OOMA INC
Form 10-K
April 03, 2019

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

(Mark One)

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended January 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: 001-37493

Ooma, Inc.

(Exact name of registrant as specified in charter)

Delaware	06-1713274
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

525 Almanor Avenue, Suite 200, Sunnyvale, California 94085

(Address of principal executive offices and zip code)

Registrant’s telephone number (650) 566-6600

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

Common Stock, par value $0.0001	New York Stock Exchange
(Title of each class)	(Name of each exchange on which registered)

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

Indicate by check mark if the Registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. YES NO

Indicate by check mark if the Registrant is not required to file reports pursuant to Section 13 or 15(d) of the Act. YES NO

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

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

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

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

Large accelerated filer	Accelerated filer
Non-accelerated filer	Small reporting company
	Emerging growth company

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

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

The aggregate market value of the voting and non-voting common equity held by non-affiliates of the registrant as of July 31, 2018 was approximately $295 million based upon the closing price reported for such date on the New York Stock Exchange.

20.6 million shares of common stock were issued and outstanding as of March 31, 2019.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's definitive Proxy Statement for its 2019 Annual Meeting of Stockholders are incorporated by reference in Part III of this Annual Report on Form 10-K. Such Proxy Statement will be filed with the U.S. Securities and Exchange Commission within 120 days after the end of the fiscal year to which this report relates. Except with respect to information specifically incorporated by reference in this Form 10-K, the Proxy Statement is not deemed to be filed as part of this Form 10-K.

Table of Contents

		Page
PART I		
Item 1.	Business	2
Item 1A.	Risk Factors	10
Item 1B.	Unresolved Staff Comments	36
Item 2.	Properties	36
Item 3.	Legal Proceedings	36
Item 4.	Mine Safety Disclosures	36
PART II		
Item 5.	Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities	37
Item 6.	Selected Consolidated Financial Data	38
Item 7.	Management's Discussion and Analysis of Financial Condition and Results of Operations	39
Item 7A.	Quantitative and Qualitative Disclosures About Market Risk	53
Item 8.	Consolidated Financial Statements and Supplementary Data	54
Item 9.	Changes in and Disagreements with Accountants on Accounting and Financial Disclosure	81
Item 9A.	Controls and Procedures	81
Item 9B.	Other Information	81
PART III		
Item 10.	Directors, Executive Officers and Corporate Governance	82
Item 11.	Executive Compensation	82
Item 12.	Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters	82
Item 13.	Certain Relationships and Related Transactions, and Director Independence	82
Item 14.	Principal Accounting Fees and Services	82
PART IV		
Item 15.	Exhibits, Financial Statement Schedules	83
Exhibits		84
Signatures		86

FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K for the fiscal year ended January 31, 2019 ("Form 10-K") contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the "Securities Act"), and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). The words "believe," "will," "may," "estimate," "continue," "anticipate," "intend," "should," "plan," "expect," "predict," "could," "potentially" and variations of su similar expressions are intended to identify such forward-looking statements, which may include, but are not limited to, statements concerning the following:

- our future financial performance, including trends in revenue, cost of revenue, operating expenses and income taxes;
- our estimates of the size of our market opportunity and forecasts of market growth;
- changes to our business resulting from increased competition or changes in market trends;
- our ability to develop, launch or acquire new products and services, improve our existing products and services and increase the value of our products and services;
- our ability to increase our revenue and our revenue growth rate, anticipate demand for our products, and effectively manage our future growth;
- our ability to successfully maintain our relationships with our resellers;
- our ability to attract and retain customers, including our ability to maintain adequate customer care and manage increases in our churn rate;
- our ability to improve local number portability provisioning and obtain direct inward dialing numbers;
- our ability to maintain, protect and enhance our brand and intellectual property;
- government regulation, including compliance with regulatory requirements and changes in market rules, rates and tariffs;
- our ability to comply with applicable FCC regulations, including those regarding E-911 services;
- increasing regulation of our services and the imposition of federal, state and municipal sales and use taxes, fees or surcharges on our services;
- the effects of industry trends on our results of operations;
- server or system failures that could affect the quality or disrupt the services we provide and our ability to maintain data security;
- our ability to borrow additional funds and access capital markets, as well as our ability to comply with the terms of our indebtedness and the possibility that we may incur additional indebtedness in the future;
- the differences between our services, including emergency calling, compared to traditional phone services;
- the sufficiency of our cash, cash equivalents and short-term investments to meet our working capital and capital expenditure requirements;
- our ability to successfully enter new markets, manage our international expansion, and identify, evaluate and consummate acquisitions;
- the future trading prices of our common stock; and
- other risk factors included under the section titled "Risk Factors"

You should not rely upon forward-looking statements as predictions of future events. Such statements are based on management's expectations as of the date of this filing and involve many risks and uncertainties that could cause our actual results, events or circumstances to differ materially from those expressed or implied in our forward-looking statements. Such risks and uncertainties include those described throughout this report and particularly in the sections entitled "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations." Given these risks and uncertainties, readers are cautioned not to place undue reliance on such forward-looking statements. Readers are urged to carefully review and consider all of the information in this Form 10-K and in other documents we file from time to time with the Securities and Exchange Commission ("SEC"). We undertake no obligation to update any forward-looking statements made in this Form 10-K to reflect events or circumstances after the date of this filing or to reflect new information or the occurrence of unanticipated events, except as required by law. We may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements. Our forward-looking statements do not reflect the potential impact of any future acquisitions, mergers, dispositions, joint ventures or investments we may make.

When we use the terms “Ooma,” the “Company,” “we,” “us” or “our” in this report, we are referring to Ooma, Inc. and its consolidated subsidiaries unless the context requires otherwise. Ooma, Ooma Premier, Ooma Telo, Ooma Office, Ooma Home, Ooma Smart Cam, Instant Second Line, PureVoice, Talkatone, Butterfleye, Butterfleye Logo, and the Ooma logo referred to or displayed herein are trademarks of Ooma, Inc. and its consolidated subsidiaries. All other company and product names referred to herein may be trademarks of the respective companies with which they are associated.

PART I

Item 1. Business

Overview

Ooma creates powerful connected experiences for businesses and consumers. Our smart cloud-based SaaS platform serves as a communications hub, which offers cloud-based communications solutions, smart security and other connected services. Our business and residential solutions deliver our proprietary PureVoice high-definition voice quality, advanced functionality and integration with mobile devices, at competitive pricing and value. Our platform helps create smart workplaces and homes by providing communications, monitoring, security, automation, productivity and networking infrastructure applications.

We drive the adoption of our platform by providing communications solutions to the large and growing markets for business, residential and mobile users, and then accelerate growth by offering new and innovative connected services to our user base. Our customers adopt our platform by making a one-time purchase of one of our on-premise appliances, connecting the appliance to the internet, and activating services, for which they primarily pay on a monthly basis. We believe we have achieved high levels of customer retention and loyalty by delivering exceptional quality and customer satisfaction.

Our services run on our unique platform consisting of four proprietary elements: our multi-tenant cloud service, custom on-premise appliance, mobile applications and end-point devices. Ooma's cloud provides a high-quality, secure, managed, and reliable connection integrating every element of our platform. Our on-premise appliances incorporate both a custom-designed, Linux-based computer and a high-speed network router, with several key features, including wireless connectivity to end-point devices and custom firmware and software applications that are remotely upgradable and extensible to new services. Our mobile applications enable customers to access our product features from anywhere, and our end-point devices enable additional functionality and services. Our platform powers all aspects of our business, not only providing the infrastructure for the communications portion of our business, but also enabling a number of other current and future valuable productivity, automation, monitoring, safety, security and networking infrastructure applications.

We primarily offer our solutions in the U.S. and Canadian markets. We believe that our differentiated platform and our long-term customer relationships uniquely position us to add new connected services and exploit adjacent markets, all without significant capital investment or high customer acquisition costs to drive their adoption. We believe that our platform is particularly well-suited to enable the delivery of connected services because it is always on, monitored and interactive. We expect the adoption of our connected services to support the continued growth of our recurring revenue stream.

We have experienced strong revenue and user growth in recent periods, growing our Ooma Business and Ooma Residential core users from approximately 858,000 as of January 31, 2017 to approximately 976,000 as of January 31, 2019, representing growth of approximately 14% over two fiscal years. We believe that we have one of the lowest customer churn rates in the industry, with an average annual core user churn rate of approximately 10% for the year ended January 31, 2019. Our total revenue was $129.2 million, $114.5 million and $104.5 million in fiscal 2019, 2018 and 2017, respectively. Subscription and services revenue, which primarily includes the recurring portion of our total revenue, has increased as a percentage of our total revenue over the last three years, from approximately 87% in fiscal 2017 to 90% in fiscal 2019. We have continued to make significant investments in research and development, brand marketing, and channel development, incurring net losses of ($14.6) million, ($13.1) million and ($12.9) million in fiscal 2019, 2018 and 2017, respectively. Our Adjusted Earnings Before Interest Tax and Depreciation and Amortization and other non-GAAP measures ("Adjusted EBITDA") was ($1.9) million, ($0.2) million and ($1.4) million in fiscal 2019, 2018 and 2017, respectively. See "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations" below for additional information, including non-GAAP reconciliations.

We were incorporated in 2003 as a Delaware corporation and our stock is listed on the New York Stock Exchange under the symbol “OOMA.” Our corporate headquarters is located in Sunnyvale, California.

Our Products and Services

Ooma Business

Small Business Phone Service

Ooma Office is a fully-featured multi-user communications system for small businesses of any size, providing everything needed to manage communications in and out of the office with a suite of powerful features at an affordable price. Unlike pure cloud-based phone services that only work with IP phones, our unique hybrid SaaS platform allows for the use of standard analog phones, mobile phones and fax machines, as well as select IP phones and internet fax. Ooma Office analog desktop extensions work wirelessly with no wiring infrastructure. This makes setup intuitive and easy enough for the user to install and manage without assistance from an IT professional.

Ooma Office provides a variety of configurations to meet our customers' specific needs. Ooma Office can be configured as a cloud-based phone system using our mobile app to run on the user's smart phone, or it can employ a variety of IP phones for desktop use or the customer can choose Ooma's on-premise appliance (base unit) and Ooma wireless end-point devices (DP1 deskpone or Linx) for simple, wireless installation of desk phones and fax machines to the user's high-speed internet connection. The user can configure the system online, using the Ooma Office Manager web portal. Ooma Office provides advanced features not typically available to small businesses, including a virtual receptionist, extension dialing, conferencing and music-on-hold, as well as mobility features, such as voicemail forwarding to a designated e-mail address. We also refer to Ooma Office as our Small Business Solution and we may refer to them interchangeably. Our Ooma Office Mobile HD app allows users to make, receive and transfer phone calls, listen to voicemails and manage their Ooma account on the go with any iOS or Android device.

