verify that we have appropriately satisfied our obligation to our customers for that reporting period. Adjustments are recorded in the period in which the data is received.

We periodically enter into multiple-element service arrangements that include license fees, support fees, and, in certain cases, other professional services. These contracts include multiple promises that we evaluate to determine if the promises are separate performance obligations. Performance obligations are identified based on services to be transferred to a customer that are both capable of being distinct and are distinct within the context of the contract. Once we determine the performance obligations, we determine the transaction price, which includes estimating the amount of variable consideration to be included in the transaction price, if any. We then allocate the transaction price to each performance obligation in the contract based on a relative stand-alone selling price (SSP) method. The transaction price post-allocation is recognized as revenue as the related performance obligation is satisfied. Judgment is required to determine the SSP for each distinct performance obligation. We use a single amount to estimate SSP for items that are not sold separately, including on-premises licenses sold with support. In instances where SSP is not directly observable, such as when we do not sell the product or service separately, we determine the SSP using information that may include market conditions and other observable inputs.

Revenue Sharing

We pay our Managed Portals and Advertising customers a portion of the revenue generated from search and digital advertising. The portion paid to our customers depends on, among other things, the consumer base of the customer and their expected ability to drive consumer traffic to our Managed Portals. This revenue consists of the consideration we receive from Google and our digital advertising partners in connection with traffic supplied by the applicable customer.

Gross Versus Net Presentation of Revenue for Revenue Sharing

For the sale of third-party goods and services, we evaluate whether we are the principal, and report revenue on a gross basis, or an agent, and report revenue on a net basis. In this assessment, we consider if we obtain control of the specified goods or services before they are transferred to the customer, as well as other indicators such as the party primarily responsible for fulfillment, inventory risk, and discretion in establishing price.

Stock-Based Compensation

We account for stock-based compensation in accordance with the authoritative guidance on stock compensation. Under the fair value recognition provisions of this guidance, stock-based compensation is measured at the grant date based on the fair value of the award and is recognized as expense, net of estimated forfeitures, over the requisite service period, which is generally the vesting period of the respective award. As a result, we are required to estimate the amount of stock-based compensation we expect to be forfeited based on our historical experience. If actual forfeitures differ significantly from our estimates, stock-based compensation expense and our results of operations could be materially impacted. Determining the fair value of stock-based awards at the grant date requires judgment. We use the Black-Scholes option-pricing model to determine the fair value of stock options. The determination of the grant date fair value of options using an option-pricing model is affected by our common stock fair value as well as assumptions regarding a number of other complex and subjective variables. These variables include the fair value of our common stock, our expected stock price volatility over the expected term of the options, stock option exercise and cancellation behaviors, risk-free interest rates, and expected dividends, which are estimated as follows:

Expected Term - The expected term was estimated using the simplified method allowed under SEC guidance. As we develop more experience, our estimate of the life of awards may change.

Volatility - Expected stock price volatility for our common stock was estimated by blending our average historic price volatility with that of our industry peers based on daily price observations over a period equivalent to the expected term of the stock option grants. Industry peers consist of several public companies in the technology industry, some larger and some similar in size, stage of life cycle and financial leverage. We did not rely on implied volatilities of traded options in our industry peers' common stock because the volume of activity was relatively low. We intend to continue to consistently apply this process using the same or similar public companies until a sufficient amount of historical information regarding the volatility of our own common stock share price becomes available, enabling us to give greater weight to our own experience, or unless circumstances change such that the identified companies are no longer similar to us, in which case, more suitable companies whose share prices are publicly available would be utilized in the calculation.

Risk-free Rate - The risk-free interest rate is based on the yields of U.S. Treasury securities with maturities similar to the expected term of the options for each option group.

Dividend Yield - We have never declared or paid any cash dividends and do not presently plan to pay cash dividends in the foreseeable future. Additionally, our loan and security agreement with Silicon Valley Bank restricts our ability

to pay any dividends. See “Management’s Discussion and Analysis of Financial Condition and Results of Operations—Liquidity and Capital Resources.” Accordingly, we used an expected dividend yield of zero.

Income Taxes

We record income taxes using the asset and liability method, which requires the recognition of deferred tax assets and liabilities for the expected future tax consequences of events that have been recognized in our financial statements or tax returns. In estimating future tax consequences, generally all expected future events other than enactments or changes in the tax law or rates are considered. Valuation allowances are provided when necessary to reduce deferred tax assets to the amount expected to be realized. The recorded balances of deferred tax assets and liabilities are adjusted for changes in tax rates (such as those enacted by the United States federal government in December 2017) upon enactment of the changes.

