

**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, 2019

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	16-1542712
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

40 La Riviere Drive, Suite 300	14202
Buffalo,	(Zip Code)
New York	
(Address of principal executive offices)	

Registrant's telephone number, including area code: (716) 853-1362

Title of each class	Securities registered pursuant to Section 12(b) of the Act:	Name of each exchange on which registered
Common Stock, \$0.01 Par Value (voting)	Trading Symbol(s) SYNC	The Nasdaq Stock Market LLC (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 whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	<input type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input checked="" type="checkbox"/>	Smaller reporting company	<input checked="" type="checkbox"/>
		Emerging growth company	<input type="checkbox"/>

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

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

Based on the closing price of the registrant's common stock on the last business day of the registrant's most recently completed second fiscal quarter, which was June 28, 2019, the aggregate market value of its shares held by non-affiliates was approximately \$49.9 million, based on the last reported sale price of the registrant's common stock on the Nasdaq Global Market.

As of March 3, 2020, there were 39,288,515 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 2020 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, 2019.

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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,” “targets,” “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.

PART I

ITEM 1. BUSINESS

Our Business

We are a digital technology company that provides email and collaboration software, cloud-based identity management platforms, managed web and mobile portals, and advertising solutions. Our customers include communications providers, media companies, government entities and enterprises. We are their trusted partner for enterprise software platforms and monetization solutions that we deliver through public and private cloud software-as-a-service, software licensing, and professional services. Our platforms enable our clients to deepen engagement with their consumers and users.

Products and Services

Cloud ID Authentication

Synacor develops and operates a cloud-based identity and access management platform for large enterprises that runs authentication, user lifecycle management and identity security for our customer's end users when they need to sign-in to online applications and access their services with networked devices.

Consumers access their online services and subscription content using a myriad of devices where many find the login process frustrating. Enterprises are challenged to handle the digital identities of tens of millions of consumers and resiliently unlock access during online events that require thousands of verifications per second, often breaking under the load.

Synacor Cloud ID managed identity services resiliently scale to handle the largest enterprises without requiring customers to install on-premises identity management systems. Cloud ID simplifies the end user experience by offering native single sign on, home-based authentication and device management to reduce login friction and improve security.

Email/Collaboration

Our open and extensible Email/Collaboration platform is used by service providers, regulated entities (government & financial institutions), enterprises, and small and medium sized businesses around the world. Branded as Zimbra, our open-standards-based Email/Collaboration platform powers hundreds of millions of mailboxes globally through our network of over 1,900 channel partners (value-added resellers, or VARs, and Business Service Providers, or BSPs) and about 4,000 licensed customers. Zimbra is delivered as software-as-a-service through public and private cloud infrastructure, and as licensed software. Our Email/Collaboration Services include white-label hosting, security and migration.

Managed Portals and Advertising

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

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 two of the top four OTT players including Sling TV and YouTube TV, simplifying the consumer log-in experience.

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 2019, Synacor added 380 new Zimbra Email and Collaboration Suite enterprise and government customers around the world.

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.

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

Our products leverage technology that is reliable, fault tolerant and scalable through the addition of more servers as usage grows. In 2019 we invested heavily in providing these same capabilities using public cloud technologies. In addition to the existing reliable/fault tolerant infrastructure, cloud technologies enable us to provide self-healing software, auto-scaling, and automated deployments.

Data Center Facilities

We currently operate and maintain five 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; 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 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, 2019, 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.

Our Managed Portals and Advertising customers principally consist of high-speed internet service providers, such as Windstream, Mediacom and CenturyLink. 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.

Content and Service Providers

We license the content available in our Managed Portals, as well as premium services, from numerous third-party content and service partners. These partners provide a variety of content, including news and information, entertainment, video, games, shopping, travel, and finance. Our relationships with content providers give consumers access to over five hundred thousand articles and one million short-form videos each month. To obtain this content, we enter into a variety of licensing arrangements with the content providers. These arrangements are typically one to two 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 that subscribers may purchase for additional fees. As of December 31, 2019, we had arrangements with dozens of content providers, such as The Associated Press, AOL, Gracenote, The Sporting News and Video Elephant.

Sales and Marketing

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 more than 2,500 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.

Managed Portals and Advertising Solutions

Synacor’s managed portal network and publisher-focused advertising platform reaches over 200 million monthly unique visitors. Our advertising solutions enable our customers to earn incremental revenue by monetizing media from their consumers across all popular devices.

Our advertising sales team sells advertising inventory directly to advertisers and/or to advertising agencies representing those advertisers, as well as employing programmatic ad monetization strategies utilizing ad exchanges via real-time bidding. 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 as well as on our syndicated group of publishers’ sites. We have a team of direct advertising sales employees, independent advertising sales representatives, and programmatic ad specialists 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, 2019, we had arrangements with over 100 advertising partners such as Rubicon, AppNexus, Comcast Spotlight, Criteo, DoubleClick, Progressive Insurance, and Telaria.

Managed Portals

Our managed portal network consists of white-labeled browser start pages and iOS/Android start apps that serve as daily destinations for consumers. Powered by our media and programming library which includes news, entertainment, and short and long form video, these products increase consumer engagement and generate advertising revenue. They also provide consumers with self-management capabilities for email and messaging, bill paying and other account management activities.

Syndicated Advertising

Synacor's syndicated advertising platform works with hundreds of publishers to deliver brand-safe monetization that leverages scale, premium brands and programmatic technology across desktop and mobile. We help publishers dynamically target different audiences by matching relevant content to the right users across multiple devices. Publishers also leverage our demand facilitation services to connect premium advertisers and brands with their target audiences on brand-safe sites.

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 Kingdom, and 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") took effect on January 1, 2020 and requires 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. It remains unclear how the legislation will be interpreted. The California Attorney General's office will enforce the statute as of July 1, 2020.

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 initially certified compliance with the EU-US Privacy Shield in December 2016 and the Swiss-U.S. Privacy Shield in June 2017 and renew our certifications on an annual basis, 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.

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-phishing, 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.

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.

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; 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 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.

Employees

As of December 31, 2019, we had 257 employees in the United States and 153 based internationally. Of these employees, 320 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 Portal and Advertising customer could negatively affect our financial performance.

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 investments in features and functionality for our technology that are designed to drive consumer engagement. 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.

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. 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. For 2019, revenue attributable to one customer exceeded 10% of our total revenue, and accounted for approximately 13% of our revenue, or \$16.4 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.

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. 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 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 increase 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.

Our Managed Portals solutions has suffered a loss of users, which may adversely affect our Portal business.

The number of active portal users has declined consistently for several years, and may further contract in the future.

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, or acquire new consumer electronics devices 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.

Furthermore, 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. 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 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.

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.

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, 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.

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.

We have significant 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. 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, they may 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 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 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.

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, 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 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.

We rely, to a significant degree, on indirect sales channels for the distribution of our Software 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.

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 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 requires 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. 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.

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

We have reported annual pre-tax net losses since 2013. Over the years, we have taken cost saving measures, including reductions in workforce. However, our expenses have increased and may continue to 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 our solutions, acquisitions of complementary businesses, 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. 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.

Our ability to use our net operating loss carryforwards and certain other tax attributes may be limited.

As of December 31, 2019 our cumulative U.S. federal net operating loss carryforward was \$48.2 million. A failure to achieve or maintain profitability may adversely affect 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.

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.

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.

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;
- 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.

International operations are subject to the economic, political, regulatory, foreign exchange and other risks of international operations.

We derive a portion of our revenue from, and have operations, outside of the United States. Revenue from customer outside of the United States was 18% of total revenue in 2019. We plan to continue to expand our product offerings internationally, particularly in Asia, Canada, Latin America and Europe.

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 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 and similar foreign laws 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 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. 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 our 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, terminate their agreements with us, all of which would have an adverse effect on our business.

System failures, security breaches, computer viruses 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 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 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. 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.

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. If we were forced to relocate to an alternate site and to rely on our system back-ups to restore the systems, we could 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.

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.

Our future success also depends on our ability to identify, attract and retain highly skilled technical, managerial, finance, marketing and creative personnel. 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 company 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.

We may expand our business through acquisitions of, mergers with, 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.

As part of our growth strategy, we may decide to pursue acquisitions of, mergers with, 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 or prove not to be successful.

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;
- 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. 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.

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 and internationally. 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 material 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. From time to time, we have been subject to claims that the presentation of certain licensed content on our Managed Portals infringes certain patents of various third parties, 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, could result in us or our customers having to enter into licenses with the claimants and could cause us to incur additional costs or experience reduced revenue. 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. 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.

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.

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. 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 have concluded that we have remediated these material weaknesses as of December 31, 2019. For more information about these material weaknesses and our remediation efforts, see Item 9A. “Controls and Procedures.”

If we fail to maintain our remediated internal control environment, investors and other users of our financial statements could lose confidence in the reliability of our financial information. We could be obligated to incur additional costs to improve our internal controls, which may adversely affect our reputation and its operating prospects. Further, if additional material weaknesses or significant deficiencies in our internal controls are discovered or occur in the future, 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.

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.

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 burden.

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 went into effect on January 1, 2020, requires 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. 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 may 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 the Merger

Qumu shareholders will receive a fixed ratio of 1.61 shares of Synacor common stock for each share of Qumu common stock regardless of any changes in market value of Qumu common stock or Synacor common stock before the completion of the merger.

At the effective time of the merger, each share of Qumu common stock will be converted into the right to receive 1.61 shares of Synacor common stock. There will be no adjustment to the exchange ratio (except for adjustments to reflect the effect of any stock split, reverse stock split, stock dividend, reorganization, recapitalization, reclassification or other like change with respect to Synacor common stock or Qumu common stock), and the parties do not have a right to terminate the merger agreement based upon changes in the market price of either Synacor common stock or Qumu common stock. The respective market value of Synacor's and Qumu's common stock since the announcement of the merger has fluctuated and may continue to fluctuate as a result of a variety of factors, including general market and economic conditions and changes in Synacor's or Qumu's businesses, operations and prospects. Many of these factors are outside the control of Synacor and Qumu.

The market value of Synacor common stock at the time of completion of the merger may be lower or higher than the closing price of Synacor common stock on the last full trading day preceding the public announcement of the proposed merger on February 11, 2020 (the date that Synacor and Qumu entered into the merger agreement), the last full trading day prior to the date that the joint proxy statement/prospectus is filed with the SEC, or the last full trading day prior to the date of Synacor's and Qumu's shareholder meetings. Moreover, completion of the merger may occur some time after the requisite shareholder approvals have been obtained. Consequently, at the time Qumu shareholders must decide whether to approve the merger agreement, they will not know the market price of the Synacor common stock they will receive and the market price of the Qumu common stock they will surrender when the merger is actually consummated. The value of the Synacor common stock received by Qumu shareholders will depend on the market price of the Synacor common stock at that time the merger occurs, and the value of the Qumu common stock surrendered by Qumu shareholders will depend on the market price of the Qumu common stock at that time.

The issuance of shares of Synacor common stock to Qumu shareholders in the merger will substantially reduce the percentage interests of Synacor stockholders.

If the merger is completed, Synacor stockholders are expected to own approximately 64.4% of the outstanding shares of Synacor common stock and former Qumu shareholders are expected to own approximately 35.6% of the outstanding shares of Synacor common stock following the completion of the merger. The issuance of shares of Synacor common stock to Qumu shareholders in the merger will cause a significant reduction in the relative percentage interest of current Synacor stockholders in earnings, voting, liquidation value and book and market value.

Whether or not the merger is completed, the announcement and pendency of the merger could impact or cause disruptions in the businesses of Qumu and Synacor, which could have an adverse effect on the businesses and operating results of Qumu and Synacor.

Whether or not the merger is completed, the announcement and pendency of the merger could cause disruptions in or otherwise negatively impact the businesses and operating results of Qumu and Synacor, including among others:

- Qumu and Synacor employees may experience uncertainty about their future roles with the combined company, which might adversely affect Qumu's and Synacor's ability to retain and hire key personnel and other employees;
- the attention of Qumu's and Synacor's management may be directed toward completion of the merger and transaction-related considerations and may be diverted from the day-to-day operations and pursuit of other opportunities that could have been beneficial to the businesses of Qumu and Synacor; and
- customers, channel partners, vendors or suppliers may seek to modify or terminate their business relationships with Qumu or Synacor, or delay or defer decisions concerning Qumu's or Synacor's products or services or seek alternatives to the products or services offered by Qumu or Synacor.

These disruptions could be exacerbated by a delay in the completion of the merger or termination of the merger agreement and could have an adverse effect on the businesses, operating results or prospects of Qumu and Synacor if the merger is not completed or the business, operating results or prospects of the combined company if the merger is completed.

Failure to successfully integrate the businesses of Synacor and Qumu in the expected time-frame may adversely affect the combined company's future results.

Synacor and Qumu entered into the merger agreement with the expectation that the merger will result in various benefits, including certain cost savings and operational efficiencies or synergies. To realize these anticipated benefits, the businesses of Synacor and Qumu must be successfully integrated. Historically, Synacor and Qumu have been independent companies, and they will continue to be operated as such until the completion of the merger. The integration may be complex and time consuming and may require substantial resources and effort. The management of the combined company may face significant challenges in consolidating the operations of Synacor and Qumu, integrating the two companies' technologies, procedures, and policies, as well as addressing the different corporate cultures of the two companies. If the companies are not successfully integrated, the anticipated benefits of the merger may not be realized fully or at all, or may take longer to realize than expected.

Customer uncertainties related to the merger could adversely affect the businesses, revenues and gross margins of Synacor and the combined company.

In response to the announcement of the merger or due to ongoing uncertainty about the merger, customers of Synacor or Qumu may delay or defer purchasing decisions or elect to switch to other suppliers. In particular, prospective customers could be reluctant to purchase the products and services of Synacor or the combined company due to uncertainty about the direction of the combined company's offerings and willingness to support existing products. To the extent that the merger creates uncertainty among those persons and organizations contemplating purchases such that customers delay, defer or change purchases in connection with the planned merger, the revenues of Synacor or the combined company would be adversely affected. Customer assurances may be made by Synacor and Qumu to address their customers' uncertainty about the direction of the combined company's product and related support offerings, which may result in additional obligations of Synacor or the combined company. As a result of any of these actions, quarterly revenues and other operating results of the combined company could be substantially below expectations of market analysts and a decline in the companies' respective stock prices could result.

Provisions of the merger agreement may deter alternative business combinations and could negatively impact the stock prices of Synacor and Qumu if the merger agreement is terminated in certain circumstances.

In connection with the execution and delivery of the merger agreement, each of Qumu and Synacor agreed to immediately cease all existing activities, discussions or negotiations with any persons previously conducted with respect to certain acquisition proposals and acquisition transactions relating to Qumu and Synacor. The merger agreement prohibits Synacor and Qumu from soliciting, initiating, or knowingly encouraging or facilitating certain acquisition proposals with any third party, subject to exceptions set forth in the merger agreement. The merger agreement does not allow either Qumu or Synacor to terminate the merger agreement solely due to the receipt of an alternative acquisition proposal. The merger agreement also provides for the payment by Synacor of a termination fee of \$2.0 million if the merger agreement is terminated in certain circumstances (relating to, among other things, certain breaches of Synacor's no-shop obligations, failure by the Synacor board to recommend the merger, and failure by Synacor to bring the merger before a vote to the stockholders) in connection with a competing third party acquisition proposal for Synacor and for the payment by Qumu of a termination fee of \$2.0 million if the merger agreement is terminated in certain circumstances (relating to, among other things, certain breaches of Qumu's no-shop obligations, failure by the Qumu board to recommend the merger, and failure by Qumu to bring the merger before a vote to the stockholders) in connection with a competing third party acquisition proposal for Qumu. These provisions limit our ability to pursue offers from third parties that could result in greater value to Synacor stockholders. The obligation to pay the termination fee also may discourage a third party from pursuing an acquisition proposal. If the merger agreement is terminated and we determine to seek another business combination, we cannot assure our stockholders we they will be able to negotiate a transaction with another acquiror on terms comparable to the terms of the merger, or that we will avoid the termination fee associated with the termination of the merger agreement.

In the event the merger agreement is terminated by Synacor or Qumu in circumstances that obligate either party to pay the termination fee to the other party, including where either party terminates the merger agreement because the other party's board withdraws its support of the merger, our stock price may decline.

We are subject to business uncertainties and contractual restrictions while the proposed transactions are pending, which could adversely affect our business and operations.

Under the terms of the merger agreement, we are subject to certain restrictions on the conduct of our business prior to completing the merger, which may adversely affect our ability to execute certain of our business strategies, including the ability in certain cases to enter into contracts, incur indebtedness or incur capital expenditures, or otherwise pursue actions that are not in the ordinary course of business, even if such actions would be beneficial to Synacor. Such limitations could negatively affect each party's businesses, operations and financial condition prior to the completion of the merger.

If the proposed merger is not completed, we will have incurred substantial costs that may adversely affect our financial results and operations and the market price of Synacor common stock.

We have incurred and will incur substantial costs in connection with the proposed merger, even if the merger is not completed. These costs are primarily associated with the fees of our attorneys, accountants, transaction advisors, and financial advisors. Also, if the merger agreement is terminated under specified circumstances, we may be required to pay a termination fee to Qumu of \$2 million. In the event that the proposed merger is not completed, these merger related costs may adversely affect our business, operating results and financial condition, as well as the price of Synacor common stock.

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 3, 2020, approximately 25% of our outstanding common stock (including exercisable options). These stockholders, if they were to act together, would have the ability to significantly influence 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.

There can be no assurance that a 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 decide to 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.

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;
- 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 6, 2020, 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 of acquisitions of, or mergers with companies
- announcements regarding our existing customer contracts;
- 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 sales, administrative and product development offices in New York, New York; Ottawa, Ontario, Canada; Westford, Massachusetts; Frisco, Texas; Pune, India; London, United Kingdom; Tokyo, Japan; Paris, France; and Singapore. Our data centers are located in Allen, Texas; Dallas, Texas; Lewis Center, Ohio; Watertown, Massachusetts; and Toronto, Ontario, Canada.

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 were previously awaiting a decision of an arbitration tribunal following a binding arbitration that took place on July 30, 2018 between the Company and Maxit Technology Incorporated and Maxit Technology Holdings Limited, (collectively, "Maxit"), who were formerly our joint venture partner 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, interest and legal expenses. On March 18, 2019, the arbitral tribunal issued a final award finding that we had no liability to Maxit. We reversed the reserve of \$0.3 million that was previously recorded related to this arbitration during 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. The plaintiff filed an opposition to the motion to dismiss on January 19, 2019 and we filed a reply to plaintiff's opposition on February 15, 2019. On August 28, 2019, the court granted our motion to dismiss but permitted the plaintiff to seek leave to replead. On October 2, 2019, the plaintiff filed a letter application seeking the court's leave to file a third amended complaint. We filed a letter in opposition to the plaintiff's motion on October 21, 2019. The court denied plaintiff's application to file an amended complaint and ordered the case closed on November 15, 2019. The Clerk of the Court entered judgment in favor of Synacor and the individual defendants and closed the case on November 19, 2019. Plaintiff filed its Notice of Appeal on December 16, 2019. We dispute these claims and intend to defend them vigorously. Any potential liabilities related to this lawsuit are covered by D&O insurance now that we have reached 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.