Enterprise Communications

Ooma Enterprise is a highly customizable and scalable Unified-Communications-as-a-Service ("UCaaS") offering that complements our Ooma Office solution and allows us to meet the needs of organizations of all sizes. Ooma Enterprise features include a number of communication/collaboration applications and services across multiple channels, including: mobile and softphone telephony; instant and presence messaging; and multiparty audio conferencing, video conferencing and web conferencing capabilities. Our advanced contact center platform, powered by Talkdesk, can extend contact center functionality across an entire enterprise, including sales. Ooma Enterprise CRM Integration unifies a cloud-based enterprise phone system and hosted call center platform with popular CRM systems including Salesforce and Microsoft Dynamics. Our enterprise network is also globally distributed and kept in sync around the world, allowing users or devices to connect to the facilities closest to them to ensure the most reliable and efficient connectivity. All functionality on our Enterprise platform is leveraged by an Application Programming Interface ("API") driven architecture enabling integrations and customization either internally or via third party developers.

Ooma Residential

Phone Service

Ooma Telo is a complete home communications solution designed to serve as the primary phone line in the home, delivering high-quality voice communications and unique and valuable features. Users buy an Ooma Telo and plug it into a high-speed internet connection and standard home phone devices. Users have the option to transfer their existing phone number for a one-time fee or to select a new number at no cost. Once set up, users have access to free nationwide calling, international calling with low rates and standard features such as: voicemail, call waiting, caller ID, network address book and 911 calling, with text alerts when 911 is dialed from the home.

Ooma Telo Air is an Ooma Telo with built-in Wi-Fi and Bluetooth connectivity that connects to the Internet wirelessly using the home's Wi-Fi network and can be paired with mobile phones to answer incoming mobile calls

from any phone in the home.

Our Ooma HD3 cordless handset delivers smart features, such as the ability to sync the phone book with online contacts and display picture caller ID by syncing with social media. One-touch voicemail access lets users check messages anywhere in the home and the intercom button allows them to talk between handsets or transfer calls.

Ooma Premier Service is a suite of over 25 advanced calling features that have been designed to enhance the capabilities of Ooma Telo on a monthly or annual subscription basis. Ooma Premier helps our users enhance their privacy, personalize their home phone, stay connected on the go, better manage and access their voicemail, expand calling options, and connect with a variety of devices and services to enable new functionality and automation. We also offer other premium subscription services to our customers, independent of Ooma Premier, including an international calling plan and voicemail transcription service.

Our Ooma Mobile HD app allows users to make and receive phone calls and access Ooma features and settings with any iOS or Android device over a Wi-Fi or cellular data connection. The app includes unlimited outbound calls within the U.S., subject to normal residential usage limitations, and enables users to make international calls on their mobile devices using Ooma's attractive international calling plan.

Our platform enables an ecosystem for connected services by integrating with other automation solutions. For example, we have integrated Ooma Telo with products from Nest Labs, Inc., a Google company, including the Nest Learning Thermostat and Nest Protect smoke and carbon monoxide detector, the Amazon Echo, Amazon Echo Connect and Amazon Alexa voice service, and a variety of products integrated through the If-This-Then-That platform ("IFTTT"). By combining Ooma's communications intelligence with these products' functions, we enable innovative and valuable features.

Smart Security

Ooma Smart Security is an innovative security and monitoring platform that utilizes the Ooma Telo device to provide do-it-yourself home security and awareness through a range of sensors including door/window, motion, garage door, water, siren, and visual monitoring with the Ooma Smart Cam. Ooma Smart Security also offers remote 911, the ability to call your home's local emergency service from anywhere in the world, as well as multi-user geofencing capabilities to automatically arm and disarm the security system. Our smart security platform offers activity alerts via phone call, text, email and in-app notifications. The Ooma Smart Security app is the interface through which users interact with the system to pair sensors, toggle between home, away and vacation modes, check activity logs and manage and receive notifications.

Ooma Smart Cam is our next-generation indoor/outdoor high-definition video security camera that's wireless and delivers advanced features, including facial recognition, onboard memory and battery backup, night vision and more. The intuitive design allows for all configuration, control and video viewing through the convenient Ooma Smart Cam mobile app for iOS and Android. Ooma Smart Cam automatically records video clips by motion, noise or camera movement, and alerts users via text message and/or in-app notifications. Ooma Smart Cam is also integrated with the Ooma Smart Security solution.

Talkatone

Our Talkatone mobile app is available to anyone with an iOS or Android mobile device. Users download the app from the Apple App Store or Google Play for free. Users select a phone number that they can use to make free U.S. and Canada calls and texts using a Wi-Fi or cellular data connection within and out of network. Advertising is displayed within the Talkatone mobile app and users can purchase premium services such as ad-free usage and international calling plans.

Segment Information

We operate in one industry segment, generating revenue from two sources: (1) subscription and services revenue, which are generated from sales of subscription plans for communications services and other connected services; and (2) product and other revenue, generated primarily from the sale of on-premise appliances and end-point devices to our end-customers through our website and from sales through distributors, retailers and resellers.

Operating segments are defined as components of an entity for which separate financial information is evaluated regularly by the chief operating decision maker, who in our case is the chief executive officer, in deciding how to allocate resources and assess performance. Our subscription plans, services and product offerings operate on a single SaaS platform and our chief operating decision-maker evaluates our financial information and resources and assesses the performance of these resources on a consolidated basis. Accordingly, we have determined that we have a single reportable segment and operating segment structure.

Sales and Marketing

Our sales and marketing objective is to grow our customer base, and sell to our existing customers additional services using an integrated and multi-channel marketing approach. We continually test and refine our marketing and sales tactics to drive sales at a low customer acquisition cost. Our sales and marketing expenses were $40.8 million, $37.3 million, and $33.8 million in fiscal 2019, 2018 and 2017, respectively.

Marketing and Advertising

Traditional. We use television and radio advertising to build awareness and interest for our products and services, which benefits Ooma Business and Ooma Residential. We believe that television advertising provides an opportunity to build the Ooma brand cost-effectively, educate prospects on Ooma's unique combination of quality and value, and capture prospects' attention. Small businesses and consumers who see our television ads are directed to our web site, our inbound sales personnel, and/or to key retail partners. Radio is used in a highly targeted manner primarily to reach small business owners and decision makers as they commute to and from their workplace.

Online. We use online marketing including search engine marketing, search engine optimization, online video, digital display advertising and social media to attract customers as they do online research for the products and services we offer. We continue to reach out to our prospect leads over time using e-mail and telemarketing until they purchase or the lead is retired.

Word-of-mouth. We actively mobilize our customers and brand advocates to spread word-of-mouth marketing by sharing Ooma news and information through social media and e-mail. We sell additional services to our existing customer base by offering free trials and promotional offers, as well as sending e-mail communications and leaving messages on their Ooma voicemail service.

Sales, Customers and Backlog

Our business and residential products are sold through direct channels, retail, value-added resellers and other resellers. The direct channel and value-added resellers are our primary distribution channels for business customers and the direct and retail channel is our primary distribution channel for residential customers. Our direct sales force is focused on business sales and includes highly trained sales representatives located in the U.S. and Canada responding to inbound telephone calls and sales leads generated through marketing activity and our website and third-party web sites.

Our retail distribution includes national and regional consumer electronics, big box retailers and leading online retailers, including Amazon, Best Buy, Costco.com, Walmart and others. No single customer accounted for 10% or more of our total revenue for fiscal 2019, 2018 and 2017.

We generally sign monthly and annual contracts for our subscriptions and invoice our customers on a monthly basis for the services purchased. Products are generally shipped and billed shortly after receipt of an order. We do not believe that our product backlog at any particular time is meaningful because it is not necessarily indicative of future revenue in any given period as such orders may be rescheduled or cancelled without penalty prior to shipment. The majority of our product revenue comes from orders that are received and shipped in the same quarter.

Customer Support

Our primary customer support objective is to satisfy our customers and educate them on the features and benefits of our products to optimize the overall user experience. We employ an active customer management strategy in which we drive incremental revenue through cross-selling of products and services. Our customer support teams also manage the porting process for our customers as well as billing and payment activities.

We maintain two customer contact centers: one operated by us in Newark, California, which primarily supports our small business customers, and the other operated by a third-party provider in Manila, Philippines, which primarily supports our residential customers. In addition, our office located in Vancouver, British Columbia support our enterprise customers. We utilize a variety of communication media to serve the needs of our customers including telephone, online chat, online tutorials and e-mail.

Engineering, Research and Development

We take an integrated approach to the development of our technology. Our extensive engineering resources span both hardware and software and our business scope encompasses the entire platform, giving us the ability to drive new integrated solutions for our customers. We believe our integrated engineering and business strategy is a significant competitive advantage and makes it feasible for us to leverage our platform to deliver a broad range of productivity, automation and infrastructure connected services.

We have invested significant time and resources into developing our engineering, research and development team, resulting in a group with diverse skills, ranging from digital and radio frequency hardware design to embedded software, network software, telecommunications, database architecture, operations support systems, billing, security, web design and mobile app development. Because our team develops and manages all aspects of our solutions, we are able to offer an integrated solution that works seamlessly between software and hardware and respond to customer feedback to add in additional features and services that work across the entire platform. Our team consists of a core set of engineers located primarily in the San Francisco Bay Area, augmented by development teams in a number of international locations.

Our research and development expenses were $33.9 million, $29.3 million and $24.2 million in fiscal 2019, 2018 and 2017, respectively.

Our Platform

Our unique hybrid SaaS platform consists of our proprietary cloud, on-premise appliances, mobile applications and end-point devices. They work in concert to support our advanced features, high-quality and the ability to offer customized connected services, which are vital to driving our high level of customer satisfaction and low customer churn. The integrated approach to our technology allows us to operate at a reduced cost and provides competitive advantages:

- Because we designed our on-premise appliances and network elements to work in harmony, we are free to make optimizations that streamline and simplify the elements of the network.
- Our platform enables us to automatically select, on a call-by-call basis, between over a number of call termination providers based on cost and call quality. Likewise, our platform allows us to shift our customer base among several origination vendors. This, combined with our rapid growth creates a favorable environment to demand low costs from our vendors without sacrificing quality.
- The tight integration between our engineering and operations teams, combined with the functional nature of our on-premise appliances, facilitates our highly automated network operations, enabling us to efficiently scale our operations.

Cloud Infrastructure

Our multi-tenant cloud infrastructure provides a high-quality, secure, managed and reliable suite of services integrating all elements of the platform. We have built a proprietary cloud in order to optimize quality of service, reliability and security, which are essential elements of our communications solutions. Our cloud simplifies the task of offering new services, and provides consistent performance and economies of scale for all of our connected services. Ooma’s key cloud capabilities include: telecommunications, custom hosted services, interconnections to third party services (cloud-to-cloud), on-premise appliance management, remote diagnostics support and billing.