We provide reserves as necessary for any uncertain tax positions taken on our tax filings. First, we determine if a tax position is more likely than not to be sustained upon audit solely based on technical merits, including resolution of related appeals or litigation processes, if any. Second, based on the largest amount of benefit, which is more likely than not to be realized on ultimate settlement

we recognize any such differences as a liability. In the event that any unrecognized tax benefits are recognized, the effective tax rate will be affected. Although we believe our estimates are reasonable, no assurance can be given that the final tax outcome of these matters will be the same as these estimates. These estimates are updated quarterly based on factors such as changes in facts or circumstances, changes in tax law, new audit activity, and effectively settled issues.

We follow specific and detailed guidelines in each tax jurisdiction regarding the recoverability of any tax assets recorded on the balance sheet and provide necessary valuation allowances as required. Future realization of deferred tax assets ultimately depends on the existence of sufficient taxable income of the appropriate character (for example, ordinary income or capital gain) within the carryback or carryforward periods available under the tax law. We regularly review our deferred tax assets for recoverability based on historical taxable income, projected future taxable income, the expected timing of the reversals of existing temporary differences and tax planning strategies. Our judgments regarding future profitability may change due to many factors, including future market conditions and our ability to successfully execute our business plans and/or tax planning strategies. Should there be a change in our ability to recover our deferred tax assets, our tax provision would increase or decrease in the period in which the assessment is changed.

Results of Operations

The following tables set forth our results of operations for the periods presented in amount and as a percentage of revenue for those periods. The period to period comparison of financial results is not necessarily indicative of future results.

	Year Ended December 31,		
	2018 (3)	2017	2016
	(in thousands)		
Revenue	\$143,879	\$140,027	\$127,373
Costs and operating expenses:			
Cost of revenue (1)	72,547	70,053	59,146
Technology and development (1)(2)	24,510	27,642	25,612
Sales and marketing (2)	24,116	24,941	22,846
General and administrative (1)(2)	19,454	17,800	19,695
Depreciation and amortization	9,641	9,820	9,235
Total costs and operating expenses	150,268	150,256	136,534
Loss from operations	(6,389)	(10,229)	(9,161)
Gain on sale of investment	—	1,987	—
Interest expense	(338)	(433)	(318)
Other expense	(212)	(2)	(42)
Loss before income taxes	(6,939)	(8,677)	(9,521)
Provision for income taxes	616	1,100	1,219
Net loss	\$(7,555)	\$(9,777)	\$(10,740)

	Year Ended December 31,		
	2018	2017	2016
	%		
Revenue	100 %	100 %	100 %
Costs and operating expenses:			
Cost of revenue (1)	50	50	46
Technology and development (1)	17	19	20
Sales and marketing	17	18	18
General and administrative (1)	14	13	16
Depreciation and amortization	7	7	7
Total costs and operating expenses	105	107	107
Loss from operations	(5)	(7)	(7)
Gain on sale of investment	—	1	—
Interest expense	—	—	—
Other expense	—	—	—
Loss before income taxes	(5)	(6)	(7)
Provision for income taxes	—	1	1
Net loss	(5)%	(7)%	(8)%

Notes:

(1) Exclusive of depreciation and amortization shown separately.

(2) Includes stock-based compensation as follows:

	Year Ended December		
	2018	2017	2016
	(in thousands)		
Technology and development	\$489	\$744	\$921
Sales and marketing	474	636	784
General and administrative	841	1,110	1,066
	\$1,804	\$2,490	\$2,771

(3) Results for 2018 include the impact of the adoption new accounting standard in fiscal year 2018 related to revenue recognition. Refer to Note 1, The Company and Summary of Significant Accounting Policies, of the Notes to the Consolidated Financial Statements referred to in Item 8 of this report for additional information.

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Comparison of Years Ended December 31, 2018, 2017 and 2016

Revenue

	Year Ended December 31,			2017 to	2016 to
	2018 (3)	2017	2016	2018	2017
	(in thousands)			%	%
				Change	Change
Revenue:					
Search and digital advertising	\$87,461	\$83,556	\$74,889	5 %	12 %
Recurring and fee-based	\$56,418	56,471	52,484	—	8 %
Total revenue	\$143,879	\$140,027	\$127,373	3 %	10 %
Percentage of revenue:					
Search and digital advertising	61 %	60 %	59 %		
Recurring and fee-based	39				