Holder of Record

As of March 3, 2020, there were 93 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 2019 pursuant to Regulation 14A.

Recent Sales of Unregistered Securities

None.

Use of Proceeds

Not applicable.

Issuer Purchases of Equity Securities

None.

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, 2019, and 2018, and as of December 31, 2019 and 2018 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, 2017, 2016 and 2015 and as of December 31, 2017, 2016 and 2015 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,				
	2019 (5)	2018 (5)	2017	2016	2015 (4)
(in thousands except share and per share data)					
Consolidated Statements of Operations Data:					
Revenue	\$ 121,845	\$ 143,879	\$ 140,027	\$ 127,373	\$ 110,245
Costs and operating expenses:					
Cost of revenue (1)	61,990	73,304	70,053	59,146	54,423
Technology and development (1)(2)	18,273	23,753	27,642	25,612	20,007
Sales and marketing (2)	21,790	24,116	24,941	22,846	16,272
General and administrative (1)(2)	17,734	19,454	17,800	19,695	15,543
Depreciation and amortization	9,865	9,641	9,820	9,235	6,901
Total costs and operating expenses	129,652	150,268	150,256	136,534	113,146
Net loss	(7,807)	(6,389)	(10,229)	(9,161)	(2,901)
Gain on sale of investment	—	—	1,987	—	—
Loss before income taxes	(17)	(212)	(433)	(318)	(245)
Interest expense	(268)	(338)	(2)	(42)	(16)
Loss before income taxes	(8,092)	(6,939)	(8,677)	(9,521)	(3,162)
Provision for income taxes	929	616	1,100	1,219	239
Loss in equity interest	—	—	—	—	(73)
Net loss	\$ (9,021)	\$ (7,555)	\$ (9,777)	\$ (10,740)	\$ (3,474)
Net loss per share:					
Basic	\$ (0.23)	\$ (0.19)	\$ (0.27)	\$ (0.36)	\$ (0.12)
Diluted	\$ (0.23)	\$ (0.19)	\$ (0.27)	\$ (0.36)	\$ (0.12)
Weighted average shares used to compute net loss per share:					
Basic	39,090,239	38,895,301	36,381,299	30,251,685	28,213,838
Diluted	39,090,239	38,895,301	36,381,299	30,251,685	28,213,838
Other Financial Data:					
Adjusted EBITDA (3)	\$ 9,503	\$ 8,464	\$ 2,337	\$ 3,179	\$ 7,593

	As of December 31,				
	2019 (6)	2018 (5)	2017	2016	2015 (4)
	(in thousands)				
Consolidated Balance Sheet Data:					
Cash and cash equivalents	\$ 10,966	\$ 15,921	\$ 22,476	\$ 14,315	\$ 15,697
Accounts receivable, net	20,532	25,567	31,696	27,386	24,341
Property and equipment, net	14,948	18,707	20,505	14,406	14,377
Total assets	79,878	91,463	108,780	93,399	89,026
Long-term debt and finance lease obligations	3,258	3,695	5,815	6,996	7,581
Total stockholders' equity	43,664	51,171	54,345	39,649	46,104

Notes:

- (1) Exclusive of depreciation and amortization shown separately
- (2) Includes stock-based compensation, as follows:

	Year Ended December 31,				
	2019	2018	2017	2016	2015 (4)
	(in thousands)				
Technology and development	\$ 338	\$ 489	\$ 744	\$ 921	\$ 936
Sales and marketing	513	474	636	784	942
General and administrative	765	841	1,110	1,066	1,237
	<u>\$ 1,616</u>	<u>\$ 1,804</u>	<u>\$ 2,490</u>	<u>\$ 2,771</u>	<u>\$ 3,115</u>

- (3) We define adjusted EBITDA as net income (loss) plus: provision (benefit) for income taxes, interest expense, other (income) expense, depreciation and amortization, asset impairments, stock-based compensation, restructuring costs, and certain legal and professional fees. 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 starting in 2018 include the impact of the adoption of the new accounting standard in fiscal year 2018 related to revenue recognition, prior periods have not been restated.
- (6) Results for 2019 include the impact of the adoption of the new accounting standard in fiscal year 2019 related to leases. 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 merger or other 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 net loss to Adjusted EBITDA for each of the periods indicated:

	Year Ended December 31,				
	2019	2018	2017	2016	2015
	(in thousands)				
Reconciliation of Adjusted EBITDA:					
Net loss	\$ (9,021)	\$ (7,555)	\$ (9,777)	\$ (10,740)	\$ (3,474)
Provision for income taxes	929	616	1,100	1,219	239
Interest expense	268	338	433	318	245
Other expense, net	17	212	2	42	16
Depreciation and amortization	11,251	9,832	9,820	9,235	6,901
Long-lived asset impairment	1,751	552	256	334	—
Stock-based compensation expense	1,616	1,804	2,490	2,771	3,115
Gain on sale of investment	—	—	(1,987)	—	—
Loss in equity interest	—	—	—	—	73
Restructuring costs *	959	1,111	—	—	—
Acquisition costs	—	—	—	—	478
Certain legal expenses **	1,098	1,400	—	—	—
Certain professional services fees ***	635	154	—	—	—
Adjusted EBITDA	<u>\$ 9,503</u>	<u>\$ 8,464</u>	<u>\$ 2,337</u>	<u>\$ 3,179</u>	<u>\$ 7,593</u>

* "Restructuring costs" include severance expense, contract termination costs and other exit or disposal costs.

** "Certain legal expenses" include legal fees and other related expenses outside the ordinary course of business.

*** "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

Business Overview

Synacor is a digital technology company that provides email and collaboration software, cloud-based identity management platforms, managed web and mobile portals, and advertising solutions. Our customers include communications providers, media companies, government entities and enterprises. We are their trusted partner for enterprise software platforms and monetization solutions that we deliver through public and private cloud software-as-a-service, software licensing, and professional services. Our platforms enable our clients to deepen engagement with their consumers and users.

During the first quarter of 2019, we made changes to our reporting structure that resulted in two reportable segments: Software & Services and Portal & Advertising. A summary of the major products and services of our reportable segments follows:

Software & Services

Synacor's software and services segment is comprised of our cloud-based identity management platform and our Zimbra email & collaboration platform.

Cloud-based Identity Management

Our Cloud ID platform provides secure, scalable authentication and authorization that enables consumers to easily unlock access to content and services. It enables single sign-on access to services such as OTT video, TV Everywhere streaming video and audio, email, web access customer account information, and other consumer and enterprise apps. Cloud ID is delivered as a platform-as-a-service through public and private cloud infrastructure.

Email / Collaboration

Synacor delivers an open and extensible email & collaboration platform used by service providers, regulated entities (government & financial institutions), enterprises, and small and medium sized businesses around the world. Branded as Zimbra, our open-standards-based email collaboration platform powers hundreds of millions of mailboxes globally through our network of more than 1,900 channel partners (value-added resellers, or VARs, and Business Service Providers, or BSPs) and about 4,000 licensed customers. Zimbra is delivered as software-as-a-service through public and private cloud infrastructure, and as licensed software.

Portal & Advertising

Synacor's managed portal network and publisher-focused advertising platform reaches over 200 million monthly unique visitors. These solutions enable our customers to earn incremental revenue by monetizing media from their consumers across all popular devices.

Managed Portals

Our managed portal network consists of white-labeled browser start pages and iOS/Android start apps that serve as daily destinations for consumers. Powered by our media and programming library which includes news, entertainment, and short and long form video, these products increase consumer engagement and generate advertising revenue. They also provide consumers with self-management capabilities for email and messaging, bill paying and other account management activities.

Syndicated Advertising

Synacor's syndicated advertising platform works with hundreds of publishers to deliver brand-safe monetization that leverages scale, premium brands and programmatic technology across desktop and mobile. We help publishers dynamically target different audiences by matching relevant content to the right users across multiple devices. Publishers also leverage our demand facilitation services to connect premium advertisers and brands with their target audiences on brand-safe sites.

Financial Highlights

Highlights and significant developments for the twelve months ended December 31, 2019

- Adjusted EBITDA* increased to \$9.5 million, up from \$8.5 million in 2018
- Operating expenses, exclusive of depreciation and amortization, decreased 14% from the prior year to \$57.8 million
- Cash from operating activities was \$2.5 million, compared to \$2.1 million of cash from operating activities in 2018

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.

* We define adjusted EBITDA as net income (loss) plus: provision (benefit) for income taxes, interest expense, other (income) expense, depreciation and amortization, asset impairments, stock-based compensation, restructuring costs, and certain legal and professional fees. Please see “Adjusted EBITDA” within *Item 6*, 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. Net loss for the year ending December 31, 2019 was \$(9.0) million, and \$(7.6) million for the year ending December 31, 2018.

Trends Affecting Our Business

Software & Services

Our current customers and new prospects require authentication services to manage the complexity of new business rules. With consumers having more choice for video consumption via traditional video packages to a la carte offerings and direct to consumer offerings, the demand for Cloud ID authentication across multiple platforms and providing a simplified single sign on solution for the end user is in high demand.

More and more companies are leveraging highly scalable global SaaS solutions to enable staff to use the same integrated enterprise application in order to achieve massive economies of scale, while maintaining their respective security and compliance objectives. We have also reached a tipping point in the industry where businesses are more receptive to cloud-based SaaS solutions than the traditional on-premised software deployments. As such, our success is dependent on our ability to help these businesses realize improved efficiency, personalization and security brought about by recent technological advancements.

Portal & Advertising

Our customers in the Portal & Advertising segment, 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 competitors include a number of large companies, most notable being Google. 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.

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 all devices. Our technology enables them to extend their presence beyond traditional personal computers.

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 have been and will continue to be the principal drivers. We believe we have experienced a decline in advertising revenue due to consumers’ internet searching habits increasingly transitioning to mobile devices. However, our focus on publisher based advertising has resulted in an increase in 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.

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.

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. We base our estimates on historical experience and on various other assumptions that we believe are reasonable under the circumstances. Our estimates form the basis for our judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. 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.

An accounting policy is considered to be critical if it requires an accounting estimate to be made based on assumptions about matters that are highly uncertain at the time the estimate is made, and if different estimates that reasonably could have been used, or changes in the accounting estimate that are reasonably likely to occur, could materially impact the consolidated financial statements.

We believe that of our significant accounting policies, which are described in Note 1, *The Company and Summary of Significant Accounting Policies*, of the Notes to the Consolidated Financial Statements, the following accounting policies involve a greater degree of judgment and complexity. Accordingly, these are the policies we believe are the most critical to aid in fully understanding and evaluating our consolidated financial condition and results of our operations.

Revenue Recognition

Revenue is recognized according to ASC 606, *Revenue - Revenue from Contracts with Customers*. The Company generates all of its revenue from contracts with customers. Many of the Company's contracts with customers contain multiple performance obligations. For these contracts, the Company accounts for individual performance obligations separately if they are distinct. The transaction price is allocated to the separate performance obligations on a relative standalone selling price basis. Standalone selling prices of software licenses are typically estimated using the residual approach. Standalone selling prices of services are typically estimated based on observable transactions when these services are sold on a standalone basis. The Company usually expects payment within 30 to 90 days from the invoice date (fulfillment of performance obligations or per contract terms). Differences between the amount of revenue recognized and the amount invoiced are recognized as deferred revenue. None of the Company's contracts as of December 31, 2019 or 2018 contained a significant financing component.

The following is a description of principal activities from which the Company generates revenue in each reportable segment. Revenue is recognized when control of the promised goods or services are transferred to the Company's customers, in an amount that reflects the consideration that is expected to be received in exchange for those goods or services.

Software & Services

Synacor's software and services segment is comprised of our cloud-based identity management platform and our Zimbra email & collaboration platform. Subscription fees and other fees are received from customers for the use of the Company's proprietary technology, including the use of, or access to, email, Cloud ID, security services, games and other premium services. Monthly subscriber levels typically form the basis for generating recurring and fee-based revenue. This revenue is typically determined by multiplying a per-subscriber per-month fee by the number of subscribers using the particular services being offered or consumed, except in the case of software licenses and support, which are based on a fixed fee. Revenue earned as subscription fees and maintenance and support fees is recognized from customers as its obligation to deliver the service is satisfied, which is when the service is delivered. Revenue is also recognized from the licensing and distribution of the Company's Email/Collaboration products and services, including licenses of intellectual property. Software license revenue is recognized up front upon delivery of the licensed product and the utility that enables the customer to access authorization keys, provided that a signed contract has been received. The Company typically sells term-based software licenses that expire, which are referred to as subscription licenses, but also sell perpetual licenses for its Email products. The software is delivered before related services are provided and is functional without professional services, updates, and technical support.

Portal & Advertising

The Company uses internet advertising to generate revenue from the traffic on its Managed Portals and Advertising solutions, categorized as search advertising and digital advertising. For search advertising, the Company has a revenue-sharing relationship with Google, pursuant to which the Company includes a Google-branded search tool on its Managed Portals. For revenue earned under this relationship the Company evaluates whether it is the principal (i.e., report revenues on a gross basis) or agent (i.e., report revenues on a net basis). When a Google consumer makes a search query using this tool, the Company delivers 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 the Company. The payment received from Google is recognized as revenue. Digital advertising includes video, image and text advertisements delivered on its Managed Portals. Advertising inventory is filled with advertisements sourced by the Company's direct sales force and advertising network partners. Revenue is generated 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 on a cost per impression or cost per action basis. Digital advertising also includes advertising fees received for the placement of syndicated digital advertisements with other digital advertising publishers, for which the Company acquires and pays for the space (inventory) 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.

Software Development Costs

The Company capitalizes certain costs incurred for the development of internal use software, as well as the costs of developing software for sale or license to customers. Internal use software includes the Company's proprietary portal software and related applications, Cloud ID authentication software, and various applications used in the management of the Company's portals. Software for sale or license to customers includes the Company's proprietary Email/Collaboration offerings. Costs incurred during the preliminary project stage for internal software programs are expensed as incurred. External and internal costs incurred during the application development stage (subsequent to the achievement of technological feasibility on software to be sold or licensed) of new software development, as well as for upgrades and enhancements for software programs that result in additional functionality are capitalized. Software development costs capitalized for sale or license to customers and costs capitalized for the development of internal use software are amortized over the estimated useful life of the applicable software. Impairment charges are taken as a result of circumstances that indicate that the carrying values of the assets were not fully recoverable. The Company utilizes the discounted cash flow method to determine the fair value of the capitalized software assets. Impairment charges for the years ended December 31, 2019 and 2018 are included in general and administrative expense in the consolidated statement of operations.

Results of Operations

The following tables set forth our results of operations for the periods presented in amount (in thousands) 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,	
	2019	2018
	(in thousands)	
Revenue	\$ 121,845	\$ 143,879
Costs and operating expenses:		
Cost of revenue (1)	61,990	73,304
Technology and development (1) (2)	18,273	23,753
Sales and marketing (2)	21,790	24,116
General and administrative (1) (2)	17,734	19,454
Depreciation and amortization	9,865	9,641
Total costs and operating expenses	129,652	150,268
Loss from operations	(7,807)	(6,389)
Other expense, net	(17)	(212)
Interest expense	(268)	(338)
Loss before income taxes	(8,092)	(6,939)
Provision for income taxes	929	616
Net loss	\$ (9,021)	\$ (7,555)

Notes:

- (1) Exclusive of depreciation and amortization shown separately.
(2) Includes stock-based compensation as follows:

	Year Ended December 31,	
	2019	2018
	(in thousands)	
Technology and development	\$ 338	\$ 489
Sales and marketing	513	474
General and administrative	765	841
	\$ 1,616	\$ 1,804

	Year Ended December 31,	
	2019	2018
Revenue	100 %	100 %
Cost of revenue (1)	51	51
Technology and development (1) (2)	15	17
Sales and marketing (2)	18	17
General and administrative (1) (2)	15	14
Depreciation and amortization	8	7
Total costs and operating expenses	107	104
Loss from operations	(6)	(4)
Other expense, net	—	—
Interest expense	—	—
Loss before income taxes	(7)	(5)
Provision for income taxes	1	—
Net loss	(7)%	(5)%

Included in the above results of operations was the following restructuring expense:

	Year Ended December 31,	
	2019	2018
Cost of revenue	\$ 234	\$ —
Technology and development	370	298
Sales and marketing	246	339
General and administrative	109	474
Total restructuring expense	\$ 959	\$ 1,111

Comparison of the years ended December 31, 2019 and 2018

Revenue decreased by \$22.0 million, or 15%, in 2019 compared to 2018, attributable to an overall decline of \$4.2 million in Software & Services revenue and a decline of \$17.8 million in Portal & Advertising revenue.

Cost of revenue decreased \$11.3 million, or 15%, in 2019 compared to 2018. The decrease in cost is in line with the decline in revenue.

Technology and development expenses decreased by \$5.5 million, or 23%, in 2019 compared to 2018, primarily due to lower compensation expense of \$4.9 million, lower professional service fees of \$0.4 million and lower travel expenses of \$0.3 million. Offsetting these declines was an increase in software licenses of \$0.1 million.

Sales and marketing expenses decreased by \$2.3 million, or 10%, in 2019 compared to 2018, primarily the result of lower compensation expenses of \$1.2 million, lower marketing expenses of \$0.5 million, lower travel expenses of \$0.4 million and lower professional services fees of \$0.2 million.

General and administrative expenses decreased by \$1.7 million, or 9%, in 2019 compared to 2018 due to lower professional services fees of \$2.6 million and lower compensation expense of \$1.2 million, offset by higher asset impairment charges of \$1.2 million, higher computer software costs of \$0.3 million, higher bad debt expense of \$0.3 million and a decline in investment value of \$0.2 million.

Depreciation and amortization increased by \$0.2 million or 2%, in 2019 compared to 2018. The increase in expense is a result of additional finance leases in 2019 compared to 2018.

Other expense, net consists of interest income and foreign currency transaction gains and losses related to our international operations. The decrease in expense of \$0.2 million for the year ended December 31, 2019 compared to the same period in 2018 was due to unrealized foreign currency transaction gain.

Interest expense decreased for the year ended December 31, 2019, when compared to 2018 primarily due to lower interest incurred on finance leases.

Provision for income taxes of \$0.9 million for the year ended December 31, 2019 and \$0.6 million for the year ended December 31, 2018 respectively, is comprised primarily of current foreign income tax expense, including foreign withholding taxes, offset by deferred income tax benefit.

Segment Results of Operations

During the first quarter of 2019, we made changes to our segment reporting structure that resulted in two reportable segments: 1) Software & Services and 2) Portal & Advertising. Previously we concluded we had one reportable segment. All historical amounts have been restated to reflect this change.