On-Premise Appliances

Our purpose-built on-premise appliances are both a custom-designed, Linux-based computer and a high-speed network router, with several key features, including wireless connectivity to end-point devices and custom firmware and software applications that are remotely upgradable and extensible to new services.

Mobile Applications

We have made significant investments in developing mobile applications for the iOS and Android operating systems. As a result, nearly every connected service and feature we deploy enhances or can be enhanced through integration with our customer’s mobile device. In fiscal 2018, we integrated our PureVoice HD technology into the Ooma Mobile HD app. We plan to continue enhancing our mobile apps to incorporate features related to our partners’ services and other connected services.

Operations and Manufacturing

We deliver our services through two separate data centers located in Northern California and Virginia, both hosted in third-party leased facilities. While our service operations are partially redundant, account provisioning and billing are operated out of the San Jose facility. Our network operations and carrier operations teams are responsible for designing our core routing and switching infrastructure, managing growth and maintenance (including the introduction of new services) and orchestrating vendor relationships for hosted services, IP transit and carrier services and daily operation of our cloud and other services. The design of these services, and the tools for monitoring and managing them, are developed in combination with our engineering team.

We primarily contract with manufacturers in China to produce our on-premise appliances and end-point devices. We also contract with a manufacturer in Israel to produce components of our smart security solutions. We configure and ship to our channel partners and end users through our internal manufacturing and logistics team based in Newark, California. Our internal logistics team also manages reverse logistics for channel and warranty returns and works closely with our engineering team to develop tooling and processes that bring new products into production.

Competition

The market for communications solutions and other connected services for small business, home and mobile users is complex, fragmented and defined by constant shifts in technology and customer demands. We expect competition to continue increasing in the future. We believe that the defining factors driving competition in our market include:

- Quality and consistency of communications services;
- Lifetime value of initial investment and ongoing cost of services;
- Breadth of features and capabilities;
- System reliability, availability and performance;
- Speed and ease of activation, setup, and configuration;
- Ownership and control of the proprietary technology;
- Integration with multiple end-point devices and mobile solutions; and
- Customer satisfaction and brand loyalty; and
- Ability to effectively access reseller channels

We believe that we compete favorably on the basis of the factors listed above. We face competition from a broad range of providers of communications solutions and other connected services for business, home and mobile users. Some of these competitors include:

- Established communications providers, such as AT&T Inc., Comcast Corporation and Verizon Communications Inc. and Rogers Communications Inc;
- Other communications companies such as 8x8 Inc., Coredial LLC, Evolve IP LLC, Intermedia.net Inc., RingCentral Inc. and Vonage Holdings Corp;
- Traditional on-premise, hardware business communications providers such as Avaya Inc., Cisco Systems, Inc. and Mitel, Inc.;
- Mobile communications app companies providing “over-the-top” solutions, such as LINE Corporation, Pinger Inc., Viber (Rakuten, Inc.) and WhatsApp Inc.; and
- Large internet companies offer services with features that compete with some of what we offer. These include Amazon, through its platform and Alexa free calling service, as well as Google through its free calling service, Google Voice, and the Google Home personal assistant device, for which Google launched a free outbound calling service.

All of these companies currently or may in the future host their solutions through the cloud.

We also face competition in the home security market from (i) established providers such as Arlo Technologies Inc., SimpliSafe and ADT, as well as from (ii) home security offerings such as Nest Secure and Ring Protect, an Amazon company.

Intellectual Property

We rely on a combination of patents, trade secrets, copyrights, trademarks, confidentiality and proprietary rights agreements with our employees, consultants and other third parties, as well as other contractual protections to establish and protect our intellectual property rights. We control access to our software, documentation and other proprietary information, and our software is protected by U.S. and international copyright laws.

As of January 31, 2019, we had 16 issued patents and 14 patent applications pending in the U.S., and 7 patent applications pending in foreign jurisdictions, all of which are associated with U.S. applications. Our issued patents will expire approximately between 2031 and 2035. We cannot assure you whether any of our patent applications will result in the issuance of a patent or whether the examination process will require us to narrow our claims. Any issued patents may be contested, circumvented, found unenforceable or invalidated, and we may not be able to prevent third parties from infringing them. We are also a party to various license agreements with third parties who typically grant us the right to use certain third-party technology in conjunction with our products and services, or to integrate software into our products, including open source software and other software available on commercially reasonable terms. Despite the foregoing protections, unauthorized parties may attempt to misappropriate our rights or to copy or obtain and use our proprietary technology to develop products and services with the same functionality as ours. Policing unauthorized use of our technology and intellectual property rights is difficult and enforcing our intellectual property rights is expensive and uncertain.

Although our success depends, in part, on our ability to protect our proprietary technology and other intellectual property rights, we believe the technological and creative skills of our personnel, the development of new features and functionality and frequent enhancements to our products and services are the primary methods of establishing and maintaining our technology leadership position.

Employees

As of January 31, 2019, we had 684 full-time employees and contractors. None of our employees are either represented by a labor union or subject to a collective bargaining agreement. We have not experienced any work stoppages and we believe that our employee relations are good. We also contract with third-party contractors whose employees or subcontractors' employees perform services for us.

Regulatory Matters

Traditional telephone service historically has been subject to extensive federal and state regulation, while Internet services generally have been subject to less regulation. Because some elements of VoIP resemble the services provided by traditional telephone companies and others resemble the services provided by internet service providers, the VoIP industry has not fit easily within the existing framework of telecommunications law and until recently has developed in an environment largely free from regulation. The Federal Communications Commission ("FCC"), the U.S. Congress, and various regulatory bodies in the states and in foreign countries have begun to assert regulatory authority over VoIP providers and are continuing to evaluate how VoIP will be regulated in the future.

Federal Regulation

As a provider of internet communications services, we are subject to a number of FCC regulations. Among others, these regulatory obligations include: contributing to the Federal Universal Service Fund ("USF"), the Telecommunications Relay Service Fund and federal programs related to phone number administration; providing access to E-911 services; protecting customer information; and porting phone numbers upon a valid customer request. If we do not comply with any current or future rules or regulations that apply to our business, we could be subject to substantial fines and penalties, may have to restructure our service offerings, exit certain markets or raise the price of our services, any of which could ultimately harm our business and results of operations.

State Regulation

The FCC has preempted much regulation of internet voice communications services. However, a number of states have ruled that non-nomadic internet voice communications services may or do fall within the definition of "telecommunications services" or are otherwise within state telecommunications regulatory jurisdiction and therefore those states assert that they have authority to regulate the service. Although no states currently require certification for

nomadic internet voice communications service providers, a number of states have imposed certain traditional telecommunications requirements on such services. For example, a number of states require us to contribute to state USF and E-911 and pay other surcharges, which are passed through to our customers, while others are actively considering extending their public policy programs to include the services we provide. We expect that state public utility commissions will continue their attempts to apply state telecommunications regulations to internet voice communications services like ours.

International Regulation

As we expand internationally, we will be subject to laws and regulations in the countries in which we offer our services. Regulatory treatment of internet communications services outside the U.S. varies from country to country, is often unclear, and may be more onerous than imposed on our services in the U.S. In Canada, our service is regulated by the Canadian Radio-television and Telecommunications Commission ("CRTC") which, among other things, imposes requirements similar to the U.S. related to the provision of E-911 services in all areas of Canada where the traditional telephone carrier offers such 911 services. Our regulatory obligations in foreign jurisdictions could have a material adverse effect on our ability to expand internationally, and on the use of our services in international locations.

See "Risks Related to Federal, State and International Regulation" in Item 1A. Risk Factors below for more information.

Available Information

Our headquarters are located at 525 Almanor Avenue Suite 200, Sunnyvale, California 94085, and our telephone number is (650) 566-6600. Our corporate website address is www.ooma.com. We use the Investor Relations page of our website for purposes of compliance with Regulation FD and as a routine channel for distribution of important information, including news releases, analyst presentations, financial information and corporate governance practices. Our filings with the SEC such as our Annual Reports on Form 10-K , Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and amendments to these reports are posted on our website and available free of charge as soon as reasonably practical after they are electronically filed with, or furnished to, the SEC. The SEC's website, www.sec.gov, contains reports, proxy statements and other information regarding issuers that file electronically with the SEC. The content on any website referred to in this Form 10-K is not incorporated by reference in this Form 10-K unless expressly noted.

ITEM 1A. Risk Factors

Our current and prospective investors should carefully consider the risks and uncertainties described below, together with all of the other information in this Annual Report on Form 10-K, including our consolidated financial statements and the related notes, "Management's Discussion and Analysis of Financial Condition and Results of Operations" and the "Cautionary Note Regarding Forward-Looking Statements," before making investment decisions regarding our common stock. The risks and uncertainties described below may not be the only ones we face but include the most significant factors currently known by us. Additional risks and uncertainties that we are unaware of, or that we currently believe are not material, also may become important factors that affect us. If any of the risks actually occur, our business, financial condition, results of operations could be materially and adversely affected. In that event, the trading price of our common stock could decline, and you could lose part or all of your investment.

Risks Related to Our Business and Our Industry

If we are unable to attract new users of our services on a cost-effective basis, our business will be materially and adversely affected.

In order to grow our business, we must continue to attract new users on a cost-effective basis. We use and periodically adjust the mix of advertising and marketing programs to promote our services. Significant increases in the pricing of one or more of our advertising channels could increase our advertising costs or may cause us to choose less expensive and perhaps less effective channels to promote our services. As we add to or change the mix of our advertising and marketing strategies, we may need to expand into channels with significantly higher costs than our current programs, which could materially and adversely affect our results of operations. We will incur advertising and marketing expenses in advance of when we anticipate recognizing any revenue generated by such expenses, and we may fail to experience an increase in revenue or brand awareness as a result of such expenditures. We have made in the past, and may make in the future, significant expenditures and investments in new advertising campaigns, and we cannot assure you that any such investments will lead to the cost-effective acquisition of additional customers. New users are drawn to our products and services by rankings circulated by organizations such as Amazon, Apple and Google app stores and highly regarded publications such as PCMag. If we are unable to maintain effective advertising programs and garner favorable rankings, our ability to attract new customers could be materially and adversely affected, our advertising and marketing expenses could increase substantially, and our results of operations may suffer.

We market our products and services principally to small businesses and households. Many of these consumers tend to be less technically knowledgeable and may be resistant to new technologies such as our cloud-based communications solutions and our connected services. Because our potential customers need to connect additional hardware at their location and take other technical steps not required for the use of traditional communications services such as telephone, fax and e-mail, these consumers may be reluctant to use our service. These customers may also lack sufficient resources, financial or otherwise, to invest in learning about our services, and therefore may be unwilling to adopt them. If these consumers choose not to adopt our services, our ability to grow our business will be limited.

Our customers may terminate their subscriptions for our service in most cases without penalty, and increased customer turnover, or costs we incur to retain our customers and encourage them to add users and, in the future, to purchase additional functionalities and premium services, could materially and adversely affect our financial performance.