The following are Revenue, Segment Adjusted EBITDA (in thousands) and Segment Adjusted EBITDA Margin by reportable segment for the twelve months ended December 31, 2019 and 2018. Segment Adjusted EBITDA is defined as EBITDA (earnings before interest, income taxes, depreciation and amortization) adjusted for certain non-cash items and other non-recurring income and expenses. Total Segment Adjusted EBITDA is equal to Adjusted EBITDA, which is a metric that is not presented in accordance with U.S. GAAP. Refer to “Adjusted EBITDA” with *Item 6*, for a definition of Adjusted EBITDA and a reconciliation to net loss, the most directly comparable U.S. GAAP measure. Segment Adjusted EBITDA is the primary performance measure used by our senior management, the chief operating decision-maker and the board of directors to evaluate operating results and allocate capital resources among segments. Segment Adjusted EBITDA Margin is defined as Segment Adjusted EBITDA as a percent of Segment Revenue. Net loss for the year ending December 31, 2019 was \$(9.0) million, and \$(7.6) million for the year ending December 31, 2018.

	Year Ended December 31,	
	2019	2018
Revenue:		
Software & Services	\$ 44,485	\$ 48,692
Portal & Advertising	77,360	95,187
Total Revenue	\$ 121,845	\$ 143,879
Segment Adjusted EBITDA:		
Software & Services	\$ 12,531	\$ 14,305
Portal & Advertising	10,657	10,788
Corporate Unallocated Expense	(13,685)	(16,629)
Total Segment Adjusted EBITDA	\$ 9,503	\$ 8,464
Segment Adjusted EBITDA Margin:		
Software & Services	28.2 %	29.4 %
Portal & Advertising	13.8 %	11.3 %
Total Segment Adjusted EBITDA Margin	7.8 %	5.9 %

Software & Services

Revenue in 2019 decreased by \$4.2 million or 9% when compared 2018. Recurring revenue (revenue recognized over time) decreased \$1.9 million, primarily due to \$1.2 million of discontinued video product line and lower email revenue of \$0.9 million offset by higher Cloud ID revenue of \$0.2 million. Non-recurring revenue (revenue recognized at a point in time) decreased \$2.3 million. This was primarily due to \$2.5 million of one-time, non-recurring service revenue recognized in 2018.

Segment Adjusted EBITDA in 2019 decreased by \$1.8 million to \$12.5 million, or 12%, compared to 2018. The decrease was primarily due to lower revenue, higher royalty fees and unfavorable mix which were only partially offset by lower operating expenses. As a result, the Segment Adjusted EBITDA Margin decreased to 28.2% compared to 29.4% in 2018.

Portal & Advertising

Revenue in 2019 decreased by \$17.8 million, or 19%, when compared to 2018. Recurring revenue was down \$2.1 million primarily due to lower portal fees and the expected, continual decline in premium service fees. Non-recurring revenue was down \$15.7 million primarily due to lower core portal and advertising revenue of \$6.6 million and the \$15.2 million impact of the loss of a significant portal customer at the end of Q3 2019. This was partially offset by growth in publisher based advertising of \$6.6 million.

Segment Adjusted EBITDA in 2019 decreased \$0.1 million, or 1%, compared to 2018. The small decrease was primarily due to lower operating expenses and improved advertising margins which more than offset the lower revenue. As a result, the Segment Adjusted EBITDA Margin increased to 13.8% compared to 11.3% in 2018.

Corporate Unallocated Expense

Corporate Unallocated Expense primarily includes corporate overhead costs, such as payroll and related benefit costs, rent expense and professional services fees which are not directly attributable to any individual segment. Corporate Unallocated Expense decreased for the year ended December 31, 2019 by \$2.9 million, or 18%, compared to the year ended December 31, 2018. The decrease in Corporate Unallocated Expense is primarily a result of lower professional service fees of \$2.8 million and lower compensation costs of \$0.6 million offset by higher computer software costs of \$0.3 million and decline in investment value of \$0.2 million.

Unaudited Quarterly Results of Operations and Other Data

The following tables present our unaudited quarterly results of operations and other data for the eight quarters ended December 31, 2019. This unaudited quarterly information has been prepared on the same basis as our audited consolidated financial statements and, in the opinion of management, the statement of operations data includes all adjustments, consisting of normal recurring adjustments, necessary for the fair presentation of the results of operations for these periods. This table should be read in conjunction with our consolidated financial statements and related notes located elsewhere in this Annual Report on Form 10-K. The results of operations for any quarter are not necessarily indicative of the results of operations for any future periods.

	For the Three Months Ended							
	March 31, 2018	June 30, 2018	September 30, 2018	December 31, 2018	March 31, 2019	June 30, 2019	September 30, 2019	December 31, 2019
(in thousands, except per-share data)								
Statements of Operations Data:								
Revenue	\$ 32,915	\$ 35,923	\$ 35,643	\$ 39,398	\$ 31,824	\$ 31,849	\$ 31,366	\$ 26,806
Costs and operating expenses:								
Cost of revenue (1)	15,535	18,506	18,317	20,888	16,506	17,152	15,634	12,698
Technology and development (1)	6,369	5,819	5,886	5,737	4,546	4,577	5,545	3,605
Sales and marketing	5,936	6,904	5,667	5,609	5,991	5,550	5,473	4,776
General and administrative (1)	5,017	4,320	5,279	4,838	4,465	3,955	5,648	3,666
Depreciation and amortization	2,435	2,444	2,437	2,325	2,435	2,567	2,605	2,258
Total costs and operating expenses	35,292	37,993	37,586	39,397	33,943	33,801	34,905	27,003
(Loss) income from operations	\$ (2,377)	\$ (2,070)	\$ (1,943)	\$ 1	\$ (2,119)	\$ (1,952)	\$ (3,539)	\$ (197)
Net loss	\$ (2,375)	\$ (2,584)	\$ (2,220)	\$ (376)	\$ (2,244)	\$ (2,487)	\$ (3,725)	\$ (565)
Net loss per share:								
Basic	\$ (0.06)	\$ (0.07)	\$ (0.06)	\$ (0.01)	\$ (0.06)	\$ (0.06)	\$ (0.10)	\$ (0.01)
Diluted	\$ (0.06)	\$ (0.07)	\$ (0.06)	\$ (0.01)	\$ (0.06)	\$ (0.06)	\$ (0.10)	\$ (0.01)

Notes:

(1) Exclusive of depreciation and amortization shown separately

Liquidity and Capital Resources

Our primary liquidity and capital resource requirements are for financing working capital, investing in capital expenditures such as computer hardware and software, supporting research and development efforts, introducing new technology, enhancing existing technology, and marketing our services and products to new and existing customers.

To the extent that existing cash and cash equivalents, cash from operations, cash from short-term borrowings, and cash from the exercise of stock options are insufficient to fund our future activities, we may need to raise additional funds through public or private equity offerings or debt financings.

In August 2019, we entered into a new Loan and Security Agreement, the "Loan Agreement", with Silicon Valley Bank, or the "Lender". The Lender has agreed to provide a \$12.0 million secured revolving line of credit, the "credit facility". The credit facility is available for cash borrowings, subject to a Borrowing Base formula based upon eligible accounts receivable. The maturity of the Loan Agreement is two years from the date of the Loan Agreement. Any borrowings under the Loan Agreement bear interest, based on an interest rate dependent on cash liquidity for the relevant period. Cash liquidity is defined as cash plus (a) the lesser of (i) the Revolving Line or (ii) the amount available under the Borrowing Base minus (b) the outstanding principal balance of any Advances. If cash liquidity is greater than \$20.0 million then the interest rate is the greater of the "prime rate" as published in The Wall Street Journal (WSJ) for the relevant period plus 0.50% or 5.50%. If cash liquidity is less than \$20.0 million then the interest rate is the greater of WSJ prime rate plus 1.00% or 6.00%. The Loan Agreement maintains certain reporting requirements, conditions, and covenants. The financial covenants include that we must maintain a Minimum Liquidity Coverage greater than or equal to 2.25:1.00. Additionally, when cash liquidity falls below \$20.0 million, the Agreement includes certain trailing six month Free Cash Flow requirements, tested on a quarterly basis. Free Cash Flow is to be defined as (a) Adjusted EBITDA, minus (b) capital expenditures determined in accordance with GAAP, minus (c) capitalized software expenses, determined in accordance with GAAP, and minus (d) cash taxes, determined in accordance with GAAP. As of December 31, 2019, we had no outstanding borrowings under the Loan Agreement, and we had \$10.8 million of availability based upon the borrowing formula under the Loan Agreement.

Our obligations to the Lender are secured by a first priority security interest in all our assets, including our intellectual property. The Loan Agreement contains customary events of default, including non-payment of principal or interest, violations of covenants, material adverse changes, cross-default, bankruptcy and material judgments. Upon the occurrence of an event of default, the Lender may accelerate repayment of any outstanding balance. The Loan Agreement also contains certain financial covenants and other agreements that are customary in loan agreements of this type, including restrictions on paying dividends and making distributions to our stockholders. As of December 31, 2019, we were in compliance with the covenants and anticipate continuing to be so.

As of December 31, 2019, we had approximately \$11.0 million of cash and cash equivalents. We believe that our existing cash and cash equivalents, along with cash flows from operations and availability under our revolving credit line, will be sufficient to meet our anticipated working capital, interest payments, capital lease payment obligations and capital expenditure requirements for at least the next 12 months.

Cash Flows

	Year Ended December 31,	
	2019	2018
(in thousands)		
Statements of Cash Flows Data:		
Net cash provided by operating activities	\$ 2,459	\$ 2,056
Net cash used in investing activities	\$ (3,772)	\$ (6,256)
Net cash used in financing activities	\$ (3,459)	\$ (2,055)

Cash Provided by Operating Activities

Operating activities provided \$2.5 million of cash in 2019. Cash flow from operating activities resulted from our net loss, adjusted for non-cash items, and changes in our operating assets and liabilities. We had a net loss of \$9.0 million which included non-cash depreciation and amortization of \$11.3 million, non-cash stock-based compensation of \$1.6 million, non-cash change in our allowance for doubtful accounts of \$0.4 million, and an impairment of long-lived assets of \$1.8 million. Changes in our operating assets and liabilities used \$3.5 million of cash, primarily due to a decrease in our accounts payable, accrued expenses, and other current liabilities of \$8.8 million, offset partially by a decrease in accounts receivable of \$4.7 million.

Operating activities provided \$2.1 million of cash in 2018. Cash flow from operating activities resulted from our net loss, adjusted for non-cash items, and changes in our operating assets and liabilities. We had a net loss of \$7.6 million which included non-cash depreciation and amortization of \$9.8 million, non-cash stock-based compensation of \$1.8 million, non-cash benefit to our provision for deferred income taxes of \$0.2 million, and an impairment of capitalized software of \$0.6 million. Changes in our operating assets and liabilities used \$2.5 million of cash, primarily due to a decrease in our accounts payable, accrued expenses, and other current liabilities of \$5.8 million, and deferred revenue by \$3.9 million and offset partially by a decrease in accounts receivable of \$6.0 million. The decrease in our deferred revenue was largely a result of the adoption of *ASC 606*.

Cash Used in Investing Activities

Our primary investing activities have consisted of purchases of property and equipment. Purchases of property and equipment vary from period to period due to the timing of the expansion of our operations and internal-use software development. We expect to continue to make significant investments in property and equipment and development of software in 2020 and thereafter.

Cash used by investing activities totaled \$3.8 million in 2019 resulting from cash expenditures for purchases of property and equipment, primarily related to the replacement of data center hardware and the development of both internal use software and software for sale or license.

Cash used by investing activities totaled \$6.3 million in 2018 resulting from cash expenditures for purchases of property and equipment, primarily related to the build-out of our data centers and the development of both internal use software and software for sale or license.

Cash Used in Financing Activities

Net cash used by financing activities totaled \$3.5 million in 2019. We made \$3.4 million in payments for finance lease obligations and paid \$0.1 million for debt issue costs related to our line of credit.

Net cash used by financing activities totaled \$2.1 million in 2018. We made \$2.4 million in payments of debt obligations. Partially offsetting the cash used was \$0.4 million received from the exercise of stock options.

Off-Balance Sheet Arrangements

At December 31, 2019, we did not have any off-balance sheet arrangements other than the contract commitments listed below under *Contractual Obligations*, as defined in Item 303(a)(4)(ii) of Regulation S-K promulgated by the SEC, that have or are reasonably likely to have a current or future effect on our financial condition, changes in our financial condition, revenue, or expenses, results of operations, liquidity, capital expenditures, or capital resources that is material to investors.

Contractual Obligations

We lease office space and data center space under operating lease agreements and certain equipment under capital lease agreements. We are also obligated to make fixed payments under various contracts with vendors and customers, principally for revenue-sharing and content arrangements. These fixed payments are reflected in the table below as “contract commitments.”

The following table sets forth our future contractual obligations as of December 31, 2019 (in thousands):

	Payments Due by Period					
	2020	2021	2022	2023	2024	Total
Operating lease obligations	\$ 2,396	\$ 1,615	\$ 944	\$ 448	\$ 36	\$ 5,439
Finance lease obligations	2,611	522	226	—	—	3,359
Contract commitments	753	—	—	—	—	753
Total	<u>\$ 5,760</u>	<u>\$ 2,137</u>	<u>\$ 1,170</u>	<u>\$ 448</u>	<u>\$ 36</u>	<u>\$ 9,551</u>

Impact of Applicable Recent Accounting Pronouncements

In the normal course of business, we evaluate pronouncements issued by the Financial Accounting Standards Board (“FASB”), Securities and Exchange Commission (“SEC”), or other authoritative bodies to determine the potential impact they may have on our consolidated financial statements. 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 about these recently issued accounting standards and their potential impact on our consolidated results of operations.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We have operations both within the United States and internationally, and we are exposed to market risks in the ordinary course of our business. These primarily include interest rate, inflation and foreign currency exchange risk.

Interest Rate Risk

Our cash and cash equivalents primarily consist of cash and money market funds. We currently have no investments of any type. Our exposure to market risk for changes in interest rates is limited because nearly all of our cash and cash equivalents have a short-term maturity and are used primarily for working capital purposes.

We have a bank line of credit of \$12 million with no outstanding borrowings at December 31, 2019. Any borrowings under the line of credit bear interest at a variable annual rate, based the "prime rate" as published in The Wall Street Journal, dependent on cash liquidity for the relevant period. Cash liquidity is defined as cash plus (a) the lesser of (i) the Revolving Line or (ii) the amount available under the Borrowing Base minus (b) the outstanding principal balance of any Advances. If cash liquidity is greater than \$20.0 million then the interest rate is the greater of the "prime rate" as published in The Wall Street Journal (WSJ) for the relevant period plus 0.50% or 5.50%. If cash liquidity is less than \$20.0 million then the interest rate is the greater of WSJ prime rate plus 1.00% or 6.00%. The Agreement maintains certain reporting requirements, conditions, and covenants. The financial covenants include that we must maintain a Minimum Liquidity Coverage greater than or equal to 2.25:1.00. Additionally, when cash liquidity falls below \$20.0 million, the Agreement includes certain trailing six month Free Cash Flow requirements, tested on a quarterly basis. Free Cash Flow is to be defined as (a) Adjusted EBITDA, minus (b) capital expenditures determined in accordance with GAAP, minus (c) capitalized software expenses, determined in accordance with GAAP, and minus (d) cash taxes, determined in accordance with GAAP. This arrangement, if we were to have borrowings under the line of credit, would subject us to interest rate risk. Refer to Note 5, *Long-Term Debt* of the Notes to the Consolidated Financial Statements referred to in Item 8 of this report for additional information about our outstanding debt.

Inflation Risk

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

Foreign Currency Exchange Risk

We are also subject to foreign currency exchange risk relating to our operations in Canada, Europe, India, Japan and Singapore. Our expenses at these locations are denominated in the local currencies and our results of operations are influenced by changes in the exchange rates between the U.S. Dollar and these local currencies, principally the Canadian Dollar, Euro, British Pound Sterling, Yen, Rupee and Singapore Dollar. In addition, certain of our accounts receivable are denominated in currencies other than the U.S. Dollar, principally the Euro, British Pound Sterling, and Japanese Yen. A 10% increase or decrease in the applicable currency exchange rates could result in an increase or decrease in our currency exchange (loss) gain of approximately \$0.2 million, calculated based on our foreign currency-denominated accounts receivable as of December 31, 2019. We have in the past, and we may in the future, enter into contracts to minimize the foreign currency exchange risk with respect to significant foreign currency denominated accounts receivable balances. We continue to evaluate our foreign currency rate exposures and may take additional steps to mitigate these exposures.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

Our financial statements are submitted on pages F-1 through F-24 of this Annual Report on Form 10-K.

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

None.

ITEM 9A. CONTROLS AND PROCEDURES

Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, evaluated the effectiveness of our disclosure controls and procedures as of December 31, 2019. The term “disclosure controls and procedures,” as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the “Exchange Act”) means controls and other procedures of a company that are designed to provide reasonable assurance that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC’s rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the company’s management, including its principal executive and principal financial officers, as appropriate to allow timely decisions regarding required disclosure. Based on that evaluation, our management concluded that our disclosure controls and procedures were effective as of December 31, 2019.

Management’s Annual Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Rule 13a-15(f) of the Exchange Act. Under the supervision and with the participation of our Chief Executive Officer and Chief Financial Officer, our management conducted an evaluation of the effectiveness of our internal control over financial reporting as of December 31, 2019 based upon the framework in “Internal Control—Integrated Framework” issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework). The Company’s internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements in accordance with U.S. generally accepted accounting principles. Based on that evaluation, management concluded that our internal control over financial reporting was effective as of December 31, 2019.

Changes in Internal Control over Financial Reporting

Remediation Efforts to Address the Material Weaknesses

The Company previously reported material weaknesses in its December 31, 2018 Form 10-K. As more fully described below, we have identified and implemented additional processes, procedures and controls to improve the effectiveness of our internal control over financial reporting and disclosure controls and procedures. We regularly reviewed our progress toward remediating these material weaknesses with our audit committee during 2019. Leading this remediation process was our Chief Financial Officer and our Senior Director of Accounting. Assisting management with the remediation process was a nationally recognized consulting firm who, under the direction of management, assisted management in testing processes, procedures and controls to support management’s conclusions surrounding the design and operating effectiveness of management’s internal controls over financial reporting.

Control Activities & Monitoring

As previously described in the Company’s Annual Report on Form 10-K for the year ended December 31, 2018, management had identified a material weakness in our internal control activities due to the lack of timeliness and consistency in executing business process controls. In addition, management had identified a material weakness in our internal control activities due to ineffective monitoring controls to ascertain whether the components of internal control were present and functioning. As of December 31, 2019 we had completed our remediation of the prior material weaknesses by implementing the following corrective actions:

- We hired four new senior accounting professionals in 2018 who possess the requisite skills and relevant experience to augment our staff to help us improve our controls and procedures pertaining to financial reporting and to assist in making other improvements to our internal controls. The addition of skilled personnel allowed us to select and develop appropriate policies, procedures, and controls to strengthen our control environment.
- We reorganized our accounting staff to delineate distinct roles and responsibilities for external financial reporting including the application of generally accepted accounting principles (“GAAP”).
- We implemented a more structured analysis and timely review process of the application of generally accepted accounting principles and complex accounting matters.

- We developed enhanced quantitative and qualitative analytical analysis as part of our financial close process to help in the early detection of potential material misstatements to our financial statements.
- We increased the standardization and automation within accounting processes, as well as the timeliness in which these processes occur on a regular basis, to improve the consistency and reliability of information used by existing accounting personnel.
- We expanded and enhanced the written documentation of our testing and monitoring of internal controls.
- We implemented a sequence of meetings around our processes to prepare and report on the consolidated financial statements that promotes cross-functional communication and broadens the accountability for internal controls.
- We have integrated the responsibility for internal controls across business functions to assign accountability for internal controls beyond the accounting and finance team.
- We have developed effective communication plans related to monitoring the effectiveness of our internal control environment. Management uses an accounting management software to verify controls have been performed timely. Any exceptions identified during management's testing of controls are evaluated internally to determine if a control deficiency exists. Management presents status updates, including any identified deficiencies and recommendations for corrective actions to our Audit Committee for appropriate oversight, monitoring and evaluation of corrective action.
- Executive management and our Audit Committee continues to evaluate the resources of our accounting and financial reporting functions to ensure appropriate levels of subject matter knowledge to maintain an effective control environment.
- We have conducted training on internal controls over financial reporting and enhanced the sub-certification process that supports our CEO's and CFO's financial statement certifications and expanded the sub-certification participation population.
- We have implemented various channels for which to identify, communicate and properly account for non-standard terms, including increased information sharing between Sales and other departments on various transactions.

Management evaluated the design and operational effectiveness of the remediation activities and concluded that we have sufficient evidence that the previously reported material weaknesses pertaining to the lack of timeliness and consistency in executing business process controls, as well as ineffective monitoring controls, have been remediated as of December 31, 2019.

Other Changes in Internal Control over Financial Reporting

Except as noted above in the section "Remediation Efforts to Address the Material Weaknesses", there were no other changes in our internal control over financial reporting identified in management's evaluation pursuant to Rules 13a-15(d) or 15d-15(d) of the Exchange Act during the three months ended December 31, 2019 that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

ITEM 9B. OTHER INFORMATION

None.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information required by this item is incorporated by reference to the information in our proxy statement for our 2020 Annual Meeting of Stockholders to be filed with the SEC within 120 days after the end of our fiscal year ended December 31, 2019.

Our board of directors has adopted a Code of Business Conduct and a Code of Ethics applicable to all officers, directors and employees, which is available on our website (<http://www.synacor.com>) under “Investors—Corporate Governance.” We will provide a copy of these documents to any person, without charge, upon request, by writing to us at Synacor, Inc., Investor Relations Department, 40 La Riviere Drive, Suite 300, Buffalo, New York 14202. We intend to satisfy the disclosure requirement under Item 5.05 of Form 8-K regarding an amendment to, or waiver from, a provision of our Code of Business Conduct or Code of Ethics by posting such information on our website at the address and the location specified above.

ITEM 11. EXECUTIVE COMPENSATION

The information required by this item is incorporated by reference to the information in our proxy statement for our 2020 Annual Meeting of Stockholders to be filed with the SEC within 120 days after the end of our fiscal year ended December 31, 2019.

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

The information required by this item is incorporated by reference to the information in our proxy statement for our 2020 Annual Meeting of Stockholders to be filed with the SEC within 120 days after the end of our fiscal year ended December 31, 2019.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The information required by this item is incorporated by reference to the information in our proxy statement for our 2020 Annual Meeting of Stockholders to be filed with the SEC within 120 days after the end of our fiscal year ended December 31, 2019.

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

The information required by this item is incorporated by reference to the information in our proxy statement for our 2020 Annual Meeting of Stockholders to be filed with the SEC within 120 days after the end of our fiscal year ended December 31, 2019.

PART IV

ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES

(a) The following documents are filed as a part of this report:

1. *Financial Statements*: See Financial Statements and Supplementary Data, Part II, Item 8.

2. *Financial Statement Schedules*: Financial Statement Schedules have been omitted either because they are not required or because the information required is included in the notes to the financial statements.

3. *Exhibits*: See the Exhibit Index immediately preceding the signature page of this Annual Report on Form 10-K.

ITEM 16. FORM 10- K SUMMARY

Not applicable.

EXHIBITS

The following exhibits are incorporated by reference herein or filed here within:

Exhibit No.	Description	Incorporated by Reference			Exhibit Number	Filed Herewith
		Form	File No.	Date of Filing		
3.1	Fifth Amended and Restated Certificate of Incorporation	S-1/A	333-178049	1/30/2012	3.2	
3.2	Amended and Restated Bylaws	S-1/A	333-178049	1/30/2012	3.4	
3.3	Certificate of Designation of Series A Junior Participating Preferred Stock	8-K	001-33843	7/15/2014	3.1	
4.1	Description of Registrant's Securities					X
10.1	Form of Indemnification Agreement between Synacor, Inc. and each of its directors and executive officers and certain key employees	S-1	333-178049	11/18/2011	10.1	
10.2.1*	2006 Stock Plan	S-1	333-178049	11/18/2011	10.3.1	
10.2.2*	Amendment No. 1 to 2006 Stock Plan	S-1	333-178049	11/18/2011	10.3.2	
10.2.3*	Amendment No. 2 to 2006 Stock Plan	S-1	333-178049	11/18/2011	10.3.3	
10.2.4*	Amendment No. 3 to 2006 Stock Plan	S-1	333-178049	11/18/2011	10.3.4	
10.2.5*	Amendment No. 4 to 2006 Stock Plan	S-1	333-178049	11/18/2011	10.3.5	
10.2.6*	Amendment No. 5 to 2006 Stock Plan	S-1	333-178049	11/18/2011	10.3.6	
10.2.7*	Amendment No. 6 to 2006 Stock Plan	S-1	333-178049	11/18/2011	10.3.7	
10.2.8*	Amendment No. 7 to 2006 Stock Plan	S-1/A	333-178049	1/18/2012	10.3.8	
10.2.9*	Form of Stock Option Agreement under 2006 Stock Plan with Jordan Levy	S-1/A	333-178049	1/30/2012	10.3.9	
10.2.10*	Form of Director Stock Option Agreement under 2006 Stock Plan	S-1/A	333-178049	1/30/2012	10.3.14	
10.2.11*	Form of Director Stock Option Agreement under 2006 Stock Plan	S-1/A	333-178049	1/30/2012	10.3.15	
10.2.12 *	Form of Stock Option Agreement with Himesh Bhise under 2006 Stock Plan	10-K	001-33843	3/22/2017	10.2.13	
10.3.1*	Amended and Restated 2012 Equity Incentive Plan	DEF 14A	001-33843	4/7/2017	App A	
10.3.2*	Form of Stock Option Agreement under 2012 Equity Incentive Plan	S-1/A	333-178049	1/30/2012	10.4.2	
10.3.3*	Form of Stock Unit Agreement under 2012 Equity Incentive Plan	S-1/A	333-178049	1/30/2012	10.4.3	

Exhibit No.	Description	Incorporated by Reference			Filed Herewith
		Form	File No.	Date of Filing	Exhibit Number
10.3.4*	Form of Early Exercise Stock Option Agreement under 2012 Equity Incentive Plan	10-K	001-33843	3/26/2013	10.4.5
10.3.5*	Form of Stock Option Agreement with William J. Stuart under 2012 Equity Incentive Plan	10-K	001-33843	3/26/2013	10.4.7
10.3.6*	Form of Stock Option Agreement with Himesh Bhise under 2012 Equity Incentive Plan	10-K	001-33843	3/22/2017	10.3.7
10.3.7*	Form of Stock Option Agreement with William J. Stuart under 2012 Equity Incentive Plan	10-K	001-33843	3/22/2017	10.3.8
10.4.1*	Letter Agreement dated August 3, 2011 with William J. Stuart	S-1	333-178049	11/18/2011	10.8
10.4.2*	Change of Control Severance Agreement with William J. Stuart	10-K	001-33843	3/26/2014	10.8.2
10.4.3*	Letter Agreement dated August 26, 2013 with William J. Stuart	10-K	001-33843	3/26/2014	10.8.3
10.4.4*	Separation agreement dated August 16, 2018 with William J. Stuart	10-K	001-33843	3/14/2019	10.4.4
10.5*	2007 Management Cash Incentive Plan	10-Q	001-33843	5/15/2012	10.1
10.6.1†	Second Amended and Restated Master Services Agreement between Qwest Corporation and Synacor, Inc. dated June 1, 2017	10-Q	001-33843	5/15/2017	10.3
10.6.2	Letter Amendment to that certain Second Amended and Restated Master Services Agreement between Qwest Corporation and Synacor, Inc. dated June 1, 2017.	10-Q	001-33843	5/10/2018	10.3
10.6.3†	Amendment #1 to Second Amended and Restated Master Services Agreement between Synacor, Inc. and Qwest Corporation, effective as of March 1, 2018.	10-Q	001-33843	8/9/2018	10.2
10.7†	Google Services Agreement between Synacor, Inc. and Google Inc., effective as of June 1, 2018	10-Q	001-33843	8/9/2018	10.1
10.8.1*	Letter Agreement dated March 1, 2008 with Jordan Levy	S-1/A	333-178049	1/30/2012	10.15.1
10.8.2*	Letter Agreement dated June 23, 2009 with Jordan Levy	S-1/A	333-178049	1/30/2012	10.15.2
10.9*	Form of Common Stock Repurchase Agreement	S-1/A	333-178049	1/30/2012	10.16
10.10.1*	Special Purpose Recruitment Plan	DEF 14A	001-33843	4/5/2013	App. A
10.10.2*	Form of Stock Option Agreement (Early Exercise) under Special Purpose Recruitment Plan	10-Q	001-33843	8/13/2013	10.5
10.11.1	Loan and Security Agreement between Silicon Valley Bank and Synacor, Inc. dated September 27, 2013	10-Q	001-33843	11/14/2013	10.1
10.11.2	First Amendment to the Loan and Security Agreement between Silicon Valley Bank and Synacor, Inc. dated October 28, 2014	10-K	001-33843	3/12/2015	10.20.2
10.11.3	Joinder to Loan and Security Agreement among Silicon Valley Bank, Synacor, Inc., and NTV Internet Holdings, LLC dated April 13, 2015	10-K	001-33843	3/22/2016	10.16.3

Exhibit No.	Description	Incorporated by Reference			Filed Herewith
		Form	File No.	Date of Filing	
10.11.4	Second Amendment to Loan and Security Agreement among Silicon Valley Bank, Synacor, Inc., NTV Internet Holdings, LLC and SYNC Holdings, LLC dated September 25, 2015	10-Q	001-33843	11/17/2015	10.3
10.11.5	Joinder to Loan and Security Agreement among Silicon Valley Bank, Synacor, Inc., NTV Internet Holdings, LLC and SYNC Holdings, LLC dated September 25, 2015	10-K	001-33843	3/22/2016	10.16.5
10.11.6	Third Amendment to Loan and Security Agreement among Silicon Valley Bank, Synacor, Inc., NTV Internet Holdings, LLC and SYNC Holdings, LLC dated October 28, 2015	10-K	001-33843	3/22/2016	10.16.6
10.11.7	Consent and Fourth Amendment to Loan and Security Agreement among Silicon Valley Bank, Synacor, Inc., NTV Internet Holdings, LLC and SYNC Holdings, LLC dated February 25, 2016	10-Q	001-33843	5/16/2016	10.2
10.11.8	Consent and Fifth Amendment to Loan and Security Agreement among Silicon Valley Bank, Synacor, Inc., NTV Internet Holdings, LLC and SYNC Holdings, LLC dated November 8, 2016	10-Q	001-33843	11/14/2016	10.2
10.11.9	Consent and Sixth Amendment to Loan and Security Agreement among Silicon Valley Bank, Synacor, Inc., NTV Internet Holdings, LLC and SYNC Holdings, LLC dated March 30, 2017	10-Q	001-33843	5/15/2017	10.4
10.11.10	Seventh Amendment to Loan and Security Agreement among Silicon Valley Bank, Synacor, Inc., NTV Internet Holdings, LLC and SYNC Holdings, LLC dated June 30, 2017	10-Q	001-33843	8/14/2017	10.2
10.11.11	Eight Amendment to Loan and Security Agreement among Silicon Valley Bank, Synacor, Inc., NTV Internet Holdings, LLC and SYNC Holdings, LLC dated September 30, 2018	10-K	001-33843	3/14/2019	10.12.11
10.11.12	Ninth Amendment to Loan and Security Agreement among Silicon Valley Bank, Synacor, Inc., NTV Internet Holdings, LLC and SYNC Holdings, LLC dated February 1, 2018	10-K	001-33843	3/14/2019	10.12.12
10.11.13	Loan and Security Agreement among Silicon Valley Bank, Synacor, Inc., NTV Internet Holdings, LLC and SYNC Holdings, LLC dated August 7, 2019	8-K	001-33843	11/6/2019	10.1
10.12.1*	Employment Letter Agreement with Himesh Bhise dated July 31, 2014	10-Q	001-33843	11/14/2014	10.1.1
10.12.2*	Stock Option Agreement with Himesh Bhise granted on August 4, 2014	10-Q	001-33843	11/14/2014	10.1.2
10.13.1†	Portal and Advertising Services Agreement between Synacor, Inc. and AT&T Services, Inc. made as of April 1, 2016.	10-Q	001-33843	8/15/2016	10.1.2
10.13.2†	First Amendment to Portal and Advertising Services Agreement between Synacor, Inc. and AT&T Services, Inc. effective as of May 4, 2016.	10-Q	001-33843	8/15/2016	10.2
10.13.3†	Second Amendment to Portal and Advertising Services Agreement between Synacor, Inc. and AT&T Services, Inc. effective as of December 7, 2016	10-K/A	001-33843	6/5/2017	10.16.3

Exhibit No.	Description	Incorporated by Reference			Filed Herewith	
		Form	File No.	Date of Filing		Exhibit Number
10.13.4†	Third Amendment to Portal and Advertising Services Agreement between Synacor, Inc. and AT&T Services, Inc. effective as of March 10, 2017	10-Q	001-33843	5/15/2017	10.2	
10.13.5	Fourth Amendment to Portal and Advertising Services Agreement between Synacor, Inc. and AT&T Services, Inc. effective as of July 10, 2017	10-Q	001-33843	11/14/2017	10.1	
10.13.6†	Statement of Work #1 to Portal and Advertising Services Agreement between Synacor, Inc. and AT&T Services, Inc. effective as of July 10, 2017	10-Q	001-33843	11/14/2017	10.2	
10.13.7†	Fifth Amendment to Portal and Advertising Services Agreement between Synacor, Inc. and AT&T Services, Inc. effective as of November 20, 2017	10-K	001-33843	3/16/2018	10.14.7	
10.13.8†	Sixth Amendment to Portal and Advertising Services Agreement between Synacor, Inc. and AT&T Services, Inc. effective as of December 8, 2017	10-K	001-33843	3/16/2018	10.14.8	
10.13.9†	Seventh Amendment to Portal and Advertising Services Agreement effective as of August 23, 2018 between Synacor Inc. and AT&T Services, Inc.	10-Q	001-33843	11/9/2018	10.1	
10.14	Lease dated August 31, 2017 between D&S Capital Real Estate III, LLC and Synacor, Inc.	10-K	001-33843	3/16/2018	10.15	
10.15*	Letter Agreement with Timothy J. Heasley dated August 1, 2018	8-K	001-33843	8/1/2018	10.1	
10.16.1*	Letter Agreement with Steven Davi dated October 25, 2012	10-Q	001-33843	8/9/2018	10.3.1	
10.16.2*	Change of Control Severance Agreement with Steven Davi	10-Q	001-33843	8/9/2018	10.3.2	
10.16.3*	Letter Agreement with Steven Davi dated April 26, 2018	10-Q	001-33843	8/9/2018	10.3.3	
10.17	Agreement between Synacor, Inc. and 180 Degree Capital Corp. dated March 1, 2019	8-K	001-33843	3/5/2019	10.1	
10.18	Agreement and Plan of Merger and Reorganization, dated as of February 11, 2020, by and among Qumu Corporation, Synacor, Inc. and Quantum Merger Sub I, Inc.	8-K	001-33843	2/11/2020	2.1	
21.1	List of subsidiaries					X
23.1	Consent of Deloitte & Touche LLP					X
24.1	Power of Attorney (contained in the signature page of this Annual Report on Form 10-K)					X
31.1	Certification of the Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002					X
31.2	Certification of the Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002					X
32.1 ‡	Certifications of the Chief Executive Officer and Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002					X

Exhibit No.	Description	Incorporated by Reference			Filed Herewith
		Form	File No.	Date of Filing	
101.INS	XBRL Instance Document				X
101.SCH	XBRL Taxonomy Extension Schema				X
101.CAL	XBRL Taxonomy Extension Calculation Linkbase				X
101.LAB	XBRL Taxonomy Extension Label Linkbase				X
101.PRE	XBRL Taxonomy Extension Presentation Linkbase				X
101.DEF	XBRL Taxonomy Extension Definition Linkbase				X

Notes:

* Indicates management contract or compensatory plan or arrangement.

† Confidential treatment has been granted for portions of this document. The omitted portions have been filed with the Securities and Exchange Commission.

‡ This certification is not deemed “filed” for purposes of Section 18 of the Securities Exchange Act, or otherwise subject to the liability of that section. Such certification will not be deemed to be incorporated by reference into any filing under the Securities Act of 1933 or the Securities Exchange Act of 1934, except to the extent that Synacor, Inc. specifically incorporates it by reference.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this Annual Report on Form 10-K to be signed on its behalf by the undersigned, thereunto duly authorized.

SYNACOR, INC.

/s/ HIMESH BHISE

Himesh Bhise

**President and Chief Executive Officer
(Principal Executive Officer)**

Date: March 6, 2020

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Himesh Bhise and Timothy Heasley, and each of them, his true and lawful attorneys-in-fact, each with full power of substitution, for him in any and all capacities, to sign any amendments to this Annual Report on Form 10-K and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all that each of said attorneys-in-fact or their substitute or substitutes may do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this Annual Report on Form 10-K has been signed by the following persons on behalf of the registrant and in the capacities and on the dates indicated:

Signature	Title	Date
<u>/s/ HIMESH BHISE</u> Himesh Bhise	President, Chief Executive Officer and Director (Principal Executive Officer)	March 6, 2020
<u>/s/ TIMOTHY HEASLEY</u> Timothy J. Heasley	Chief Financial Officer (Principal Financial and Accounting Officer)	March 6, 2020
<u>/s/ ELISABETH B. DONOHUE</u> Elisabeth B. Donohue	Director	March 6, 2020
<u>/s/ MARWAN FAWAZ</u> Marwan Fawaz	Director	March 6, 2020
<u>/s/ GARY L. GINSBERG</u> Gary L. Ginsberg	Director	March 6, 2020
<u>/s/ ANDREW KAU</u> Andrew Kau	Director	March 6, 2020
<u>/s/ MICHAEL J. MONTGOMERY</u> Michael J. Montgomery	Director	March 6, 2020
<u>/s/ SCOTT MURPHY</u> Scott Murphy	Director	March 6, 2020
<u>/s/ KEVIN RENDINO</u> Kevin Rendino	Director	March 6, 2020

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

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

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Synacor, Inc. and subsidiaries (the "Company") as of December 31, 2019 and 2018, the related consolidated statements of operations, comprehensive loss, stockholders' equity, and cash flows, for each of the two years in the period ended December 31, 2019, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2019 and 2018, and the results of its operations and its cash flows for each of the two years in the period ended December 31, 2019, in conformity with accounting principles generally accepted in the United States of America.