Our customers generally do not have long-term contracts with us and may terminate their subscription for our service at any time without penalty or early termination charges. We cannot accurately predict the rate of customer terminations or average monthly service cancellations or failures to renew, which we refer to as churn. Our Ooma Residential customers subscribing to Premium Services have no obligation to renew their subscriptions for such services and may elect to terminate their subscription for any number of reasons. Our Ooma Business customers may choose to reduce the number of lines or remove some of the solutions to which they subscribe. Ooma Business

customers generally pay more for their subscriptions than residential or mobile customers, so any increased churn in small business customers could materially and adversely affect our financial performance and user churn, resulting in a significant impact on our results of operations, and an increase in the cost we incur in our efforts to retain our customers and encourage them to upgrade their services and increase their number of users.

Our core user churn rate could increase significantly in the future if customers are not satisfied with our service, the value proposition of our services, our ability to otherwise meet their needs and expectations, and/or other factors beyond our control. As a result, we may have to acquire new customers or new users within our existing customer base on an ongoing basis simply to maintain our existing level of revenue. If a significant number of customers terminate, reduce or fail to renew their subscriptions, we may need to incur significantly higher marketing expenditures than anticipated to maintain or increase our revenue, which could harm our business and results of operations.

Our business is susceptible to a broad array of market forces, and any of our efforts to mitigate risk of customer churn due to one factor may divert management's time and focus away from efforts to address customer churn due to other factors. This broad-based susceptibility to churn could materially and adversely affect our financial performance.

Our future success also depends in part on our ability to sell additional subscriptions and functionalities to our current customer base, which may require increasingly sophisticated, costlier sales efforts and a longer sales cycle. Any increase in the costs necessary to upgrade, expand and retain existing customers could materially and adversely affect our financial performance. Such increased costs could cause us to increase our subscription rates, which could increase our customer turnover rate. If our efforts to convince customers to add users and, in the future, to purchase additional functionalities are not successful, our business may suffer.

We face competition in our markets by our competitors and may lack sufficient financial or other resources to compete successfully. Mergers or other strategic transactions involving our competitors could adversely affect our ability to compete effectively and harm our results of operations.

The cloud-based communications and connected services industries are highly competitive and may increase in the future. We face continued competition from the following:

- Established communications providers, such as AT&T Inc., Comcast Corporation and Verizon Communications Inc. and Rogers Communications Inc;
- Other communications companies such as 8x8 Inc., Coredial LLC, Evolve IP LLC, Intermedia.net Inc., RingCentral Inc. and Vonage Holdings Corp;
- Traditional on-premise, hardware business communications providers such as Avaya Inc., Cisco Systems, Inc. and Mitel, Inc.;
- Mobile communications app companies providing "over-the-top" solutions, such as LINE Corporation, Pinger Inc., Viber (Rakuten, Inc.) and WhatsApp Inc.; and
- Large internet companies offer services with features that compete with some of what we offer. These include Amazon, through its platform and Alexa free calling service, as well as Google through its free calling service, Google Voice, and the Google Home personal assistant device, for which Google launched a free outbound calling service.

All of these companies currently or may in the future host their solutions through the cloud.

We also face competition in the home security market from (i) established providers such as Arlo Technologies Inc., SimpliSafe and ADT as well as from (ii) new home security offerings such as Nest Secure and Ring Protect, an Amazon company.

In addition, some of our competitors have been acquired, and may in the future consolidate with or be acquired by, other companies and competitors. Some of our competitors may enter into new alliances with each other or may establish or strengthen cooperative relationships with systems integrators, third-party consulting firms or other parties. Any such consolidation, acquisition, alliance or cooperative relationship could adversely affect our ability to compete effectively and lead to pricing pressure and our loss of market share, and could result in a competitor with greater financial, technical, marketing, service and other resources, all of which could harm our business, results of operations and financial condition.

Aggressive business tactics by our competitors may reduce our revenue.

Increased competition may result in aggressive business tactics by our competitors, including: offering products similar to our platform and solutions on a bundled basis at no charge; announcing competing products combined with extensive marketing efforts; providing financial incentives to consumers; and asserting intellectual property rights irrespective of the validity of the claims. Our retail partners may offer the products and services of competing companies, which would adversely affect our business. Competition from other companies may also adversely affect

our negotiations with service providers and suppliers, including, in some cases, requiring us to lower our prices. We may not be able to compete successfully with the offerings and sales tactics of other companies, which could result in the loss of customers and, as a result, our revenue and profitability could be adversely affected.

We rely significantly on retailers and reseller partnerships to sell our products our failure to effectively develop, manage and maintain these sales channels could materially and adversely affect our revenue and business.

We currently sell Ooma Residential and Ooma Business through a combination of direct sales, leading retailers such as Amazon, Costco.com, Best Buy and Walmart, and our reseller partnerships and a significant portion of our product sales are made through our retail and reseller partnership channels. Our future success depends on our ability to effectively maintain, develop and expand our retail channel and reseller partnership sales as we seek to grow and expand our customer base. We generally do not have long-term contracts with our retailers, distributors and reseller partners, and we have in the past and may in the future experience a loss of or reduction in sales through any of these third parties, which could materially reduce our revenue. Our competitors may in some cases be effective in causing our current and potential retailers, and

reseller partners to favor their services or prevent or reduce sales of our services. If we fail to maintain relationships with current retailers and reseller partners, fail to develop relationships with new retailers and reseller partners in new markets or expand the number of retailers and reseller partners in existing markets, fail to manage, train, or provide appropriate incentives to our existing retailers and reseller partners, or if they are not successful in their sales efforts, sales of our products and services may decrease and our results of operations would suffer.

In addition, our Talkatone application relies significantly on the Apple and Google app stores for distribution. Its future success depends on our continued ability to distribute Talkatone through these app stores and increase its visibility therein. If Apple or Google determine that Talkatone is non-compliant with their app store vendor policies, they may revoke our rights to sell Talkatone through their app store at any time, which could adversely affect our revenue.

We depend on a small number of vendors to manufacture the on-premise appliances, end-point devices and smart security systems we sell, and any delay or interruption in manufacturing, configuring and delivering by these third parties would result in delayed or reduced shipments to our customers and may harm our business.

We primarily contract with manufacturers in China to produce our on-premise appliances and end-point devices. We also contract with a manufacturer in Israel to produce components of our smart security solutions. We currently do not have long-term contracts with these vendors and they are not obligated to provide products to or perform services for us for any specific period, in any specific quantities or at any specific price, except as may be provided in a particular purchase order. If these third parties are unable to deliver products of acceptable quality or in a timely manner, our ability to bring services to market, the reliability of our services and our reputation could suffer. We expect that it could take several months to effectively transition to new third-party manufacturers or fulfillment agents. We may also decide to switch to or bring on additional contract manufacturers in order to better meet our needs. Switching to or bringing on a new contract manufacturer and commencing production is expensive and time-consuming and may cause delays in order fulfillment at our existing contract manufacturers or cause other disruptions.

Additionally, several components used in our on-premise appliances and end-point devices are “single sourced” and any interruption in the suppliers of such components could cause our business to suffer as we identify alternative sources of components. Future repetition of such delays could negatively affect our ability to deliver product to our customers in a timely manner and may harm our business and hinder our growth.

To deliver our services, we rely on third parties for our network connectivity and co location facilities for certain features in our services and for certain elements of providing our services.

We expect that we will continue to rely on third-party service providers for hosting, internet access and other services that are vital to our service offering for the foreseeable future. Equinix, Inc. provides data center facilities; Comcast, NTT Inc. and others provide backbone internet access; and Bandwidth.com, Onvoy and others provide origination services. We also rely on third-party services for our SMS and speech-to-text services which are sole-sourced. Intrado is our sole provider of 911 services. If any of these network service providers stop providing us with access to their infrastructure, fail to provide these services to us on a cost-effective basis, cease operations, or otherwise terminate these services, the delay caused by qualifying and switching to another third-party network service provider, if one is available, could have a material adverse effect on our business and results of operations.

We may be required to transfer our servers to new data center facilities if we are unable to renew our leases on acceptable terms, if at all, or the owners of the facilities decide to close their facilities, and we may incur significant costs and possible service interruption in connection with doing so. Any financial difficulties, such as bankruptcy or foreclosure, faced by our third-party data center operators or any of the service providers with which we or they contract, may have negative effects on our business, the nature and extent of which are difficult to predict. Additionally, if our data centers are unable to keep up with our increasing needs for capacity, our ability to grow our business could be materially and adversely impacted.

If problems occur with any of these third-party network or service providers, it may cause errors or reduced quality in our services, and we could encounter difficulty identifying the source of the problem. The occurrence of errors or reduced quality in our service, whether caused by our systems or a third-party network or service provider, may result in the loss of our existing customers, delay or loss of market acceptance of our services, termination of our relationships and agreements with our resellers or liability for failure to meet service level agreements, and may seriously harm our business and results of operations.

We rely on purchased or leased hardware and software licensed from third parties in order to offer our service. In some cases, we integrate third-party licensed software components into our platform. This hardware and software may not continue to be available at reasonable prices or on commercially reasonable terms, or at all. Any loss of the right to use any of this hardware or software could significantly increase our expenses and otherwise result in delays in the provisioning of our service until equivalent technology is either developed by us, or, if available, is identified, obtained and integrated. Any errors or defects in third-party hardware or software could result in errors or a failure of our service which could harm our business.

We also contract with one or more third parties to provide enhanced 911, or E-911, services, including assistance in routing emergency calls and terminating E-911 calls. Our providers operate a national call center that is available 24 hours a day, seven days a week, to receive certain emergency calls and maintain public service answering point, or PSAP, databases for the purpose of deploying and operating E-911 services. On mobile devices, we generally rely on the underlying cellular or wireless carrier to provide E-911 services. Any failure to perform, including interruptions in service, by our vendors, could cause failures in our customers' access to E-911 services and expose us to significant liability and damage our reputation.

Interruptions in our services could harm our reputation, result in significant costs to us and impair our ability to sell our services.

Because our technology platform is complex, incorporates a variety of new computer hardware, and the platform continues to evolve, our services may have errors or defects that are identified after customers begin using such services, which could result in unanticipated service interruptions. Although we test our services to detect and correct errors and defects before their initial release and before we make updates or other changes to such services, we have occasionally experienced significant service interruptions as a result of undetected errors or defects and may experience future interruptions of service if we fail to detect and correct errors and defects. For example, in May 2018 while working to upgrade our network, we encountered unexpected interactions between components in our Office platform which led to multiple short-term intermittent service outages. We were able to restore service without incurring material expenses, and outages to date have not materially affected our results of operations. However, the costs incurred in correcting root causes for service outages may be substantial and these and other related consequences could negatively impact our results of operations.