Change in Accounting Principle

Effective January 1, 2019, the Company adopted Financial Accounting Standards Board Accounting Standards Update 2016-02, *Leases* ("Topic 842", or the "New Lease Accounting Standard"). Effects of the application of the New Lease Accounting Standard are further discussed in Note 1 of the financial statements.

Basis for Opinion

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

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ Deloitte & Touche LLP

Williamsville, New York
March 6, 2020

We have served as the Company's auditor since 2006.

SYNACOR, INC.
CONSOLIDATED BALANCE SHEETS
AS OF DECEMBER 31, 2019 AND 2018
(In thousands except for share and per share data)

	2019	2018
ASSETS		
CURRENT ASSETS:		
Cash and cash equivalents	\$ 10,966	\$ 15,921
Accounts receivable—net of allowance of \$585 and \$225	20,532	25,567
Prepaid expenses and other current assets	2,989	3,779
Total current assets	34,487	45,267
PROPERTY AND EQUIPMENT, net	14,948	18,707
OPERATING LEASE RIGHT-OF-USE ASSETS, net	4,765	—
GOODWILL	15,948	15,941
INTANGIBLE ASSETS, net	8,411	10,553
OTHER ASSETS	1,319	995
TOTAL ASSETS	\$ 79,878	\$ 91,463
LIABILITIES AND STOCKHOLDERS' EQUITY		
CURRENT LIABILITIES:		
Accounts payable	\$ 12,583	\$ 19,174
Accrued expenses and other current liabilities	5,878	7,849
Current portion of deferred revenue	6,509	6,672
Current portion of long-term debt and finance leases	2,529	2,328
Current portion of operating lease liabilities	2,165	—
Total current liabilities	29,664	36,023
LONG-TERM PORTION OF DEBT AND FINANCE LEASES	729	1,367
LONG-TERM PORTION OF OPERATING LEASE LIABILITIES	2,846	—
DEFERRED REVENUE	2,366	2,214
DEFERRED INCOME TAXES	275	231
OTHER LONG-TERM LIABILITIES	334	457
Total liabilities	36,214	40,292
COMMITMENTS AND CONTINGENCIES (Note 8)		
STOCKHOLDERS' EQUITY:		
Preferred stock, \$0.01 par value—10,000,000 shares authorized, no shares issued and outstanding at December 31, 2019 and 2018	—	—
Common stock, \$0.01 par value—100,000,000 shares authorized; 40,075,475 shares issued and 39,201,477 shares outstanding at December 31, 2019; 39,880,054 shares issued and 39,027,572 shares outstanding at December 31, 2018	401	399
Treasury stock—at cost, 873,998 shares at December 31, 2019 and 852,482 shares at December 31, 2018	(1,931)	(1,899)
Additional paid-in capital	146,460	144,739
Accumulated deficit	(100,747)	(91,726)
Accumulated other comprehensive loss	(519)	(342)
Total stockholders' equity	43,664	51,171
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	\$ 79,878	\$ 91,463

The accompanying notes are an integral part of these consolidated financial statements.

SYNACOR, INC.
CONSOLIDATED STATEMENTS OF OPERATIONS
FOR THE YEARS ENDED DECEMBER 31, 2019, AND 2018
(In thousands except for share and per share data)

	2019	2018
REVENUE	\$ 121,845	\$ 143,879
COSTS AND OPERATING EXPENSES:		
Cost of revenue (exclusive of depreciation and amortization shown separately below)	61,990	73,304
Technology and development (exclusive of depreciation and amortization shown separately below)	18,273	23,753
Sales and marketing	21,790	24,116
General and administrative (exclusive of depreciation and amortization shown separately below)	17,734	19,454
Depreciation and amortization	9,865	9,641
Total costs and operating expenses	129,652	150,268
LOSS FROM OPERATIONS	(7,807)	(6,389)
OTHER EXPENSE, net	(17)	(212)
INTEREST EXPENSE	(268)	(338)
LOSS BEFORE INCOME TAXES	(8,092)	(6,939)
PROVISION FOR INCOME TAXES	929	616
NET LOSS	\$ (9,021)	\$ (7,555)
NET LOSS PER SHARE:		
Basic	\$ (0.23)	\$ (0.19)
Diluted	\$ (0.23)	\$ (0.19)
WEIGHTED AVERAGE SHARES USED TO COMPUTE NET LOSS PER SHARE:		
Basic	39,090,239	38,895,301
Diluted	39,090,239	38,895,301

The accompanying notes are an integral part of these consolidated financial statements.

SYNACOR, INC.
CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS
FOR THE YEARS ENDED DECEMBER 31, 2019, AND 2018
(In thousands)

	2019	2018
Net loss	\$ (9,021)	\$ (7,555)
Other comprehensive loss:		
Changes in foreign currency translation adjustment	(177)	(313)
Comprehensive loss	<u>\$ (9,198)</u>	<u>\$ (7,868)</u>

The accompanying notes are an integral part of these consolidated financial statements.

SYNACOR, INC.
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018
(In thousands except for share data)

	Common Stock		Treasury Stock		Additional Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive Income (Loss)	Total
	Shares	Amount	Shares	Amount				
BALANCE - January 1, 2018	39,625,980	\$ 396	842,220	\$ (1,881)	\$ 142,486	\$ (86,627)	\$ (29)	\$ 54,679
Impact of the adoption of ASC 606, net of tax	—	—	—	—	—	2,456	—	2,456
Exercise of common stock options	226,081	2	—	—	383	—	—	385
Stock-based compensation cost	—	—	—	—	1,871	—	—	1,871
Vesting of restricted stock units, net of treasury stock	27,993	1	10,262	(18)	(1)	—	—	(18)
Net loss	—	—	—	—	—	(7,555)	—	(7,555)
Other comprehensive loss	—	—	—	—	—	—	(313)	(313)
BALANCE - December 31, 2018	39,880,054	399	852,482	(1,899)	144,739	(91,726)	(342)	51,171
Exercise of common stock options	39,572	—	—	—	60	—	—	60
Stock-based compensation cost	—	—	—	—	1,661	—	—	1,661
Vesting of restricted stock units, net of treasury stock	155,849	2	21,516	(32)	—	—	—	(30)
Net loss	—	—	—	—	—	(9,021)	—	(9,021)
Other comprehensive loss	—	—	—	—	—	—	(177)	(177)
BALANCE - December 31, 2019	40,075,475	\$ 401	873,998	\$ (1,931)	\$ 146,460	\$ (100,747)	\$ (519)	\$ 43,664

The accompanying notes are an integral part of these consolidated financial statements.

SYNACOR, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018
(In thousands)

	2019	2018
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net loss	\$ (9,021)	\$ (7,555)
Adjustments to reconcile net loss to net cash and cash equivalents provided by operating activities:		
Depreciation and amortization	11,251	9,832
Long-lived asset impairment	1,751	552
Stock-based compensation expense	1,616	1,804
Provision for deferred income taxes	44	(248)
Change in allowance for doubtful accounts	360	126
Changes in operating assets and liabilities:		
Accounts receivable, net	4,676	6,002
Prepaid expenses and other assets	526	879
Operating lease right-of-use assets and liabilities, net	95	—
Accounts payable, accrued expenses and other liabilities	(8,828)	(5,391)
Deferred revenue	(11)	(3,945)
Net cash provided by operating activities	2,459	2,056
CASH FLOWS FROM INVESTING ACTIVITIES:		
Purchases of property and equipment	(3,772)	(6,256)
Net cash used in investing activities	(3,772)	(6,256)
CASH FLOWS FROM FINANCING ACTIVITIES:		
Payments of financing issuance costs	(60)	—
Repayments on long-term debt and finance leases	(3,427)	(2,422)
Proceeds from exercise of common stock options	60	385
Purchase of treasury stock and shares received to satisfy minimum tax withholdings	(32)	(18)
Net cash used in financing activities	(3,459)	(2,055)
Effect of exchange rate changes on cash and cash equivalents	(183)	(300)
NET DECREASE IN CASH AND CASH EQUIVALENTS	(4,955)	(6,555)
Cash and cash equivalents, beginning of period	15,921	22,476
Cash and cash equivalents, end of period	\$ 10,966	\$ 15,921
SUPPLEMENTAL DISCLOSURES OF CASH FLOW INFORMATION:		
Cash paid for interest	\$ 268	\$ 337
Cash paid for income taxes	\$ 706	\$ 812
SUPPLEMENTAL DISCLOSURES OF NON-CASH INVESTING AND FINANCING TRANSACTIONS:		
Property, equipment and service contracts financed under long-term debt and finance lease obligations	\$ 3,152	\$ 357
Accrued property and equipment expenditures	\$ 408	\$ 277
Stock-based compensation capitalized to property and equipment	\$ 45	\$ 67

The accompanying notes are an integral part of these consolidated financial statements.

SYNACOR, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
AS OF DECEMBER 31, 2019 AND 2018, AND
FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018

1. THE COMPANY AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Synacor, Inc., together with its consolidated subsidiaries (collectively, the “Company” or “Synacor”), is a digital technology company that provides email and collaboration software, cloud-based identity management platforms, managed web and mobile portals, and advertising solutions. The Company’s customers include communications providers, media companies, government entities and enterprises. Synacor is a trusted partner for enterprise software platforms and monetization solutions that Synacor delivers through public and private cloud software-as-a-service, software licensing, and professional services. Synacor enables clients to deepen their engagement with their consumers and users.

Basis of Presentation —The consolidated financial statements and accompanying notes have been prepared in accordance with United States generally accepted accounting principles (“U.S. GAAP”) and include the accounts of the Company and its wholly-owned subsidiaries. All intercompany balances and transactions have been eliminated in consolidation.

During the first quarter of 2019, the Company made a change to its segment reporting structure which resulted in two segments: 1) Software & Services and 2) Portal & Advertising. As a result, certain prior year amounts have been restated to conform to current year’s presentation. Historical Amounts in Note 1 – *The Company and Summary of Significant Accounting Policies*, Note 2 – *Revenue from Contracts with Customers* and Note 7 – *Segment Information* have been restated to reflect these changes in reportable segments.

Additionally, the Company has reclassified certain costs and expenses in the consolidated statement of operations for the year ended December 31, 2018 amounting to \$0.8 million, from technology and development to cost of revenue to conform to the current period presentation. These reclassifications had no effect on previously reported total costs and operating expenses and net loss. Historical Amounts in Note 1 – *The Company and Summary of Significant Accounting Policies* have been restated to reflect this reclassification.

Foreign Currency— The assets and liabilities of the Company’s foreign subsidiaries are translated into U.S. dollars at the rate of exchange in effect at the balance sheet date. Income and expense items are translated at the average exchange rates prevailing during the period.

Cash and Cash Equivalents and Restricted Cash—The Company considers all highly liquid investments with an original maturity of three months or less when purchased to be cash equivalents. Cash and cash equivalents that are contractually restricted from operating use are classified as restricted cash and cash equivalents. The Company had no restricted cash as of the years ended December 31, 2019 and 2018.

Accounts Receivable —The Company records accounts receivable at the invoiced amount and does not charge interest on past due invoices. An allowance for doubtful accounts is maintained to reserve for potentially uncollectible accounts receivable. The Company reviews its accounts receivable from customers that are past due to identify specific accounts with known disputes or collectability issues. In determining the amount of the reserve, the Company makes judgments about the creditworthiness of customers based on ongoing credit evaluations.

Property and Equipment —Property and equipment are stated at cost, less accumulated depreciation. Depreciation is computed using the straight-line method over the estimated useful lives of the assets as follows:

Leasehold improvements	3–10 years
Computer hardware	3–5 years
Computer software	3 years
Furniture and fixtures	7 years
Other	3–5 years

Computer hardware under finance leases and leasehold improvements are amortized over the shorter of the lease term or the estimated useful life of the assets.

Long-Lived Assets —The Company reviews the carrying value of its long-lived assets, exclusive of goodwill, for impairment whenever events or changes in circumstances indicate that the carrying value of these assets may not be recoverable. For purposes of evaluating and measuring impairment, the Company groups a long-lived asset or assets with other assets and liabilities at the lowest level for which identifiable cash flows are largely independent of the cash flows of other assets and liabilities. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of the assets to future undiscounted net cash flows expected to be generated by the assets. If such assets are considered impaired, the impairment is measured and recognized as the amount by which the carrying amount of the assets exceeds the fair value of the assets. See Note 3 - *Property and Equipment* —*Net* further details.

Software Development Costs —The Company capitalizes certain costs incurred for the development of internal use software, as well as the costs of developing software for sale or license to customers. Internal use software includes the Company's proprietary portal software and related applications, Cloud ID authentication software, and various applications used in the management of the Company's portals. Software for sale or license to customers includes the Company's proprietary Email/Collaboration offerings. Costs incurred during the preliminary project stage for internal software programs are expensed as incurred. External and internal costs incurred during the application development stage (subsequent to the achievement of technological feasibility on software to be sold or licensed) of new software development, as well as for upgrades and enhancements for software programs that result in additional functionality are capitalized. Software development costs capitalized for sale or license to customers and cost capitalized for the development of internal use software are amortized over the estimated useful life of the applicable software. Impairment charges are taken as a result of circumstances that indicate that the carrying values of the assets were not fully recoverable. The Company utilizes the discounted cash flow method to determine the fair value of the capitalized software assets. Impairment charges for the years ended December 31, 2019 and 2018 are included in general and administrative expense in the consolidated statement of operations.

Leases — The Company determines if an arrangement is a lease and classifies that lease as either an operating or finance lease at inception. Right-of-use (ROU) assets and liabilities are recognized at lease commencement date based on the present value of remaining lease payments over the reasonably certain lease term. For this purpose, only payments that are fixed and determinable at the time of commencement are considered. As many of the leases do not provide an implicit rate, the Company uses its incremental borrowing rate based on the information available at commencement date in determining the present value of lease payments. The incremental borrowing rate is a hypothetical rate based on factors including the Company's credit rating. The ROU asset also includes any lease payments made prior to commencement and is recorded net of any lease incentives received. Lease terms may include options to extend or terminate the lease when it is reasonably certain that the options will be exercised.

Operating leases are included in operating lease right-of-use assets, and current and long-term operating lease liabilities on our consolidated balance sheets. Finance leases are included in property and equipment-net, and on the current and long-term portion of debt and finance leases in our consolidated balance sheets.

Other Intangible Assets —Other intangible assets consist of customer relationships, trademarks, and purchased technology. Definite-lived intangible assets are amortized on a straight-line basis. The Company reviews its definite-lived intangible assets for impairment when impairment indicators exist. The Company uses undiscounted cash flow to determine whether impairment exists and measures any impairment losses using discounted cash flow.

The components and original estimated economic lives of our amortizable intangible assets were as follows as of December 31, 2019 and 2018:

	Original Estimated Economic Life	(Dollars in thousands)	
		2019	2018
Gross amortizable intangible assets:			
Customer and publisher relationships	10 years	\$ 14,780	\$ 14,780
Technology	5 years	2,330	2,330
Trademark	5 years	300	300
Total gross amortizable intangible assets		17,410	17,410
Accumulated amortization:			
Customer and publisher relationships		(6,809)	(5,193)
Technology		(257)	(197)
Trademark		(1,933)	(1,467)
Total accumulated amortization		(8,999)	(6,857)
Amortizable intangible assets, net		\$ 8,411	\$ 10,553

Amortization of intangible assets was \$2.1 million in the years ended December 31, 2019 and 2018. Future amortization expense of amortizable intangible assets will be as follows: \$2.0 million in the year ending December 31, 2020, \$1.4 million in the year ending December 31, 2021, \$1.3 million in the year ending December 31, 2022, and 2023, \$0.4 million in the year ending December 31, 2024, and \$1.9 million thereafter.

Goodwill —The Company evaluates goodwill for impairment for each of its reporting units at least annually on October 1st, and whenever events occur or circumstances change, such as changes in the business climate, poor indicators of operating performance or the sale or disposition of a significant portion of a reporting unit. The Company is required to evaluate goodwill for impairment when there is a change in reporting units. During the first quarter of 2019, the Company made changes to its segment reporting structure that resulted in two reportable segments: 1) Software & Services and 2) Portal & Advertising. Previously the Company concluded that it had one reportable segment. This change resulted in two reporting units for the purpose of impairment analysis for goodwill.

Companies may perform a qualitative assessment as the initial step in the annual goodwill impairment testing process for all or selected reporting units. Companies are also allowed to bypass the qualitative analysis and perform a quantitative analysis if desired. Economic uncertainties and the length of time from the calculation of a baseline fair value are factors that we consider in determining whether to perform a quantitative test.

When the Company evaluates the potential for goodwill impairment using a qualitative assessment, the Company considers factors including, but not limited to, macroeconomic conditions, industry conditions, the competitive environment, changes in the market for our products and services, regulatory and political developments, entity specific factors such as strategy and changes in key personnel and overall financial performance. If, after completing this assessment, it is determined that it is more likely than not that the fair value of a reporting unit is less than its carrying value, we proceed to a quantitative test.

Quantitative testing requires a comparison of the fair value of each reporting unit to its carrying value. The fair value of each reporting unit is determined using a combination of an income approach and a market approach. If the carrying value of the reporting unit exceeds its fair value, goodwill is considered impaired and any loss is measured as the difference between the carrying value and fair value of the reporting unit.

The income approach uses a discounted cash flow method to estimate the fair value of our reporting units. The discounted cash flow method incorporates various assumptions, the most significant being projected revenue growth rates, operating margins and cash flows, the terminal growth rate and the discount rate. The Company projects revenue growth rates, operating margins and cash flows based on each reporting unit's current business, expected developments and operational strategies typically over a five-year period.

The market approach determines fair value based on available market pricing for comparable assets. Valuation multiples were calculated utilizing actual transaction prices and revenue or EBITDA data from target companies deemed similar to the reporting unit. Valuation multiples were then applied to certain operating statistics such as revenue or EBITDA, and an estimated control premium was applied.

If the carrying amount of the reporting unit exceeds the reporting unit's fair value as determined using the two valuation methodologies described above, an impairment loss is recognized in the amount by which the carrying value of the reporting unit exceeds the fair value of the reporting unit. The determination of our assumptions is subjective and requires significant estimates. Changes in these estimates and assumptions could materially affect the results of our reviews for impairment of goodwill.

During the year ended December 31, 2019, in addition to the annual assessment done as of October 1st, we performed a quantitative test as of the first quarter for both reporting units due to change in segment reporting, as discussed above, and both reporting units fair value exceeded carrying value.