We currently serve our customers from data center hosting facilities located in Northern California and Virginia, where we lease space from Equinix, Inc. These facilities and the procedures we have implemented to restore services quickly in the event of a service outage, by themselves, will not prevent future outages. Any damage to, or failure of, these facilities, the communications network providers with whom we or they contract or with the systems by which our communications providers allocate capacity among their customers, including us, could result in interruptions in our service. Additionally, in connection with the expansion or consolidation of our existing data center facilities, we may move or transfer our data and our customers' data to other data centers. Despite precautions we take during this process, any unsuccessful data transfers may impair or cause disruptions in the delivery of our service.

Despite precautions taken at our hosting facilities, the occurrence of a natural disaster or an act of terrorism or other unanticipated problems at these facilities could result in lengthy interruptions in our service. Even with the disaster recovery arrangements that we have in place, our service could be interrupted. Any defects in, or unavailability of, the components of our platform that cause interruptions of our services could, among other things: cause a reduction in revenue or a delay in market acceptance of our services; require us to issue refunds to our customers or expose us to claims for damages; cause us to lose existing customers and make it more difficult to attract new customers; divert our development resources or require us to make extensive changes to our software, which would increase our expenses and slow innovation; increase our technical support costs; and harm our reputation and brand.

A security breach could delay or interrupt service to our customers, compromise the integrity of our systems or data that we collect, result in the loss of our intellectual property or confidential information, harm our reputation, or subject us to significant liability.

Our operations depend on our ability to protect our network from interruption or damage resulting from unauthorized access or entry, computer viruses or malware or other events beyond our control, and our ability to detect any such events. In the past, we may have been subject to undetected distributed denial-of-service, or DDOS cyberattacks, or other forms of attacks by hackers intent on bringing down our services or accessing confidential information, and we may be subject to DDOS and other forms of attacks in the future. We cannot assure you that our backup systems, regular data backups, physical, technological and organizational security protocols and measures and other procedures that are currently in place, or that may be in place in the future, will be adequate to detect or prevent unauthorized access to our systems, significant damage, system interruption, degradation or failure, or data loss or to respond to a cyberattack once launched. Additionally, hackers may attempt to directly gain access to a customer's on-premise appliance, or their mobile phone, which may delay or interrupt services, or may subject our customers to further security risks, including in relation to any connected household devices a customer might have now or in the future, such as our connected Smart Security sensors and our partner's connected devices, such as Nest's devices, or to our network more generally. Also, our services are web-based, and the amount of data we store for our users on our servers has been increasing as our business has grown.

Despite the implementation of security measures, our infrastructure may be vulnerable to hackers, computer viruses, worms, other malicious software programs or similar disruptive problems caused by our customers, employees, consultants or other internet users who attempt to invade public and private data networks. In some cases, we do not have in place disaster recovery facilities for certain ancillary services, such as email delivery of messages. Currently, nearly all our customers authorize us to bill their credit or debit card accounts directly for all transaction fees that we charge. We rely on encryption and authentication technology to ensure secure transmission of confidential information, including customer credit and debit card numbers. Despite our efforts to encrypt and secure transmission of confidential customer information, hackers with sufficiently sophisticated technology or methods may still be able to infiltrate our systems to gain unauthorized access to payment card information. Further, advances in computer capabilities, new discoveries in the field of cryptography or other developments may result in a compromise or breach of the technology we use to protect transaction data.

Additionally, third parties may attempt to fraudulently induce domestic and international employees, consultants or customers into disclosing sensitive information, such as user names, passwords or customer proprietary network information, or CPNI, or other information in order to gain access to our customers' data or to our data. CPNI includes information such as the phone numbers called by a customer, the frequency, duration, and timing of such calls, and any services purchased by the customer, such as call waiting, call forwarding and caller ID, in addition to other information that may appear on a customer's bill. Third parties may also attempt to fraudulently induce employees, consultants or customers into disclosing sensitive information regarding our intellectual property and other confidential business information, or our information technology systems. In addition, because the techniques used to obtain unauthorized access, or to sabotage systems, change frequently and generally are not recognized until launched against a target, we may be unable to anticipate these techniques or to implement adequate preventative measures. Any compromise or perceived compromise of our security could damage our reputation with our end-customers, and could subject us to significant liability, as well as regulatory action, including financial penalties, which would materially adversely affect our brand, results of operations, financial condition, business and prospects.

We have incurred, and expect to continue to incur, significant costs to protect against security breaches. We may incur significant additional costs in the future to address problems caused by any actual or perceived security breaches.

Any system failure or security breach that causes interruptions or data loss in our operations or in the computer systems of our customers or leads to the misappropriation of our or our customers' confidential or personal information, or CPNI, could result in significant liability to us. Such failure or breach could cause our service to be

perceived as not being secure, subject us to regulatory requirements such as FCC notification, result in significant monetary costs, such as fines, legal fees and expenditures to improve and enhance our security measures, cause considerable harm to us and our reputation (including requiring notification to customers, regulators or the media) and deter current and potential customers from using our services. Additionally, we could incur significant costs, both monetary and with respect to management's time and attention, to investigate and remediate a data security breach. Because our onboarding and billing functions are conducted primarily through a single data center, any security breach in that data center may cause an interruption in our business operations. If any of these events occurs, or is believed to occur, our reputation and brand could be damaged, our business may suffer, we could be required to expend significant capital and other resources to alleviate problems caused by such actual or perceived breaches, we could be exposed to a risk of loss, litigation or regulatory action and possible liability, and our ability to operate our business, including our ability to provide maintenance and support services to our channel partners and end-customers, may be impaired. If current or prospective channel partners and end-customers believe that our systems and solutions do not provide adequate security for their businesses' needs, our business and our financial results

could be harmed. Additionally, actual, potential or anticipated attacks may cause us to incur increasing costs, including costs to deploy additional personnel and protection technologies, train employees and engage third-party experts and consultants.

Although we maintain privacy, data breach and network security liability insurance, we cannot be certain that our coverage will be adequate for liabilities actually incurred or that insurance will continue to be available to us on economically reasonable terms, or at all. Any actual or perceived compromise or breach of our security measures, or those of our third-party service providers, or any unauthorized access to, misuse or misappropriation of personally identifiable information, channel partners' or end-customers information, or other information, could violate applicable laws and regulations, contractual obligations or other legal obligations and cause significant legal and financial exposure, adverse publicity and a loss of confidence in our security measures, any of which could have an material adverse effect on our business, financial condition and operating results.

We rely on third parties for some of our software development, quality assurance and operations, and anticipate we will continue to do so for the foreseeable future.

We outsource certain of our software development and design, quality assurance and operations activities to third-party contractors that have employees and consultants in a number of international locations. Our dependence on third-party contractors creates numerous risks, in particular, the risk that we may not maintain control or effective management with respect to these business operations. Our agreements with these third-party contractors are either not terminable by them (other than at the end of the term or upon an uncured breach by us) or require at least 30 days' prior written notice of termination. If we experience problems with our third-party contractors, the costs charged by our third-party contractors increase, or our agreements with our third-party contractors are terminated, we may not be able to develop new solutions, enhance or operate existing solutions or provide customer support in an alternate manner that is equally or more efficient and cost-effective. If we are unsuccessful in maintaining existing and, if needed, establishing new relationships with third parties, our ability to efficiently operate existing services or develop new services and provide adequate customer support could be impaired, and as a result, our competitive position or our results of operations could suffer.

We rely on third parties to provide the majority of our customer service and support representatives. If these third parties do not provide our customers with reliable, high quality service, our reputation and our business will be harmed, and we may be exposed to significant liability.

We offer customer support through both our online account management website and our toll-free customer support number. Our customer support is currently provided via a third-party provider located in the Philippines, as well as our employees in the U.S. We currently offer support almost exclusively in English. The ability to support our customers may be disrupted by natural disasters, inclement weather conditions, civil unrest, strikes, acts of terrorism and other adverse events in the Philippines. Furthermore, as we expand our operations internationally, we may need to make significant expenditures and investments in our customer service and support to adequately address the complex needs of international customers, such as support in multiple foreign languages. In addition, a significant service outage may cause a high volume of customer support inquiries, and our third party customer service center may not be able to respond to such inquiries in a timely manner. Industry consolidation among providers of services to us may impact our ability to obtain these services or increase our costs for these services.

Our rates of growth may decline in the future.

Our user growth and revenue growth rates may decline over time as the size of our active user base increases, and it is possible that the size of our active user base may fluctuate or decline in one or more markets, particularly as we achieve greater market penetration. Our revenue growth rate may generally decline over time as our revenue increases to higher levels. As our growth rates decline, investors' perceptions of our business may be adversely affected and the trading price of our common stock could decline.

We may not be able to effectively manage our growth and the increased complexity of our business, which could negatively impact our brand, financial performance and increase the risk of investing in our stock.

We have experienced substantial growth in our business, including an increase in the number of customers we consider to be our core users. This growth has placed and may continue to place significant demands on our management and our operational and financial infrastructure. As our operations grow in size, scope and complexity, we will need to increase our sales and marketing efforts and add additional sales and marketing personnel worldwide and to improve and upgrade our systems and infrastructure to attract, service, and retain an increasing number of users. For example, we expect the volume of simultaneous calls to increase significantly as our user base grows. Our network hardware and software may not be able to accommodate this additional simultaneous call volume. The expansion of our systems and infrastructure will require us to commit substantial financial, operational and technical resources in advance of an increase in the volume of business, with no assurance that the volume of business will increase. Any such additional capital investments will increase our cost base. Continued growth could also strain our ability to maintain reliable service levels for our users, develop and improve our operational, financial and management controls, enhance our reporting systems and procedures and recruit, train, and retain highly skilled personnel. If we fail to achieve the necessary level of efficiency in our organization as we grow, and if the current and future members of our management team do not effectively scale with this growth, our business, results of operations and financial condition could be materially and adversely affected.

Our business could suffer if we cannot obtain or retain direct inward dialing numbers, or DIDs, are prohibited from obtaining local or toll-free numbers, or are limited to distributing local or toll-free numbers to only certain customers.

Our future success depends on our ability to procure large quantities of local and toll-free DIDs in the U.S. and foreign countries in desirable locations at a reasonable cost and without restrictions. Our ability to procure and distribute DIDs depends on factors outside of our control, such as applicable regulations, the practices of the communications carriers that provide DIDs, the cost of these DIDs, and the level of demand for new DIDs. Due to their limited availability, there are certain popular area code prefixes we generally cannot obtain. Our inability to acquire DIDs for our operations would make our services less attractive to potential customers in the affected local geographic areas. In addition, future growth in our customer base and the customer bases of our competitors will increase our dependence on needing sufficiently large quantities of DIDs.

If we are unable to effectively process local number and toll-free number portability provisioning in a timely manner, our growth may be negatively affected.

We support local number and toll-free number portability, which allows our customers to transfer to us and thereby retain their existing phone numbers when subscribing to our services. During the number transfer process, our new customers must maintain both our service and their existing phone service. We depend on third-party carriers to transfer phone numbers, a process we do not control, and these third-party carriers may refuse or substantially delay the transfer of these numbers to us. Local number portability is considered an important feature by many potential customers, and if we fail to reduce any related delays, we may experience increased difficulty in acquiring new customers. Moreover, the FCC requires us to comply with specified number porting timeframes when customers leave our service for the services of another provider. In Canada, the Canadian Radio-television and Telecommunications Commission, or CRTC, has imposed a similar number portability requirement on service providers like us. If we, or our third-party carriers, are unable to process number portability requests within the requisite timeframes, we could be subject to fines and penalties. Additionally, in the U.S., both customers and carriers may seek relief from the relevant state public utility commission, the FCC, or in state or federal court for violation of local number portability requirements.

Our limited history operating our business at its current scale makes it difficult to evaluate our current business and future prospects, which may increase the risk of investing in our stock

Our business has experienced rapid growth in recent periods. We became a public company following our initial public offering IPO in July 2015 and our revenues have grown from $88.8 million in fiscal 2016 to $129.2 million in fiscal 2019 and our operating expenses have increased from $59.6 million in fiscal 2016 to $92.3 million in fiscal 2019. Because we have only a limited history operating our business at its current scale, it is difficult to evaluate our current business and future prospects, including our ability to plan for and model future growth. We have encountered and expect to continue encountering risks and uncertainties frequently experienced by growing companies in rapidly changing markets. If our assumptions regarding these uncertainties are incorrect or change in reaction to changes in our markets, or if we do not manage or address these risks successfully, our results of operations could differ materially from our expectations, and our business could suffer. Any success we may experience in the future will depend, in large part, on our ability to, among other things:

- retain and expand our customer base;
- increase revenue from existing customers as they add users and, in the future, purchase additional functionalities and premium service subscriptions;

- successfully acquire customers on a cost-effective basis;
- improve the performance and capabilities of our services, applications, and hardware through research and development;
- successfully expand our business domestically and internationally;
- successfully compete in our markets;
- continue to innovate and expand our service offerings;
- continue our relationships with strategic partners like Amazon, Nest Labs, Inc. and our reseller partners;
- continue our relationships with our current retail partners and develop relationships with additional retail partners;
- continue our relationships with our digital marketing agency partners, advertising agencies and digital advertising networks;
- continue our relationships with third-party vendors that enable our solutions;
- successfully protect our intellectual property and defend against intellectual property infringement claims;
- generate leads and convert potential customers into paying customers;
- maintain and enhance our third-party data center hosting facilities to minimize interruptions in the use of our services;
- determine appropriate prices for the marketplace; and
- hire, integrate and retain professional and technical talent.

We may not be able to achieve or sustain profitability in the future.

We have incurred substantial net losses since our inception, including net losses of approximately $14.6 million, $13.1 million and $12.9 million in fiscal 2019, fiscal 2018 and fiscal 2017, respectively. We have expended significant resources to develop, market, promote, and sell our products and solutions and we expect to continue investing for future growth. We used cash in operations of $3.9 million for fiscal 2019 and may continue to have negative operating cash flow in the future as a result of our increased expenditures. Achieving profitability will require us to increase revenue, manage our cost structure and avoid significant liabilities. Revenue growth may slow, revenue may decline or we may incur significant losses in the future for a number of possible reasons, including general macroeconomic conditions, increasing competition (including competitive pricing pressures), a decrease in the growth of the markets in which we compete, or failure for any reason to continue capitalizing on growth opportunities. Additionally, we may encounter unforeseen operating expenses, difficulties, complications, delays, service delivery and quality problems and other unknown factors that may result in losses in future periods. If these losses exceed our expectations or our revenue growth expectations are not met in future periods, our financial performance will be harmed and our stock price could be volatile or decline.

If we fail to continue developing our brand or our reputation is harmed, our business may suffer.

We believe that continuing to strengthen our current brand will be critical to achieving widespread acceptance of our services and will require continued focus on active marketing efforts. The demand for and cost of online and traditional advertising have been increasing and may continue to increase. Accordingly, we may need to increase our investment in, and devote greater resources to, advertising, marketing, and other efforts to create and maintain brand loyalty among users. Brand promotion activities may not yield increased revenue, and even if they do, any increased revenue may not offset the expenses incurred in building our brands. If we fail to promote and maintain our brand, or if we incur substantial expense in an unsuccessful attempt to promote and maintain our brands, our business could be materially and adversely affected.

Our services, as well as those of our competitors, are regularly reviewed and commented upon by online and social media sources, as well as computer and other business publications. Negative reviews, or reviews in which our competitors' products and services are rated more highly than our solutions, could negatively affect our brand and reputation. From time to time, our customers have expressed dissatisfaction with our services, including dissatisfaction with our customer support, our billing policies and the way our services operate. If we do not handle customer complaints effectively, our brand and reputation may suffer, we may lose our customers' confidence, and they may choose to terminate, reduce or not to renew their subscriptions. In addition, many of our customers

participate in social media and online blogs about internet-based services, including our services, and our success depends in part on our ability to minimize negative and generate positive customer feedback through such online channels where existing and potential customers seek and share information. If actions we take or changes we make to our services upset these customers, their blogging could negatively affect our brand and reputation. Complaints or negative publicity about our services or customer service could materially and adversely impact our ability to attract and retain customers and our business, financial condition and results of operations.

Failures in internet infrastructure or interference with broadband access could cause current or potential customers to believe that our systems are unreliable, leading our current customers to switch to our competitors or potential customers to avoid using our services.

Many of our services depend on our customers' broadband access to the internet, usually provided through a cable or digital subscriber line, or DSL, connection. In addition, users who access our services and applications through mobile devices, such as smartphones and tablets, must have a high-speed connection, such as Wi-Fi, 3G, 4G or LTE, to use our services and applications. Currently, this access is provided by companies that have significant and increasing market power in the broadband and internet access marketplace, including incumbent phone companies, cable companies and wireless companies. Increasing numbers of users and increasing bandwidth requirements may degrade the performance of internet and mobile infrastructure, resulting in outages or deteriorations in connectivity and negatively impacting the quality with which we can deliver our solutions. As our customer base grows and their usage of communications capacity increases, we will be required to make additional investments in network capacity to maintain adequate data transmission speeds, the availability of which may be limited, or the cost of which may be on terms unacceptable to us. If adequate capacity is not available to us as our customers' usage increases, our network may be unable to achieve or maintain sufficiently high data transmission capacity, reliability or performance. Furthermore, as the rate of adopting new technologies increases, the networks on which our services and applications rely may not be able to sufficiently adapt to the increased demand for these services, including ours. In the past, we have experienced disruptions to our service. For example, in May 2018 while working to upgrade our network, we encountered unexpected interactions between components in our Office platform which led to multiple intermittent service outages. We were able to restore service without incurring material expenses, and outages to date have not materially affected our results of operations. However, the costs incurred in correcting root causes for service outages may be substantial and these and other related consequences could negatively impact our results of operations.

Frequent or persistent interruptions could cause current or potential users to believe that our systems or services are unreliable, leading them to switch to our competitors or to avoid our services, and could permanently harm our reputation and brands. Because some of our services rely on integration between features that use both wired and wireless infrastructures, any of the aforementioned problems with either wired or wireless infrastructure may result in the inability of customers to take advantage of our integrated services and therefore may decrease the attractiveness of our collective services to current and potential customers.

The success of our business relies on customers' continued and unimpeded access to broadband service. Providers of broadband services may block or degrade our services or charge their customers more for using our services, which could adversely affect our revenue and growth.

Some of the providers of broadband internet access and high-speed mobile access, such as AT&T and Verizon, market and sell products and services to our current and potential customers that directly compete with our own offerings, which can potentially give such providers a competitive advantage. Broadband providers also may take measures that affect their customers' ability to use our service, such as degrading the quality of the data packets we transmit over their lines, giving those packets low priority, giving other packets higher priority than ours, blocking our packets entirely or attempting to charge their customers more for also using our services. In the past, actions like these taken by U.S. providers would violate the net neutrality rules adopted by the FCC and described below, however the FCC recently reversed the net neutrality rules, and most foreign countries have not adopted formal net neutrality or open internet rules, creating an increased risk broadband providers will engage in such anti-competitive measures against the Company in the United States and elsewhere.

In 2015, the FCC reclassified broadband internet access services as a "telecommunications service" subject to new open internet regulations and certain common carrier regulations, including the obligation to provide service on just and reasonable terms, requirements related to customer privacy and requirements for accessibility for people with disabilities. These regulations also prohibited blocking or discriminating against lawful services and applications and prohibited "paid prioritization," or providing faster speeds or other benefits in return for compensation.

In December 2017, the FCC largely reversed the existing net neutrality rules, including the classification of broadband Internet service as a telecommunications service subject to certain common carrier regulations. The FCC's order is the subject of pending legal challenges. We cannot predict the outcome or timing of these proceedings. The FCC's order could affect the market for broadband internet access service in a way that impacts our business, for example by increasing the cost of broadband internet service and thereby depressing demand for our services, by increasing the costs of services we purchase or by creating tiers of internet access service and by either charging us for or prohibiting us from being available through these tiers, and we cannot predict the impact of these events upon our business and results of operations.

Our quarterly and annual results of operations have fluctuated in the past and may continue to do so in the future. As a result, we may fail to meet or to exceed the expectations of research analysts or investors, which could cause our stock price to fluctuate.

Our quarterly and annual results of operations have varied historically from period to period, and we expect that they will continue to fluctuate due to a variety of factors, many of which are outside of our control, including:

- our ability to retain existing customers and attract new customers, sell premium solutions to our existing customers and introduce new solutions;
- the actions of our competitors, including pricing changes or the introduction of new solutions;
- our ability to effectively manage our growth and successfully penetrate the communications and connected services markets for small businesses, residential and mobile;
- the number of monthly and annual subscriptions at any given time;
- the timing, cost and effectiveness of our advertising and marketing efforts;
- the timing, operating cost and capital expenditures related to the operation, maintenance, and expansion of our business;
- the timing of our decisions with regard to product resource allocation;
- seasonality of consumers' purchasing patterns and seasonality of advertising patterns;
- service outages or security breaches and any related impact on our reputation;
- our ability to accurately forecast revenue and appropriately plan our expenses;
- the timing of revenue recognition for product sales made through our channel partners under the ASC 606 revenue recognition standard (which we adopted on February 1, 2018) requires us to recognize revenue upon the sale to our channel partners on a sell-in basis and make estimates for expected product returns and customer sales incentives at the time product is shipped. Such estimates for sales allowances require significant judgment and actual results may differ materially from amounts reported. As a result, this standard may heighten the impact of any fluctuations in the timing and magnitude of product returns or customer credits from these channels on our quarterly operating results;
- costs associated with defending and resolving intellectual property infringement and other claims;
- changes in tax laws, regulations, or accounting rules;
- the timing and cost of developing or acquiring technologies, services or businesses and our ability to successfully manage any such acquisitions; and
- the impact of worldwide economic, industry, and market conditions.