Furthermore, in accordance with ASC 350-20-35, the Company assesses goodwill of an entity (or a reporting unit) for impairment if an event occurs or circumstances change that indicate that the fair value of the entity (or the reporting unit) may be below its carrying amount (a triggering event). As a result of the such assessment of relevant events and circumstances, the Company performed a quantitative test for the Portal & Advertising segment as of June 30, 2019 for which the fair value exceeded the carrying value.

There were no impairment losses were recorded for goodwill during the years ended December 31, 2019, and 2018.

As noted above, in 2019, we changed our segment reporting structure which resulted in two reportable segments: 1) Software & Services and 2) Portal & Advertising. As a result, all prior period balances for those segments were restated to reflect this change. The change in goodwill is as follows for the years ended December 31, 2019 and 2018 (in thousands):

	Software & Services	Portal & Advertising	Total
Balance as of January 1, 2018	\$ 11,811	\$ 4,144	\$ 15,955
Effect of foreign currency translation	(14)	—	(14)
Balance as of December 31, 2018	\$ 11,797	\$ 4,144	\$ 15,941
Effect of foreign currency translation	7	—	7
Balance as of December 31, 2019	\$ 11,804	\$ 4,144	\$ 15,948

Revenue Recognition — The Company recognize revenues when we transfer control of promised goods or services to our customers in an amount that reflects the consideration to which we expect to be entitled to in exchange for those goods or services. See Note 2, *Revenue from Customers* for further discussion on Revenue.

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 where the Company is 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 the Company's data center facilities. Royalty costs consist of amounts due to third parties for the license of their applications or technology sold with or embedded in our email software. Product support costs consist of employee and operating costs directly related to the Company's maintenance and professional services support.

Concentrations of Risk — As of December 31, 2019 and 2018, the Company had concentrations equal to or exceeding 10% of the Company's accounts receivable as follows:

	Accounts Receivable	
	2019	2018
Portal & Advertising Customer A	14 %	15 %

For the years ended December 31, 2019 and 2018, the Company had concentrations equal to or exceeding 10% of the Company's revenue as follows:

	Revenue	
	2019	2018
Google search	*	13 %
Google advertising affiliate	*	11 %
Portal & Advertising Customer A	13 %	*

* - Less than 10%

For the years ended December 31, 2019 and 2018, the following customers received revenue-share payments equal to or exceeding 10% of the Company's cost of revenue.

	Cost of Revenue	
	2019	2018
Portal & Advertising Customer B	19 %	29 %

Financial instruments that potentially subject the Company to significant concentrations of credit risk consist principally of cash and cash equivalents. The Company places its cash primarily in checking and money market accounts with high credit quality financial institutions, which, at times, have exceeded federally insured limits of \$0.25 million. Although the Company maintains balances that exceed the federally insured limit, it has not experienced any losses related to these balances and believes credit risk to be minimal.

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 the Company's products, equipment and related infrastructure.

Sales and Marketing —Sales and marketing expenses consist primarily of compensation-related expenses to the Company's direct sales and marketing personnel, as well as costs related to advertising, industry conferences, promotional materials, and other sales and marketing programs. Advertising costs are expensed as incurred. Advertising costs totaled \$0.4 million in 2019, and 2018 respectively.

General and Administrative —General and administrative expenses consist primarily of compensation related expenses for executive management, finance, accounting, human resources, legal, and Corporate IT as well as professional fees and facilities costs.

Earnings (Loss) Per Share —Basic earnings (loss) per share ("EPS") is calculated in accordance with the Financial Accounting Standards Board ("FASB") ASC 260, *Earnings per Share*, using the weighted average number of common shares outstanding during each period. Diluted EPS assumes the conversion, exercise or issuance of all potential common stock equivalents unless the effect is to reduce a loss or increase the income per share. For purposes of this calculation, stock options, warrants, performance based stock units ("PSUs"), and restricted stock units ("RSUs") are considered to be potential common shares and are only included in the calculation of diluted earnings (loss) per share when their effect is dilutive.

Stock-Based Compensation —The Company records compensation costs related to stock-based awards in accordance with FASB ASC 718, *Compensation—Stock Compensation*. Under the fair value recognition provisions of ASC 718, the Company measures stock-based compensation cost at the grant date based on the estimated fair value of the award. Compensation cost is recognized ratably over the requisite service period of the award. The Company utilizes the Black-Scholes option-pricing model to estimate the fair value of stock options granted. The amount of stock-based compensation expense recognized during a period is based on the portion of the awards that are ultimately expected to vest. The Company estimates pre-vesting forfeitures at the time of grant by analyzing historical data and revises those estimates in subsequent periods if actual forfeitures differ from those estimates. The total expense recognized over the vesting period will only be for those awards that ultimately vest.

Employee Benefit Plan —The Company sponsors a 401(k) profit sharing plan that covers substantially all employees. Under the plan, eligible employees are permitted to contribute a portion of gross compensation not to exceed standard limitations provided by the Internal Revenue Service. The Company maintains the right to match employee contributions, and contributed \$0.2 million for the years ended December 31, 2019, and 2018.

Income Taxes — Deferred income tax assets and liabilities are determined based on temporary differences between the financial statement and income tax bases of assets and liabilities and net operating loss (“NOL”) and credit carryforwards using enacted income tax rates in effect for the year in which the differences are expected to reverse. A valuation allowance is established to the extent necessary to reduce deferred income tax assets to amounts that more likely than not will be realized.

The Company accounts for uncertain tax positions using a more-likely-than-not recognition threshold based on the technical merits of the tax position taken. Tax benefits that meet the more-likely-than-not recognition threshold should be measured as the largest amount of tax benefits, determined on a cumulative probability basis, which is more likely than not to be realized upon ultimate settlement in the financial statements. It is the Company’s policy to recognize interest and penalties related to income tax matters in income tax expense. As of December 31, 2019 and 2018, accrued interest or penalties related to uncertain tax positions was insignificant.

Accounting Estimates —The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates, judgments and assumptions that affect the amounts reported and disclosed in the financial statements and the accompanying notes. The Company bases its estimates on historical experience and on various other assumptions that are believed to be reasonable, the results of which form the basis for making judgments about the carrying values of assets and liabilities. Actual results may differ from estimated amounts.

Fair Value Measurements —Fair value measurement standards apply to certain financial assets and liabilities that are measured at fair value on a recurring basis at each reporting period. The fair value of cash and cash equivalents, accounts receivable, accounts payable, accrued expenses and other current liabilities approximates their carrying value due to their short-term nature.

The provisions of FASB ASC 820, *Fair Value Measurements and Disclosures*, establishes a framework for measuring the fair value in accounting principles generally accepted in the U.S. and establishes a hierarchy that categorizes and prioritizes the sources to be used to estimate fair value as follows:

Level 1 —Level 1 inputs are defined as observable inputs such as quoted prices in active markets.

Level 2 —Level 2 inputs include quoted prices for similar assets and liabilities in active markets, quoted prices for identical or similar assets or liabilities in markets that are not active, inputs other than quoted prices that are observable for the asset or liability (interest rates, yield curves, etc.), and inputs that are derived principally from or corroborated by observable market data by correlation or other means (market corroborated inputs).

Level 3 —Level 3 inputs are unobservable inputs that reflect the Company’s determination of assumptions that market participants would use in pricing the asset or liability. These inputs are developed based on the best information available, including the Company’s own data.

Applicable Recent Accounting Pronouncements —

Not Yet Adopted

In August 2018, the FASB issued Accounting Standards Update (“ASU”) No. 2018-15, *Customer’s Accounting For Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract* (“ASU 2018-15”), which aligns the requirements for capitalizing implementation costs in a cloud computing arrangement with the requirements for capitalizing implementation costs incurred for an internal-use software license. Adoption of this guidance is required for fiscal years beginning after December 15, 2019 and interim periods within those fiscal years and early adoption is permitted. Entities are permitted to choose to adopt the new guidance (1) prospectively for eligible costs incurred on or after the date this guidance is first applied or (2) retrospectively. The Company is evaluating the impact of this new accounting standard on its financial statements.

Recently Adopted

On January 1, 2019 the Company adopted ASU No. 2016-2, *Leases* (Topic 842) (ASU 2016-2), as amended, which generally requires lessees to recognize operating and financing lease liabilities and corresponding right-of-use (ROU) assets on the balance sheet and to provide enhanced disclosures surrounding the amount, timing and uncertainty of cash flows arising from leasing arrangements. In July 2018, the FASB issued ASU 2018-11, *Leases (Topic 842), Targeted Improvements*, which provides an additional, optional transition method with which to adopt the new leases standard. This additional transition method allows for a cumulative-effect adjustment to the opening balance of retained earnings in the period of adoption, rather than in the earliest period presented in the financial statements, as originally required by ASU 2016-2. The Company adopted the standard using the additional transition method introduced by ASU 2018-11. The most significant impact was the recognition of ROU assets and lease liabilities for operating leases, while our accounting for finance leases remained substantially unchanged. For information regarding the impact of Topic 842 adoption, see *Significant Accounting Policies - Leases* and Note 9 — *Leases*. Results and disclosure requirements for reporting periods beginning after January 1, 2019 are presented under Topic 842, while prior period amounts have not been adjusted and continue to be reported in accordance with our historical accounting under Topic 840.

The Company elected the package of practical expedients permitted under the transition guidance, which allowed for the carryforward of historical lease classification, on whether a contract was or contains a lease, and of the assessment of initial direct costs for any leases that existed prior to January 1, 2019. The Company also elected to combine lease and non-lease components and to keep leases with an initial term of 12 months or less off the balance sheet and recognize the associated lease payments in the consolidated statements of income on a straight-line basis over the lease term.

On January 1, 2019, the Company recognized ROU assets of \$10.2 million, with corresponding lease liabilities of \$10.4 million on the consolidated balance sheet. The difference between the lease liability and the ROU asset represents the existing deferred rent liabilities balances before adoption, resulting from historical straight-lining of rent expense, which was reclassified upon adoption to reduce the measurement of the initial ROU asset. This was in addition to the \$3.4 million of finance lease ROU assets previously reported in property and equipment, net as capital leases. The adoption did not impact our beginning stockholders’ equity, and did not have a material impact on the condensed statement of operations and statement of cash flows for the year ended December 31, 2019.

The Company considers the applicability and impact of all ASUs. ASUs not listed above were assessed and determined to be either not applicable, or had or are expected to have minimal impact on the Company’s financial statements and related disclosures.

2. REVENUE FROM CONTRACTS WITH CUSTOMERS

Revenue is recognized according to ASC 606, *Revenue - Revenue from Contracts with Customers*. The Company generates all of its revenue from contracts with customers. Many of the Company's contracts with customers contain multiple performance obligations. For these contracts, the Company accounts for individual performance obligations separately if they are distinct. The transaction price is allocated to the separate performance obligations on a relative standalone selling price basis. Standalone selling prices of software licenses are typically estimated using the residual approach. Standalone selling prices of services are typically estimated based on observable transactions when these services are sold on a standalone basis. The Company usually expects payment within 30 to 90 days from the invoice date (fulfillment of performance obligations or per contract terms). Differences between the amount of revenue recognized and the amount invoiced are recognized as deferred revenue. None of the Company's contracts as of December 31, 2019 or 2018 contained a significant financing component.

The following is a description of principal activities from which the Company generates revenue in each reportable segment. Revenue is recognized when control of the promised goods or services are transferred to the Company's customers, in an amount that reflects the consideration that is expected to be received in exchange for those goods or services.

Software & Services

Synacor's software and services segment is comprised of our cloud-based identity management platform and our Zimbra email & collaboration platform. Subscription fees and other fees are received from customers for the use of the Company's proprietary technology, including the use of, or access to, email, Cloud ID, security services, games and other premium services. Monthly subscriber levels typically form the basis for generating recurring and fee-based revenue. This revenue is typically determined by multiplying a per-subscriber per-month fee by the number of subscribers using the particular services being offered or consumed, except in the case of software licenses and support, which are based on a fixed fee. Revenue earned as subscription fees and maintenance and support fees is recognized from customers as its obligation to deliver the service is satisfied, which is when the service is delivered. Revenue is also recognized from the licensing and distribution of the Company's Email/Collaboration products and services, including licenses of intellectual property. Software license revenue is recognized up front upon delivery of the licensed product and the utility that enables the customer to access authorization keys, provided that a signed contract has been received. The Company typically sells term-based software licenses that expire, which are referred to as subscription licenses, but also sells perpetual licenses for its Email products. The software is delivered before related services are provided and is functional without professional services, updates, and technical support.

Portal & Advertising

The Company uses internet advertising to generate revenue from the traffic on its Managed Portals and Advertising solutions, categorized as search advertising and digital advertising. For search advertising, the Company has a revenue-sharing relationship with Google, pursuant to which the Company includes a Google-branded search tool on its Managed Portals. For revenue earned under this relationship the Company evaluates whether it is the principal (i.e., report revenues on a gross basis) or agent (i.e., report revenues on a net basis). When a Google consumer makes a search query using this tool, the Company delivers 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 the Company. The payment received from Google is recognized as revenue. Digital advertising includes video, image and text advertisements delivered on its Managed Portals. Advertising inventory is filled with advertisements sourced by the Company's direct sales force and advertising network partners. Revenue is generated 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 on a cost per impression or cost per action basis. Digital advertising also includes advertising fees received for the placement of syndicated digital advertisements with other digital advertising publishers, for which the Company acquires and pays for the space (inventory) 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.

Disaggregation of revenue

The following table provides information about disaggregated revenue for the years ended December 31, 2019, and 2018 by the timing of revenue recognition, and includes a reconciliation of the disaggregated revenue by reportable segment (in thousands):

	Year Ended December 31,	
	2019	2018
Software & Services		
Products and services transferred over time	\$ 34,029	\$ 35,938
Products transferred at a point in time	10,456	12,754
Total Software & Services	\$ 44,485	\$ 48,692
Portal & Advertising		
Products and services transferred over time	\$ 5,168	\$ 7,254
Products transferred at a point in time	72,192	87,933
Total Portal & Advertising	\$ 77,360	\$ 95,187
Total revenue	\$ 121,845	\$ 143,879

Revenue disaggregated by geography, based on the billing address of our customer, consists of the following (in thousands):

	Year Ended December 31,	
	2019	2018
Revenue		
United States	\$ 99,845	\$ 119,912
International	22,000	23,967
Total revenue	\$ 121,845	\$ 143,879

Remaining Performance Obligations

Deferred revenue is recorded when cash payments are received or due in advance of revenue recognition from software licenses, professional services, and maintenance agreements. The timing of revenue recognition may differ from the timing of billings to customers. The changes in deferred revenue, inclusive of both current and long-term, are as follows (in thousands):

Beginning balance - January 1, 2019	\$ 8,886
Recognition of deferred revenue	(11,814)
Deferral of revenue	11,759
Effect of foreign currency translation	44
Ending balance-December 31, 2019	\$ 8,875

The majority of the deferred revenue balance above relates to the maintenance and support contracts for Email software licenses. These are recognized straight-line over the life of the contract, with the majority of the balance being recognized within the next twelve months.

Practical Expedients

The Company generally expenses sales commissions when incurred because the amortization period would have been one year or less. These costs are recorded within sales and marketing expenses.

The Company does not disclose the value of unsatisfied performance obligations for (i) contracts with an original expected length of one year or less and (ii) contracts for which revenue is recognized at the amount to which the Company has the right to invoice for services performed.

3. PROPERTY AND EQUIPMENT—NET

As of December 31, 2019 and 2018, property and equipment-net consisted of the following (in thousands):

	2019	2018
Computer equipment	\$ 25,392	\$ 27,294
Computer software	31,037	27,422
Furniture and fixtures	1,315	1,618
Leasehold improvements	1,116	1,256
Work in process (primarily software development costs)	187	4,584
Other	136	179
Property and equipment, gross	59,183	62,353
Less accumulated depreciation	(44,235)	(43,646)
Property and equipment, net	\$ 14,948	\$ 18,707

Depreciation expense totaled \$9.1 million and \$7.5 million for the years ended December 31, 2019, and 2018, respectively.

Property and equipment includes computer equipment held under finance leases and long-term debt obligations of \$10.8 million and \$8.4 million as of December 31, 2019 and 2018, respectively. Accumulated depreciation of computer equipment and software held under finance leases amounted to \$6.2 million and \$5.0 million as of December 31, 2019 and 2018, respectively.

The Company capitalized a total of \$2.3 million and \$3.6 million of costs that occurred during the application development phase, related to the development of internal-use software for the years ended December 31, 2019, and 2018, respectively. The Company capitalized a total of \$1.5 million and \$1.3 million of costs related to the development of software for sale or license for the years ended December 31, 2019 and 2018, respectively, that occurred after technological feasibility had been achieved.

Amortization of software for sale or license was \$1.4 million and \$0.2 million for the years ended December 31, 2019 and 2018, respectively, and is included in cost of revenue in the consolidated statement of operations.

During the year ended December 31, 2019, there was a loss of a major portal customer which caused the Company to assess the recoverability of certain long-lived assets. When the carrying value of long-lived assets is not recoverable from future undiscounted cash flows, the Company utilizes the discounted cash flow to determine the fair value of the assets and impairment charges are recognized when the fair value of the assets is less than their carrying value, which use unobservable inputs, or Level 3 inputs, as defined by the fair value hierarchy. Impairment charges related to the following assets were included in general and administrative expenses in the consolidated statement of operations for the years ended December 31, 2019, and 2018 (in thousands):

Year Ending December 31,	2019	2018
Computer equipment	\$ 2	\$ —
Computer software	1,557	552
Furniture and fixtures	102	—
Leasehold improvements	90	—
Total	\$ 1,751	\$ 552

The following table sets forth long-lived tangible assets by geographic area as of December 31, 2019 and December 31, 2018 (in thousands):

	2019	2018
Long-lived tangible assets:		
United States	\$ 14,629	\$ 18,217
International	319	490
Total long-lived tangible assets	\$ 14,948	\$ 18,707

4. ACCRUED EXPENSES AND OTHER CURRENT LIABILITIES

As of December 31, 2019 and 2018, accrued expenses and other current liabilities consisted of the following (in thousands):

	2019	2018
Accrued compensation	\$ 4,209	\$ 5,801
Accrued content fees and other costs of revenue	151	342
Accrued taxes	192	206
Other	1,326	1,500
Total	\$ 5,878	\$ 7,849

Included in accrued compensation are accrued severance costs. In 2018, the Company initiated a cost reduction program ("2018 plan") to drive overall efficiency while adding capacity and streamlining the organization. The plan involved a reduction in the Company's workforce by approximately 25 employees. In 2019, the Company initiated a similar cost reduction program ("2019 plan") in order to further streamline the organization after the loss of a major portal customer. These actions resulted in workforce reductions of approximately 50 employees, office consolidations and consolidating operations.

In the year ended December 31, 2018, the pre-tax severance charge and outplacement services resulting from the reduction in workforce, combined with the Company's separation from its former Chief Financial Officer, amounted to \$1.1 million. Severance costs charged to sales and marketing and general and administrative expenses were each \$0.4 million, and \$0.3 million was charged to technology and development expenses. For the year ended December 31, 2019 the pre-tax severance charge and outplacement services resulting from the reduction in workforce amounted to \$0.6 million. Severance costs charged to sales and marketing was \$0.2 million and \$0.4 million was charged to technology and development expenses.