Any one of the factors above, or the cumulative effect of some or all of the factors referred to above, may result in significant fluctuations in our quarterly and annual results of operations. This variability and unpredictability could result in our failure to meet our internal operating plan or the expectations of securities analysts or investors for any period, which could cause our stock price to decline. In addition, a significant percentage of our operating expenses is fixed in nature and is based on forecasted revenue trends. Accordingly, in the event of revenue shortfalls, we may not be able to mitigate the negative impact on net income (loss) and margins in the short term. If we fail to meet or exceed the expectations of research analysts or investors, the market price of our shares could fall substantially and we could face costly lawsuits, including securities class-action suits.

We may not be able to secure additional financing on favorable terms, or at all, to meet our future capital needs.

We intend to continue making expenditures and investments to support the growth of our business. In the future, we may require additional capital to pursue our business objectives and to respond to business opportunities, challenges, or unforeseen circumstances, including the need to develop new solutions or enhance our existing solutions, enhance our operating infrastructure, and acquire complementary businesses and technologies. Accordingly, we may decide to engage in equity or debt financings to secure additional funds. However, additional funds may not be available when we need them on terms acceptable to us, or at all. Any debt financing we secure in the future could involve restrictive covenants, which may make it more difficult for us to obtain additional capital and to pursue business opportunities. In addition, volatility in the credit markets may have an adverse effect on our ability to obtain debt financing. If we raise additional funds through further issuances of equity or convertible debt securities, our existing stockholders could suffer significant dilution, and any new equity securities we issue could have rights, preferences, and privileges superior to those of holders of our common stock. If we are unable to obtain adequate financing or financing on terms satisfactory to us, our ability to continue pursuing our business objectives and to respond to business opportunities, challenges or unforeseen circumstances could be significantly limited, and our business, results of operations, financial condition and prospects could be materially and adversely affected.

Shifts in trends or the emergence of new technologies may render our solutions obsolete or require us to expend significant resources to develop, license, or acquire new services or applications on a timely and cost-effective basis in order to remain competitive.

The cloud-based communications and connected services industries are emerging markets characterized by rapid changes in customer requirements, frequent introductions of new and enhanced services, and continuing and rapid technological advancement. To compete successfully in these emerging markets, we must anticipate and adapt to unpredictable technological changes and evolving industry standards and continue to design, develop, manufacture and sell new and enhanced services that provide increasingly higher levels of performance and reliability at lower cost. We derived approximately 68% of our revenue from Ooma Residential for fiscal 2019 and expect it will continue to account for a majority of our revenue for the foreseeable future. However, our future success will also depend on our ability to introduce and sell new services, features and functionality that enhance or are beyond the voice, fax, text and connected services we currently offer, as well as to improve usability and support and increase customer satisfaction. Our failure to develop solutions that satisfy customer preferences in a timely and cost-effective manner may harm our ability to renew our subscriptions with existing customers and to create or increase demand for our services and may materially and adversely impact our results of operations.

The introduction or announcement of new services and technologies by our competitors could make our solutions obsolete, cause customers to defer purchases of our services, or otherwise adversely affect our business and results of operations. We may experience difficulties with software development, operations, design or marketing that could delay or prevent the introduction or implementation of new or enhanced services and applications. We have in the past experienced delays in the planned release dates of new features and upgrades, and have discovered defects in new services and applications after their introduction. We cannot assure you that new features or upgrades will be released according to schedule, or that, when released, they will not contain defects. Either of these situations could result in adverse publicity, loss of revenue, delay in market acceptance or claims by customers brought against us, all of which could harm our reputation, business, results of operations and financial condition. Moreover, the development of new or enhanced services or applications may require substantial investment, and we must continue to invest a significant amount of resources in our research and development efforts to remain competitive. We do not know whether these investments will be successful. If we are unable to develop, license or acquire new or enhanced services and applications on a timely and cost effective basis, or if such new or enhanced services and applications do not achieve adequate market acceptance, we may not be able to realize a return on our investments and our business, financial condition and results of operations may be materially and adversely affected.

Our success depends, in part, on increased public acceptance of our connected services and applications.

Our future growth depends on our ability to significantly increase revenue generated from our communications solutions, our Ooma Smart Security services, and other connected services. The markets for cloud-based communications, smart security services and connected services are evolving rapidly and are characterized by an increasing number of market entrants. If these markets fail to develop, develop more slowly than we anticipate or develop in a manner different than we expect, our services could fail to achieve market acceptance, which in turn could materially and adversely affect our business.

Our future growth in the small business and enterprise markets depends on the continued use of voice communications by businesses, as compared to e-mail and other data-based methods. A decline in the overall rate of voice communications by businesses would harm our business. Furthermore, our continued growth depends on future demand for and adoption of internet voice communications systems and services and on future demand for connected communications services. Although the number of broadband subscribers worldwide has grown significantly in recent years, only a small percentage of businesses have adopted internet voice communications services to date. For demand and adoption of internet voice communications services by businesses to increase, internet voice communications networks must improve the quality of their service for real-time communications by managing the effects of and reducing packet loss, packet delay, and packet jitter, as well as unreliable bandwidth, so that high-quality service can be consistently provided. Additionally, the cost and feature benefits of internet voice communications must be sufficient to cause customers to switch from traditional phone service providers. We must devote substantial resources to educate potential customers about the benefits of internet voice communications solutions, in general, and of our services in particular. If any or all of these factors fail to occur, our business may be materially and adversely affected.

Our Ooma Residential product and services are being sold to individuals and families. With the growth of mobile technologies, many consumers have chosen to eliminate their home telephone service. Our ability to continue growing our user base depends on our ability to convince our customers and potential customers that our service is sufficiently useful and cost-effective, that it makes sense to maintain or establish home telephone services with us. Our growth could slow and our financial condition could be adversely affected if the trend of eliminating home telephone service continues or accelerates.

Our Ooma Smart Security service faces significant competition in a market segment where the Ooma brand is relatively unknown, and where there are several established large providers, such as Arlo Technologies Inc., SimpliSafe and ADT as well as new market entrants with significantly greater resources than ours, such as Google and its Nest Secure home security system and service. If we fail to create sufficient recognition of the Ooma brand in the smart security market, fail to provide features or benefits in our Smart Security service seen as desirable by consumers, or fail to convince consumers of the relative benefits of our Smart Security service when compared to those of our competitors, our service could fail to achieve market acceptance and therefore not generate significant increases to our revenue.

Our mobile platform, available to any consumer with a Wi-Fi or cellular data connected mobile device, operates in a market that is fragmented and difficult to get noticed by consumers. Many of our competitors in this market have been able to establish a significant user base and reputation in the market, which may make it more difficult for our products to be adopted. Furthermore, as new mobile devices are released, we may encounter difficulties supporting these devices and services, and we may need to devote significant resources to the creation, support, and maintenance of our mobile applications. Additionally, our competitors may allocate additional resources to marketing and promotion of their products, making it even more difficult to be noticed. It is also unclear how the adoption of “over-the-top” based communications will continue to grow. If the number of consumers using “over-the-top” based communications stagnates or declines, such movement may result in an intensified competition for consumers in this space.

Accusations of infringement of third-party intellectual property rights could materially and adversely affect our business.

There has been substantial litigation in the areas in which we operate regarding intellectual property rights. In the past, we have been sued by third parties claiming infringement of their intellectual property rights and we may be sued for infringement from time to time in the future. In the past, we have settled infringement litigation brought against us; however, we cannot assure you that we will be able to settle any future claims or, if we are able to settle any such claims, that the settlement will be on terms favorable to us. Our broad range of technology may increase the likelihood that third parties will claim that we infringe their intellectual property rights.

We have in the past received, and may in the future receive, notices of claims of infringement, misappropriation or misuse of other parties' proprietary rights, such as the Deep Green Wireless Litigation described in Note 11: Commitments and Contingencies in the accompanying notes to our consolidated financial statements. Notwithstanding their merits, accusations and lawsuits like these often require significant time and expense to defend, may negatively affect customer relationships, may divert management's attention away from other aspects of our operations and, upon resolution, may have a material adverse effect on our business, results of operations, financial condition and cash flows.

Certain technology necessary for us to provide our services may, in fact, be patented by other parties either now or in the future. If such technology were validly patented by another person, we would have to negotiate a license for the use of that technology. We may not be able to negotiate such a license at a price that is acceptable to us or at all. The existence of such a patent, or our inability to negotiate a license for any such technology on acceptable terms, could force us to cease using the technology and cease offering products and services incorporating the technology, which could materially and adversely affect our business and results of operations. If we were found to be infringing on the intellectual property rights of any third party, we could be subject to liability for such infringement, which could be material. We could also be prohibited from using or selling certain products or services, prohibited from using certain processes, or required to redesign certain products or services, each of which could have a material adverse effect on our business and results of operations.

These and other outcomes may:

- result in the loss of a substantial number of existing customers or prohibit the acquisition of new customers;
- cause us to pay license fees for intellectual property we are deemed to have infringed;
- cause us to incur costs and devote valuable technical resources to redesigning our services;
- cause our cost of goods sold to increase;
- cause us to accelerate expenditures to preserve existing revenue;
    - cause existing or new vendors to require prepayments or letters of credit;
- materially and adversely affect our brand in the marketplace and cause a substantial loss of goodwill;
- cause us to change our business methods or services;
- require us to cease certain business operations or offering certain products, services or features; and
- lead to our bankruptcy or liquidation.

Our limited ability to protect our intellectual property rights could materially and adversely affect our business.

We rely, in part, on patent, trademark, copyright and trade secret law to protect our intellectual property in the U.S. and abroad. We cannot assure you that the particular forms of intellectual property protection we seek, including business decisions about when to file patents and when to maintain trade secrets, will be adequate to protect our business. We seek to protect our technology, software, documentation and other information under trade secret and copyright law, which afford only limited protection. For example, we typically enter into confidentiality agreements with our employees, consultants, third-party contractors, customers and vendors in an effort to control access to use and distribution of our technology, software, documentation and other information. These agreements may not effectively prevent unauthorized use or disclosure of confidential information and may not provide an adequate remedy in the event of such unauthorized use or disclosure, and it may be possible for a third party to legally reverse engineer, copy or otherwise obtain and use our technology without authorization. In addition, improper disclosure of trade secret information by our current or former employees, consultants, third-party contractors, customers or vendors to the public or others who could make use of the trade secret information would likely preclude that information from being protected as a trade secret.