The following is a roll forward of the accrued severance liability for the years ended December 31, 2019 and 2018 (in thousands):

	2019	2018
Balance at beginning of the year	\$ 274	\$ 21
Charged to expense	607	1,111
Cash payments related to 2018 plan	(268)	(858)
Cash payments related to 2019 plan	(557)	—
Balance at end of year	\$ 56	\$ 274

5. LONG-TERM DEBT

On August 7, 2019, the Company entered into a new Loan and Security Agreement, the "Loan Agreement", with Silicon Valley Bank, or the "Lender". The Lender agrees to provide a \$12.0 million secured revolving line of credit, the "credit facility". The credit facility is available for cash borrowings, subject to a Borrowing Base formula based upon eligible accounts receivable. The maturity of the Agreement is two years from the date of the Agreement.

Any borrowings under the Loan Agreement bear interest, based on an interest rate dependent on cash liquidity for the relevant period. Cash liquidity is defined as cash plus (a) the lesser of (i) the Revolving Line or (ii) the amount available under the Borrowing Base minus (b) the outstanding principal balance of any Advances. If cash liquidity is greater than \$20.0 million then the interest rate is the greater of the "prime rate" as published in The Wall Street Journal (WSJ) for the relevant period plus 0.50% or 5.50%. If cash liquidity is less than \$20.0 million then the interest rate is the greater of WSJ prime rate plus 1.00% or 6.00%. The Loan Agreement maintains certain reporting requirements, conditions, and covenants. The financial covenants include that the Company must maintain a Minimum Liquidity Coverage greater than or equal to 2.25:1.00. Additionally, when cash liquidity falls below \$20.0 million, the Agreement includes certain trailing six month Free Cash Flow requirements, tested on a quarterly basis. Free Cash Flow is to be defined as (a) Adjusted EBITDA, minus (b) capital expenditures determined in accordance with GAAP, minus (c) capitalized software expenses, determined in accordance with GAAP, and minus (d) cash taxes, determined in accordance with GAAP.

As of December 31, 2019, there were no borrowings outstanding under the Loan Agreement, and subject to the operation of the borrowing formula, \$10.8 million was available for draw under the Loan Agreement.

The Company's obligations to the Lender are secured by a first priority security interest in all our assets, including our intellectual property. The Loan Agreement contains customary events of default, including non-payment of principal or interest, violations of covenants, material adverse changes, cross-default, bankruptcy and material judgments. Upon the occurrence of an event of default, the Lender may accelerate repayment of any outstanding balance. The Loan Agreement also contains certain financial covenants and other agreements that are customary in loan agreements of this type, including restrictions on paying dividends and making distributions to our stockholders. As of December 31, 2019, the Company was in compliance with the financial covenants.

6. INCOME TAXES

Income (loss) before income tax expense was attributable to the following jurisdictions (in thousands):

	2019	2018
United States	\$ (8,799)	\$ (8,064)
Foreign	707	1,125
Total	\$ (8,092)	\$ (6,939)

The provision (benefit) for income taxes for the years ended December 31, 2019 and 2018, was comprised of the following (in thousands):

	2019	2018
Current:		
United States Federal	\$ —	\$ —
State	35	42
Foreign	850	822
Total current provision for income taxes	885	864
Deferred:		
United States Federal	24	(310)
State	61	62
Foreign	(41)	—
Net deferred provision for income taxes	44	(248)
Total provision for income taxes	\$ 929	\$ 616

The income tax effects of significant temporary differences and carryforwards that give rise to deferred income tax assets and liabilities as of December 31, 2019 and 2018 are as follows (in thousands):

	2019	2018
Deferred income tax assets:		
Stock and other compensation expense	\$ 2,252	\$ 2,118
Net operating losses	11,787	9,310
Research and development credits	1,676	1,676
Other federal, state and foreign carryforwards	2,424	1,858
Intangible assets	1,765	1,045
Other	620	694
Gross deferred tax assets	20,524	16,701
Valuation allowances	(14,025)	(11,984)
Net deferred tax assets	6,499	4,717
Deferred income tax liabilities:		
Fixed assets	(5,139)	(3,492)
Intangible assets and other	(1,007)	(829)
Gross deferred tax liabilities	(6,146)	(4,321)
Subtotal	353	396
Less unrecognized tax benefit liability related to deferred items	(628)	(627)
Net deferred tax liabilities	\$ (275)	\$ (231)

There have been no additions or reductions to the unrecognized tax benefit of \$0.6 million in any of the years ended December 31, 2019 and 2018. The unrecognized tax benefits at the end of December 31, 2019 and 2018 were primarily related to research and development carryforwards.

The Company does not expect any material changes to its unrecognized tax benefits within the next twelve months.

The Company recognizes interest and penalties related to uncertain tax positions in income tax expense. As of December 31, 2019 and 2018, penalties and interest were insignificant.

The Company files income tax returns in the U.S. federal jurisdiction as well as many U.S. states and foreign jurisdictions. The tax years 2016 to 2019 remain open to examination by the major jurisdictions in which the Company is subject to tax. Fiscal years outside the normal statute of limitation remain open to audit by tax authorities due to tax attributes generated in those early years which have been carried forward and may be audited in subsequent years when utilized.

Income tax expense for the years ended December 31, 2019 and 2018 differs from the expected income tax benefit calculated using the statutory U.S. Federal income tax rate as follows (dollars in thousands):

	2019		2018	
Federal income tax (benefit) expense at statutory rate	\$ (1,699)	21 %	\$ (1,457)	21 %
State and local taxes—net of federal benefit	76	(1)	82	(1)
Foreign taxes	569	(7)	620	(9)
Valuation allowance	1,818	(21)	1,250	(18)
Permanent differences	117	(2)	164	(2)
Other	48	(1)	(43)	—
Total	\$ 929	(11)%	\$ 616	(9)%

No additional U.S. income taxes or foreign withholding taxes have been provided for any additional outside basis differences inherent in the Company's foreign entities as the Company does not have any material unremitted earnings of the subsidiaries outside of the United States.

At December 31, 2019 and December 31, 2018, the Company has federal and state NOL carryforwards of \$48.2 million and \$36.6 million, respectively, including \$2.2 million of NOL carryforwards created by windfall tax benefits relating to stock compensation expense. The NOL generated December 31, 2017 and prior, will begin to expire in 2028. The Company has weighed all the available evidence both positive and negative and has determined that the Company more likely than not will not be able to generate sufficient taxable income in the future to be able to utilize the entire NOL in future periods. Therefore, a full valuation allowance has been recorded against the net deferred income tax asset as of December 31, 2019 and 2018. The deferred income tax provision is primarily due to the recognition of deferred tax liabilities relating to indefinite-lived goodwill that cannot be predicted to reverse for book purposes during the Company's loss carry forward periods.

Utilization of certain NOLs and credit carryforwards may be subject to an annual limitation due to ownership change limitations set forth in the Internal Revenue Code of 1986, as amended, or the Code, and comparable state income tax laws. Any future annual limitation may result in the expiration of NOLs and credit carryforwards before utilization. A prior ownership change and certain acquisitions resulted in the Company having NOLs subject to insignificant annual limitations. Additionally, for tax years beginning after December 31, 2017, the Tax Act limits the NOL deduction to 80% of taxable income, repeals carryback of all NOLs arising in a tax year ended after 2017, and permits indefinite carryforward for all such NOLs. NOLs arising in a tax year ended on or before 2017 can offset 100% of taxable income, are available for carryback, and expire 20 years after they arise.

7. SEGMENT INFORMATION

During the first quarter of 2019, the Company made changes to its segment reporting structure that resulted in two reportable segments: 1) Software & Services and 2) Portal & Advertising. All historical amounts have been restated to reflect this change in reportable segments. Software & Services generates revenue by providing cloud-based identity management solutions and email/collaboration products. Portal & Advertising generates managed portal fees and advertising revenue from its traffic on its Managed Portals and other advertising solutions it provides for publishers.

The Company's operations are organized and managed by type of products and services and segment information is reported accordingly. The Company's chief operating decision maker (the "CODM") is its Chief Executive Officer. The CODM reviews financial performance and allocates resources by reportable segment. There have been no operating segments aggregated to arrive at the Company's reportable segments.

The accounting policies of each segment are the same as those described in the summary of significant accounting policies, refer to Note 1—*Summary of Significant Accounting Policies*, for further details. The Company evaluates the performance of its segments and allocates resources to them based on Segment Adjusted EBITDA. Segment Adjusted EBITDA is defined as EBITDA (earnings before interest, income taxes, depreciation and amortization) adjusted for certain non-cash items and other non-recurring income and expenses.

Revenue for all operating segments include only transactions with unaffiliated customers and there is no intersegment revenue.

The Company does not account for, and does not report to management, its assets or capital expenditures by segment other than goodwill and intangible assets used for impairment analysis purposes.

The tables below summarize the financial information for the Company's reportable segments for the years ended December 31, 2019 and 2018 (in thousands). The "Corporate Unallocated Expenses" category, as it relates to Segment Adjusted EBITDA, primarily includes corporate overhead costs, such as rent, payroll and related benefit costs and professional services which are not directly attributable to any individual segment.

	Year Ended December 31, 2019		
	Revenue	Cost of revenue (1)	Segment Adjusted EBITDA
Software & Services	\$ 44,485	\$ 12,669	\$ 12,531
Portal & Advertising	77,360	49,321	10,657
Corporate Unallocated Expenses	—	—	(13,685)
Total Company	\$ 121,845	\$ 61,990	\$ 9,503

	Year Ended December 31, 2018		
	Revenue	Cost of revenue (1)	Segment Adjusted EBITDA
Software & Services	\$ 48,692	\$ 13,244	\$ 14,305
Portal & Advertising	95,187	60,060	10,788
Corporate Unallocated Expenses	—	—	(16,629)
Total Company	\$ 143,879	\$ 73,304	\$ 8,464

Notes:

(1) Exclusive of depreciation and amortization shown separately on the consolidated statements of operations

The following table reconciles total Segment Adjusted EBITDA to Net loss:

	Year Ended December 31,	
	2019	2018
	(in thousands)	
Total Segment Adjusted EBITDA	\$ 9,503	\$ 8,464
Less:		
Provision for income taxes	(929)	(616)
Interest expense	(268)	(338)
Other expense, net	(17)	(212)
Depreciation and amortization	(11,251)	(9,832)
Long-lived asset impairment	(1,751)	(552)
Stock-based compensation expense	(1,616)	(1,804)
Gain on Sale of investment	—	—
Restructuring costs *	(959)	(1,111)
Certain legal expenses **	(1,098)	(1,400)
Certain professional services fees ***	(635)	(154)
Net loss	\$ (9,021)	\$ (7,555)

* "Restructuring costs" include severance expense, contract termination costs and other exit or disposal costs.

** "Certain legal expenses" include legal fees and other related expenses outside the ordinary course of business.

*** "Certain professional services fees" includes fees and expenses related to merger and acquisition activities.

8. COMMITMENTS AND CONTINGENCIES

Contract Commitments —The Company is obligated to make payments under various contracts with vendors and other business partners, principally for revenue-share arrangements. Contract commitments as of December 31, 2019 are \$0.8 million in 2020.

Litigation —The Company was previously awaiting a decision of an arbitration tribunal following a binding arbitration that took place on July 30, 2018 between the Company and Maxit Technology Incorporated and Maxit Technology Holdings Limited, (collectively, “Maxit”), who were formerly the Company’s joint venture partner 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 the Company’s 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, interest and legal expenses. On March 18, 2019, the arbitration tribunal issued a final award finding that the Company has no liability to Maxit. The Company reversed the reserve of \$0.3 million that was previously recorded related to this arbitration during the year ended December 31, 2019.

The Company and its Chief Executive Officer and former Chief Financial Officer were named as defendants in a federal securities class action lawsuit filed on April 4, 2018 in the United States District Court for the Southern District of New York. The class includes persons who purchased the Company’s shares between May 4, 2016 and March 15, 2018. The plaintiff alleged that the Company made materially false and misleading statements regarding its 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 plaintiff filed an amended complaint on August 2, 2018, a second amended complaint on November 2, 2018, and the Company filed a motion to dismiss on December 17, 2018. The plaintiff filed an opposition to the motion to dismiss on January 19, 2019 and the Company filed its reply to plaintiff’s opposition on February 15, 2019. On August 28, 2019, the court granted the Company’s motion to dismiss but permitted the plaintiff to seek leave to replead. On October 2, 2019, the plaintiff filed a letter application seeking the court’s leave to file a third amended complaint. The Company filed a letter in opposition to the plaintiff’s motion on October 21, 2019. The court denied plaintiffs’ application to file an amended complaint and ordered the case closed on November 15, 2019. The Clerk of the Court entered judgment in favor of the Company and the individual defendants and closed the case on November 19, 2019. Plaintiff filed its Notice of Appeal on December 16, 2019. The Company disputes these claims and intends to defend them vigorously. The Company cannot yet determine whether it is probable that a loss will be incurred in connection with this complaint, nor can the Company reasonably estimate the potential loss, if any. Legal fees and liabilities related to this lawsuit are covered by our D&O insurance policy after the Company reaches its deductible.

In addition, the Company is, from time to time, party to litigation arising in the ordinary course of business. It does not believe that the outcome of these claims will have a material adverse effect on its consolidated financial position, results of operations or cash flows based on the status of proceedings at this time. However, these matters are subject to inherent uncertainties and the Company’s view of these matters may change in the future.

9. Leases

The Company enters into various noncancelable operating lease agreements for certain of our offices, data centers, colocations and network equipment. The Company's leases have original lease periods expiring between 2020 and 2024. Many leases include one or more options to renew. The Company does not assume renewals in its determination of the lease term unless the renewals are deemed to be reasonably assured at lease commencement. The Company's variable lease payments are immaterial and its lease agreements do not contain any material residual value guarantees or material restrictive covenants. Operating lease costs are included in cost of revenue and general and administrative costs in the Company's consolidated statements of operations. Finance lease amortization costs are included in depreciation and amortization, and finance lease interest costs are included in interest expense in the Company's consolidated statements of operations.

The components of lease costs, lease term and discount rate are as follows (lease cost in thousands):

	Year Ended December 31, 2019
Finance lease cost	
Amortization of right-of-use assets	\$ 3,590
Interest	237
Operating lease cost	3,666
Total lease cost	<u>\$ 7,493</u>
Weighted Average Remaining Lease Term	
Operating leases	2.0 Years
Finance leases	1.2 Years
Weighted Average Discount Rate	
Operating leases	6.0 %
Finance leases	5.0 %

The following is a schedule, by years, of maturities of lease liabilities as of December 31, 2019 (in thousands):

Year Ending December 31,	Operating Leases	Finance Leases
2020	\$ 2,396	\$ 2,611
2021	1,615	522
2022	944	226
2023	448	—
2024	36	—
Total undiscounted cash flows	<u>\$ 5,439</u>	<u>\$ 3,359</u>
Less imputed interest	(428)	(101)
Present value of lease liabilities	<u>\$ 5,011</u>	<u>\$ 3,258</u>

Supplemental cash flow information related to leases are as follows (in thousands):

	Year Ended December 31, 2019
Cash paid for amounts included in the measurement of lease liabilities:	
Operating cash outflows from operating leases	\$ 3,671
Operating cash outflows from finance leases	\$ 237
Financing cash outflows from finance leases	\$ 3,427
Lease liabilities arising from obtaining right-of-use-assets:	
Operating leases	\$ 175
Finance leases	\$ 3,152

As of December 31, 2018, prior to the adoption of Topic 842, future minimum payments under operating leases having initial or remaining non-cancelable lease terms in excess of one year, net of sublease income amounts, were as follows (in thousands):

Year Ending December 31,		Operating Lease Commitments
2019	\$	5,276
2020		3,101
2021		1,594
2022		782
2023		250
2024		33
Total lease commitments	\$	11,036

Rent expense for operating leases was \$4.6 million for 2018.

10. EQUITY

Stock Repurchases —In February 2014, the board of directors approved a Stock Repurchase Program, which authorizes a repurchase of up to \$5.0 million worth of the Company's outstanding common stock. The Stock Repurchase Program has no expiration date, and may be suspended or discontinued at any time without notice. There were no repurchases under this program during the years ended December 31, 2019 or 2018. The Company has repurchased \$0.6 million of its outstanding stock under this authorization to date.

Withhold to Cover —During the years ended December 31, 2019 or 2018, certain employees, in lieu of paying withholding taxes on the vesting of certain shares of restricted stock awards, authorized the withholding of shares of the Company's common stock to satisfy their minimum statutory tax withholding requirements related to such vesting. These shares were recorded as treasury stock using the cost method at the per share closing price on the date of vesting.

Warrants —Warrants to purchase 600,000 shares of common stock were issued as a component of the consideration transferred for an acquisition that occurred in 2015. These warrants expired unexercised as of August 2018.

11. STOCK-BASED COMPENSATION

The Company has stock-based employee compensation plans for which compensation cost is recognized in its financial statements. The Company is authorized to grant key employees and members of our board of directors stock-based incentive awards, including options to purchase common stock, stock appreciation rights, RSUs, PSUs or other stock units. The cost is measured at the grant date, based on the fair value of the award, and is recognized as an expense over the employee's requisite service period (generally the vesting period of the equity award). The Company utilizes the Black-Scholes option-pricing model to value stock option awards. The Company measures RSUs and PSUs using the fair market value of the restricted shares of common stock on the day the award is granted. Stock-based awards granted to employees and members of our board of directors include stock options and restricted stock units.

The following table presents the weighted-average assumptions used to estimate the fair value of options granted (excluding replacement options in conjunction with modifications described below) during the periods presented:

	Years Ended December 31,	
	2019	2018
Expected dividend yield	— %	— %
Expected stock price volatility	66.7 %	49.0 %
Risk-free interest rate	2.0 %	2.8 %
Expected life of options (in years)	5.27	6.25

The Company determines expected volatility uses historical volatility based on daily closing prices of the Company's common stock over periods that correlate with the expected terms of the awards. The risk-free rate is based on the United States Treasury yield curve at the time of grant for the appropriate expected term of the awards granted. Expected dividends are based on our history and expectation of dividend payouts. The Company has never declared or paid any cash dividends and does not presently plan to pay cash dividends in the foreseeable future. The expected life assumption represents the weighted-average period awards are expected to remain outstanding. The expected life assumptions are established through a review of historical exercise behavior of stock-based award grants with similar vesting periods.

The Company recorded \$1.6 million and \$1.8 million of stock-based compensation expense for the years ended December 31, 2019, and 2018, respectively. Expense related to stock option grants of non-qualified stock options ("NSOs") results in a temporary tax difference, which gives rise to a deferred income tax asset.

Total stock-based compensation expense included in the accompanying consolidated statements of operations for the years ended December 31, 2019 and 2018, is as follows (in thousands):

	Years Ended December 31,	
	2019	2018
Technology and development	\$ 338	\$ 489
Sales and marketing	513	474
General and administrative	765	841
Total stock-based compensation expense	<u>\$ 1,616</u>	<u>\$ 1,804</u>

Equity Incentive Plans —The Company has two stock option plans (the 2006 Stock Plan and the Amended and Restated 2012 Equity Incentive Plan), which, as of December 31, 2019, authorize the Company to grant up to 15.5 million stock options (ISOs and NSOs), stock appreciation rights, restricted stock, RSUs and PSUs. The ISOs and NSOs will be granted at a price per share not less than the fair value of the Company's common stock at the date of grant. Options granted to date generally vest over a four-year period with 25% vesting at the end of one year and the remaining 75% vesting monthly thereafter. Options granted generally are exercisable up to 10 years. RSUs generally vest over a 3 year period with one-sixth vesting at the end of each six-month period. PSUs vest annually over a 4 year period with the number of shares earned dependent upon the Company's achievement of certain financial performance targets.

Special Purpose Recruitment Plan —During 2013, our shareholders approved the Special Purpose Recruitment Plan from which equity compensation awards are granted to newly-hired employees. One million shares of common stock were reserved for issuance and have all been granted under this plan.

Stock Option Activity —A summary of stock option activity for the year ended December 31, 2019 is as follows:

	Number of Shares	Weighted Average Exercise Price	Aggregate Intrinsic Value (in thousands)	Weighted Average Remaining Contractual Term (years)
Outstanding at January 1, 2019	7,669,093	\$ 2.51		
Granted	461,400	1.61		
Exercised	(39,572)	1.49		
Forfeited	(314,748)	2.25		
Expired	(479,427)	2.37		
Outstanding—December 31, 2019	<u>7,296,746</u>	\$ 2.48	\$ 36	5.40
Expected to vest—December 31, 2019	<u>7,251,440</u>	\$ 2.48	\$ 35	5.37
Vested and exercisable—December 31, 2019	<u>6,036,172</u>	\$ 2.53	\$ 32	4.78

Aggregate intrinsic value represents the difference between the closing stock price of the Company's common stock and the exercise price of outstanding, in-the-money options. The Company's closing stock price as reported on the Nasdaq as of December 31, 2019 was \$1.52. The total intrinsic value of options exercised was \$10 thousand and \$91 thousand for the years ended December 31, 2019 and 2018, and respectively. The weighted-average grant date fair value of options granted was \$0.97 per share and \$1.02 per share for the years ended December 31, 2019 and 2018, respectively.

As of December 31, 2019, total unrecognized compensation cost, adjusted for estimated forfeitures, related to unvested stock options was \$1.4 million, which is expected to be recognized over a weighted-average period of 2.12 years.

RSU Activity —A summary of RSU activity for the year ended December 31, 2019 is as follows:

	Number of Shares	Weighted Average Fair Value
Unvested—January 1, 2019	11,346	\$ 3.60
Granted	845,361	1.56
Vested	(155,849)	2.04
Forfeited	(23,504)	1.76
Unvested—December 31, 2019	<u>677,354</u>	\$ 1.54

As of December 31, 2019, total unrecognized compensation cost, adjusted for estimated forfeitures, related to RSUs was \$0.7 million. This cost is expected to be recognized over a weighted-average remaining period of 2.31 years.

PSU Activity — During the year ended December 31, 2019, certain employees were granted PSUs with an aggregate target award of 297,789 shares of our common stock at a weighted average fair value of 1.36. The PSUs vest annually over four years from the grant date based on continuous service, with the number of shares earned dependent upon the Company's achievement of certain financial performance targets measured over the period from January 1, 2019 through December 31, 2022. The number of shares earned can range from 0% to 150% of the target award.

As of December 31, 2019, total unrecognized compensation cost, adjusted for estimated forfeitures, related to PSUs was \$0.3 million. This cost is expected to be recognized over a weighted-average remaining period of 3.01 years.

12. NET LOSS PER COMMON SHARE DATA

Basic net loss per share is computed using the weighted-average number of common shares outstanding during the period. Diluted net loss per share is computed using the weighted-average number of common shares and, if dilutive, potential common shares outstanding during the period. The Company's potential common shares consist of the incremental common shares issuable upon the exercise of stock options, warrants, and to a lesser extent, shares issuable upon the release of RSUs and PSUs. The dilutive effect of these potential common shares is reflected in diluted earnings per share by application of the treasury stock method.

The following equivalent shares were excluded from the calculation of diluted net loss per share because their effect would have been antidilutive for the periods presented:

	Year Ended December 31,	
	2019	2018
Anti-dilutive equity awards:		
Stock options	7,553,379	8,400,936
Restricted stock units	447,886	34,150
Performance based stock units	119,116	—
Warrants	—	400,000

13. SUBSEQUENT EVENTS

On February 11, 2020, the Company, Qumu Corporation, a Minnesota corporation (“Qumu”), and Quantum Merger Sub I, Inc., a Minnesota corporation and a direct, wholly owned subsidiary of Synacor (“Merger Sub”), entered into an Agreement and Plan of Merger and Reorganization (the “Merger Agreement”) for a proposed “merger of equals” transaction, pursuant to which, and subject to the conditions in the Merger Agreement, Merger Sub will merge with and into Qumu (the “Merger”), with Qumu surviving the Merger as a wholly owned subsidiary of the Company. The respective boards of directors of the Company and Qumu have each unanimously approved the Merger Agreement. The Company expects the Merger will be completed in the second quarter of calendar year 2020.

Pursuant to the Merger Agreement, each issued and outstanding share of common stock, par value \$0.01 per share, of Qumu will be converted into the right to receive 1.61 newly issued shares of common stock, par value \$0.01 per share, of Synacor. No fractional shares of Synacor Common Stock will be issued in the Merger, and Qumu stockholders will receive cash in lieu of fractional shares as part of the Qumu Common Stock Merger Consideration, as specified in the Merger Agreement.

The Merger Agreement provides that, upon the closing of the Merger, the board of directors of Synacor (the “New Synacor Board”) will initially be set at seven authorized directors. Two directors will come from Qumu’s existing board of directors and four directors, including Synacor Chief Executive Officer Himesh Bhise, will come from Synacor’s existing board of directors. It is anticipated that one additional director with software experience relevant to the operations of Synacor will be selected by the New Synacor Board, which such director will be subject to the approval of the New Synacor Board including at least one of the two directors from Qumu.

The closing of the Merger is subject to customary closing conditions, including (i) the absence of any adverse law or order promulgated, entered, enforced, enacted or issued by any governmental entity that makes illegal or prohibits the Merger, (ii) the Securities and Exchange Commission (the “SEC”) shall have declared effective the Form S-4 Registration Statement of Synacor which will contain the joint proxy statement/prospectus of the parties in connection with the Merger, (iii) the approval of the Merger Agreement by the affirmative vote of the holders of a majority of the outstanding shares of Qumu Common Stock entitled to vote thereon, (iv) the approval of the issuance of shares of Synacor Common Stock pursuant to the Merger Agreement by the affirmative vote of a majority of votes present or represented by proxy at Synacor’s stockholder meeting in connection with the Merger, (v) the authorization for listing on The Nasdaq Stock Market, subject to official notice of issuance, of the shares of Synacor Common Stock to be issued in the Merger, (vi) the receipt of certain opinions from legal counsel regarding the intended tax treatment of the Merger, (vii) subject to certain materiality exceptions, the accuracy of certain representations and warranties of each of Qumu and Synacor contained in the Merger Agreement and the compliance by each party with the covenants contained in the Merger Agreement, and (viii) the absence of a material adverse effect with respect to each of Qumu and Synacor.

The Merger Agreement also contains a non-solicitation provision pursuant to which neither Qumu nor Synacor is permitted to solicit, initiate, induce or knowingly encourage or facilitate, any acquisition proposal from third parties or to engage in discussions or negotiations with third parties regarding any acquisition proposal. Notwithstanding this limitation, prior to a party’s requisite shareholder approval, such party may under certain circumstances provide information to and participate in discussions or negotiations with third parties with respect to an acquisition proposal that its board of directors has determined in good faith constitutes or is reasonably likely to lead to a superior proposal. Each party’s board of directors may change its recommendation to its shareholders (subject to the other party’s right to terminate the Merger Agreement following such change in recommendation) in response to a superior proposal or an intervening event if the board of directors determines in good faith that the failure to take such action would reasonably be expected to be inconsistent with the directors’ fiduciary duties under the Minnesota Business Corporation Act or the General Corporation Law of the State of Delaware, as applicable.

If the Merger Agreement is terminated under certain circumstances as indicated in the Merger Agreement Qumu or Synacor may be required to pay the other party a termination fee of \$2.0 million.

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

The following summary of terms of our common stock, par value \$0.01 per share (the "common stock") is based upon our fifth amended and restated certificate of incorporation (the "Certificate of Incorporation"), our amended and restated bylaws (the "Bylaws") and applicable portions of the General Corporation Law of the State of Delaware (the "DGCL"). This summary is not complete and is subject to, and qualified in its entirety by reference to, the Certificate of Incorporation, the Bylaws and the applicable portions of the DGCL. For a complete description of the terms and provisions of the common stock, refer to the Certificate of Incorporation and Bylaws, which are filed as exhibits to this Annual Report on Form 10-K. We encourage you to read these documents and the applicable portions of the DGCL carefully. Throughout this exhibit, references to "Synacor," "the Company," "we," "us" and "us" refer to Synacor, Inc.

As of December 31, 2019, we had one class of securities, our common stock, registered under Section 12 of the Securities Exchange Act of 1934, as amended.

Description of Capital Stock

Under our Certificate of Incorporation, our authorized capital stock consists of 100 million shares of common stock, par value \$0.01 per share, and 10 million shares of preferred stock, par value 0.01 per share (the "preferred stock"). As of March 3, 2020, we had 39,288,515 shares of common stock issued and outstanding and no shares of preferred stock issued and outstanding.

Common Stock

The holders of shares of our common stock are entitled to one vote per share on all matters to be voted on by stockholders, including in the election of directors; provided, however, that, except as otherwise required by applicable law, holders of common stock are not entitled to vote on any amendment to the Certificate of Incorporation that relates solely to the terms of one or more outstanding series of preferred stock if the holders of such affected series of preferred stock are entitled, either separately or together as a class with the holders of one or more other series of preferred stock, to vote thereon pursuant to the Certificate of Incorporation.

Subject to the rights or preferences of the holders of any outstanding shares of preferred stock, the holders of shares of common stock are entitled to receive ratably such dividends, if any, as may be declared from time to time by the Company's board of directors (the "Board") out of funds legally available.

In the event of our dissolution, liquidation or winding up, after payment or provision for payment of all of our liabilities and any liquidation preference of any outstanding preferred stock, the holders of our common stock are entitled to share ratably in our remaining assets.

Our Certificate of Incorporation and Bylaws provide for a classified board of directors. We have three classes of directors, Class I, Class II and Class III, with each class of directors serving three-year terms that end in successive years. The classes of directors are set in as nearly equal number of directors as reasonably possible. Our Bylaws provide that directors are elected by a plurality of the affirmative votes cast. As a result, the nominees for director receiving the highest number of affirmative votes will be elected. The common stock does not have cumulative voting rights in the election of directors. Our Bylaws provide that, except as otherwise required by applicable law, the Certificate of Incorporation or the Bylaws, all matters, other than the election of directors, are to be decided by a majority of the votes cast affirmatively or negatively.

All shares of outstanding common stock are fully paid and non-assessable. The common stock has no preemptive or conversion rights or other subscription rights. There are no redemption or sinking fund provisions applicable to the common stock. The rights, preferences, and privileges of our holders of common stock are subject to the rights of the holders of any series of preferred stock that we may designate in the future. Our Certificate of Incorporation and Bylaws do not restrict the ability of a holder of our common stock to transfer his, her or its shares of common stock.

Our common stock is traded on The Nasdaq Global Market under the symbol "SYNC". The transfer agent and registrar for our common stock is American Stock Transfer & Trust Company, LLC.

Preferred Stock

The Board may issue, from time to time, without further stockholder approval, shares of preferred stock in one or more series, establish the number of shares of preferred stock to be included in each such series and fix the designation, powers, preferences and rights of such shares of preferred stock and any qualifications, limitations or restrictions thereof. The issuance of preferred stock may have the effect of delaying, deferring or preventing a change in control of the Company without further action by the stockholders and may adversely affect the voting and other rights of the holders of common stock. The issuance of preferred stock with voting and conversion rights may adversely affect the voting power of the holders of common stock, including the loss of voting control to others.

Anti-Takeover Provisions

Certain provisions of the DGCL and our Certificate of Incorporation and Bylaws could have anti-takeover effects and may delay, deter or prevent a tender offer or takeover attempt that a stockholder might consider to be in its best interests.

These provisions, summarized below, are expected to discourage and prevent coercive takeover practices and inadequate takeover bids. These provisions are designed to encourage persons seeking to acquire control of the Company to first negotiate with the Board. They are also intended to provide our management with the flexibility to enhance the likelihood of continuity and stability if the Board determines that a takeover is not in the best interests of our stockholders.

Election and Removal of Directors

The Certificate of Incorporation and Bylaws contain provisions that establish specific procedures for appointing and removing members of the Board. Under Certificate of Incorporation and Bylaws, the Board is classified into three classes of directors. Only one class of directors stands for election at each annual meeting, and directors are elected to serve three-year terms. In addition, the Certificate of Incorporation and Bylaws provide that vacancies and newly created

directorships on the Board may be filled only by a majority of the directors then serving on the Board (except as otherwise required by applicable law or by resolution of the Board). Under the Certificate of Incorporation and Bylaws, 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.

Special Stockholder Meetings

Under Certificate of Incorporation and Bylaws, only the chairman of the Board, our chief executive officer and the Board may call special meetings of stockholders.

Requirements for Advance Notification of Stockholder Nominations and Proposals

Our Bylaws establish advance notice procedures with respect to stockholder proposals and the nomination of candidates for election as directors, other than nominations made by or at the direction of the Board or a committee of the Board.

Delaware Anti-Takeover Law

We are subject to Section 203 of the DGCL, which is an anti-takeover law. In general, Section 203 prohibits a publicly-held Delaware corporation from engaging in a business combination with an interested stockholder for a period of three years following the date that the person became an interested stockholder, unless the business combination or the transaction in which the person became an interested stockholder is approved in a prescribed manner. Generally, a business combination includes a merger, asset or stock sale, or another transaction resulting in a financial benefit to the interested stockholder. In addition, generally, an interested stockholder is a person who, together with affiliates and associates, owns 15% or more of the corporation's voting stock. The existence of this provision may have an anti-takeover effect with respect to transactions that are not approved in advance by the Board, including discouraging attempts that might result in a premium over the market price for the shares of common stock held by stockholders.

Stockholder Action by Written Consent Not Permitted

The Certificate of Incorporation and Bylaws do not permit stockholders to act by written consent without a meeting.

No Cumulative Voting

Under Delaware law, cumulative voting for the election of directors is not permitted unless a corporation's certificate of incorporation authorizes cumulative voting. The Certificate of Incorporation and Bylaws do not provide for cumulative voting in the election of directors. Cumulative voting allows a minority stockholder to vote a portion or all of its shares for one or more candidates for seats on the board of directors. Without cumulative voting, a minority stockholder will not be able to gain as many seats on the Board based on the number of shares of common stock the stockholder holds as the stockholder would be able to gain if cumulative voting were permitted. The absence of cumulative voting makes it more difficult for a minority stockholder to gain a seat on the Board to influence the Board's decision regarding a takeover.

Undesignated Preferred Stock

The authorization of undesignated preferred stock makes it possible for the Board to issue preferred stock with voting or other rights or preferences that could impede the success of any attempt to change control of the Company.

Amendment of Provisions in Certificate of Incorporation and Bylaws

The amendment of most of the above provisions in the Certificate of Incorporation and Bylaws requires approval by holders of at least two-thirds of our outstanding capital stock entitled to vote generally in the election of directors. These and other provisions could have the effect of discouraging others from attempting hostile takeovers and, as a consequence, may also inhibit temporary fluctuations in the market price of our common stock that often result from actual or rumored hostile takeover attempts. These provisions may also have the effect of preventing changes in our management. It is possible that these provisions could make it more difficult to accomplish transactions that stockholders may otherwise deem to be in their best interests.

Synacor, Inc.
List of Subsidiaries

Name	Jurisdiction
NTV Internet Holdings, LLC	Delaware
Synacor Canada, Inc.	Canada
Synacor China, Ltd.	Cayman Islands
Sync Holdings, LLC	Delaware
Zimbra Software, LLC	Texas
Synacor Europe Limited	United Kingdom
Zimbra Technology India Private Limited	India
Zimbra Japan G.K.	Japan
Zimbra Singapore Pte Ltd	Singapore

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in Registration Statement Nos. 333-179608, 333-188691, 333-194847, 333-198579, 333-202852, 333-210393, 333-216906, 333-223953, and 333-230441 on Form S-8, and Registration Statement No. 333-214600 on Form S-3 of our report dated March 6, 2020, relating to the consolidated financial statements of Synacor, Inc. and subsidiaries (the “Company”), appearing in this Annual Report on Form 10-K for the year ended December 31, 2019.

/s/ Deloitte & Touche LLP

Williamsville, New York
March 6, 2020

CERTIFICATIONS

I, Himesh Bhise, certify that:

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

Date: March 6, 2020

By: /s/ HIMESH BHISE
Himesh Bhise
President and Chief Executive Officer
(Principal Executive Officer)

CERTIFICATIONS

I, Timothy J. Heasley, certify that:

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

Date: March 6, 2020

By: /s/ TIMOTHY J. HEASLEY

Timothy J. Heasley

Chief Financial Officer

(Principal Financial and Accounting Officer)

**Certification of Chief Executive Officer and Chief Financial Officer
Pursuant to 18 U.S.C. Section 1350,
as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002**

I, Himesh Bhise, certify pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that the Annual Report of Synacor, Inc. on Form 10-K for the fiscal year ended December 31, 2019 fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that the information contained in such Form 10-K fairly presents, in all material respects, the financial condition and results of operations of Synacor, Inc.

Date: March 6, 2020

/s/ Himesh Bhise

Himesh Bhise

President and Chief Executive Officer

(Principal Executive Officer)

I, Timothy J. Heasley, certify pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that the Annual Report of Synacor, Inc. on Form 10-K for the fiscal year ended December 31, 2019 fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that the information contained in such Form 10-K fairly presents, in all material respects, the financial condition and results of operations of Synacor, Inc.

Date: March 6, 2020

/s/ Timothy J. Heasley

Timothy J. Heasley

Chief Financial Officer

(Principal Financial and Accounting Officer)

A signed original of this written statement required by Section 906 of the Sarbanes-Oxley Act of 2002 has been provided to Synacor, Inc. and will be retained by Synacor, Inc. and furnished to the Securities and Exchange Commission or its staff upon request. This certification "accompanies" the Form 10-K to which it relates, is not deemed filed with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of the Company under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended (whether made before or after the date of the Form 10-K), irrespective of any general incorporation language contained in such filing.