We also rely, in part, on patent law to protect our intellectual property in the U.S. and internationally. See Item 1. Business above for additional information. We cannot predict whether our pending patent applications will result in issued patents or whether any issued patents will effectively protect our intellectual property. Even if a pending patent application results in an issued patent, the patent may be circumvented or its validity may be challenged in various proceedings in U.S. District Court, before the U.S. Patent and Trademark Office or before their foreign equivalents, such as reexamination, which may require legal representation and involve substantial costs and diversion of management time and resources. In addition, we cannot assure you that every significant feature of our solutions is protected by our patents, or that we will mark our products with any or all patents they embody. As a result, we may be prevented from seeking damages in whole or in part for infringement of our patents.

The unlicensed use of our brand, including domain names, by third parties could harm our reputation, cause confusion among our customers and impair our ability to market our products and services. To that end, we have registered numerous trademarks and service marks, have applied for registration of additional trademarks and service marks and have acquired a number of domain names in and outside the U.S. to establish and protect our brand names as part of our intellectual property strategy. If our applications receive objections or are successfully opposed by third parties, it will be difficult for us to prevent third parties from using our brand without our permission. Moreover, successful opposition to our applications might encourage third parties to make additional oppositions or commence trademark infringement proceedings against us, which could be costly and time consuming to defend against. There have been in the past, and may be in the future, instances where third parties have used our trade names, or have adopted confusingly similar trade names to ours. If we are not successful in protecting our trademarks, our trademark rights may be diluted and subject to challenge or invalidation, which could materially and adversely affect our brand.

Despite our efforts to implement our intellectual property strategy, we may not be able to protect or enforce our proprietary rights in the U.S. or internationally (where effective intellectual property protection may be unavailable or limited). For example, we have entered into agreements containing confidentiality and invention assignment provisions in connection with the outsourcing of certain software development, quality assurance and development activities to third-party contractors in a number of international locations. We have also entered into an agreement containing a confidentiality provision with a third-party contractor located in the Philippines, where we have outsourced a significant portion of our customer support function. Such agreements may not adequately protect our proprietary rights in the applicable jurisdictions and foreign countries, as their respective laws may not protect proprietary rights to the same extent as the laws of the U.S. In addition, our competitors may independently develop technologies similar or superior to our technology, duplicate our technology in a manner that does not infringe our intellectual property rights or design around any of our patents. Furthermore, detecting and policing unauthorized use of our intellectual property is difficult and resource-intensive. Moreover, litigation may be necessary in the future to enforce our intellectual property rights, to determine the validity and scope of the proprietary rights of others, or to defend against claims of infringement or invalidity. Such litigation, whether successful or not, could result in substantial costs and diversion of management time and resources and could have a material adverse effect on our business, financial condition and results of operations.

We license technology from third parties we do not control and cannot be assured of retaining such licenses.

We rely upon certain technology, including hardware and software, licensed from third parties. There can be no assurance that the technology licensed by us will continue to provide competitive features and functionality or that the licenses for technology currently utilized by us or other technology which we may seek to license in the future, will be available to us on commercially reasonable terms or at all. The loss of, or inability to maintain, existing licenses could result in shipment delays or reductions until equivalent technology or suitable alternative products are developed, identified, licensed and integrated, and could harm our business. These licenses are typically offered on standard commercial terms made generally available by the companies providing the licenses. The cost and terms of these licenses individually are not material to our business.

If we experience excessive fraudulent activity or cannot meet evolving credit card association merchant standards, we could incur substantial costs and lose the right to accept credit cards for payment, which could cause our customer base to decline significantly.

Nearly all of our customers authorize us to bill their credit card accounts directly for service fees that we charge. If people pay for our services with stolen credit cards, we could incur substantial third-party vendor costs for which we may not be reimbursed. Further, our customers provide us with credit card billing information online or over the phone, and we do not review the physical credit cards used in these transactions, which increases our risk of exposure to fraudulent activity. We also incur charges, which we refer to as chargebacks, from the credit card companies' claims that the customer did not authorize the credit card transaction to purchase our service, something we have experienced in the past. If the number of unauthorized credit card transactions becomes excessive, we could be assessed substantial fines for excess chargebacks and we could lose the right to accept credit cards for payment. We have also been affected by the credit card breaches at various retail stores, which have caused millions of consumers to cancel credit cards as a result of the breach. We have found that some consumers do not renew their services after a card cancellation, which can have a material negative impact on our revenue. In addition, credit card issuers may change merchant standards, including data protection and documentation standards, required to utilize their services from time to time.

We are currently not in compliance with all of the applicable technical requirements of the Payment Card Industry Data Security Standard, or PCI, but we are working to become fully compliant as soon as is practicable. If we fail to become compliant or maintain compliance with current merchant standards, such as PCI, or fail to meet new standards, the credit card associations may fine us or, while unusual, may impose certain restrictions on our ability to accept credit cards or terminate our agreements with them, rendering us unable to accept credit cards as payment for our services. Our services have been in the past, and may also be in the future, subject to fraudulent or abusive usage in violation of applicable law or our acceptable use policies, including but not limited to revenue share fraud, domestic traffic pumping, subscription fraud, premium text message scams, and other fraudulent schemes, any of which could result in our incurring substantial costs for the completion of calls. Although our customers are required to set passwords and Personal Identification Numbers, or PINs, to protect their accounts and may configure in which destinations international calling is enabled from their extensions, third parties have accessed and used our customers' accounts and extensions through fraudulent means in the past, and they may do so in the future, which also could result in substantial call completion and other costs for us. In addition, third parties may have attempted in the past, and may attempt in the future, to fraudulently induce domestic and international employees or consultants into disclosing customer credentials and other account information. Communications fraud can result in unauthorized access to customer accounts and customer data, unauthorized use of customers' services, and charges to customers for fraudulent usage and expenses we must pay to carriers. We may be required to pay for these charges and expenses with no reimbursement from the customer, and our reputation may be harmed if our services are subject to fraudulent usage.

Although we implement multiple fraud prevention and detection controls, we cannot assure you that these controls will be adequate to protect against fraud. Substantial losses due to fraud or our inability to accept credit card payments, which could cause our paid customer base to significantly decrease, could have a material adverse effect on our results of operations, financial condition and ability to grow our business.

Potential problems with our information systems could interfere with our business and operations.

We rely on our information systems and those of third parties for processing customer orders, distribution of our services, billing our customers, processing credit card transactions, customer relationship management, supporting financial planning and analysis, accounting functions and financial statement preparation and otherwise running our business. Information systems may experience interruptions, including interruptions of related services from third-party providers, which may be beyond our control. Such business interruptions could cause us to fail to meet customer requirements. All information systems, both internal and external, are potentially vulnerable to damage or

interruption from a variety of sources, including without limitation, computer viruses, security breaches, energy blackouts, natural disasters, terrorism, war, telecommunication failures and employee or other theft, as well as third-party provider failures. Any disruption in our information systems and those of the third parties upon which we rely could have a significant impact on our business.

We may implement enhanced information systems in the future to meet the demands resulting from our growth and to provide additional capabilities and functionality. The implementation of new systems and enhancements is frequently disruptive to the underlying business of an enterprise, and can be time-consuming and expensive, increase management responsibilities and divert management attention. Any disruptions relating to our systems enhancements or any problems with the implementation, particularly any disruptions impacting our operations or our ability to accurately report our financial performance on a timely basis during the implementation period, could materially and adversely affect our business. Even if we do not encounter these material and adverse effects, the implementation of these enhancements may be much costlier than we anticipated. If we are unable to successfully implement the information systems enhancements as planned, our financial position, results of operations and cash flows could be negatively impacted.

Our use of open source technology could impose limitations on our ability to commercialize our services.

We use open source software in our platform on which our services operate. There is a risk that the owners of the copyrights in such software may claim that such licenses impose unanticipated conditions or restrictions on our ability to market or provide our services. If such owners prevail in such claim, we could be required to make the source code for our proprietary software (which contains our valuable trade secrets) generally available to third parties, including competitors, at no cost, to seek licenses from third parties in order to continue offering our services, to re-engineer our technology, or to discontinue offering our services in the event re-engineering cannot be accomplished on a timely basis or at all, any of which could cause us to discontinue our services, harm our reputation, result in customer losses or claims, increase our costs or otherwise materially and adversely affect our business and results of operations. If a copyright holder of such open source software were to allege we had not complied with the conditions of one or more of these licenses, we could be required to incur significant legal expenses defending against such allegations and could be subject to significant damages, enjoined from the sale of our solutions that contained the open source software and required to comply with the foregoing conditions, which could disrupt the distribution and sale of some of our solutions.

We depend largely on the continued services of our senior management and other key employees, the loss of any of whom could adversely affect our business, results of operations and financial condition.

Our future performance depends on the continued services and contributions of our senior management and other key employees to execute on our business plan, and to identify and pursue opportunities and services innovations. The loss of services of senior management or other key employees could significantly delay or prevent the achievement of our development and strategic objectives. All of our executive officers and senior management may terminate employment with us at any time with no advance notice. The replacement of any of these senior management personnel would likely involve significant time and costs, and such loss could significantly delay or prevent the achievement of our business objectives. Many members of our senior management have been our employees for many years and therefore have significant experience and understanding of our business that would be difficult to replace. Our inability to attract and retain the necessary personnel could adversely affect our business, financial condition or results of business. We do not maintain key person insurance for any of our personnel.

If we are unable to hire, retain and motivate qualified personnel, our business will suffer.

Our future success depends, in part, on our continued ability to attract and retain highly skilled personnel. We believe there is, and will continue to be, intense competition for highly skilled technical and other personnel with experience in our industry in the San Francisco Bay Area, where our headquarters is located, and in other locations where we may maintain offices in the future. We must provide competitive compensation packages and a high-quality work environment to hire, retain and motivate employees. If we are unable to retain and motivate our existing employees or attract qualified personnel to fill key positions, we may be unable to manage our business effectively, including the development, marketing and sale of existing and new services, which could have a material adverse effect on our business, financial condition, and results of operations. To the extent we hire personnel from competitors, we may be subject to allegations such personnel have been improperly solicited or divulged proprietary or other confidential information.

We may expand through acquisitions of, or investments in, other companies, each of which may divert our management’s attention, result in additional dilution to our stockholders, increase expenses, disrupt our operations and harm our results of operations.

Our business strategy may, from time to time, include acquiring or investing in complementary services, technologies or businesses. We may not be able to find suitable acquisition candidates, and we may not be able to complete acquisitions on favorable terms, if at all. If we do complete acquisitions, we may not ultimately strengthen our competitive position or achieve our goals, and any acquisitions we complete could be viewed negatively by users or

investors. If we fail to successfully integrate such acquisitions, or the technologies associated with such acquisitions, the revenue and operating results of the combined company could be adversely affected. Acquisitions may disrupt our ongoing operations, divert management from their primary responsibilities, subject us to additional liabilities, increase our expenses and adversely impact our business, financial condition, operating results and cash flows. We may not successfully evaluate or utilize the acquired technology and accurately forecast the financial impact of an acquisition transaction, including accounting charges.

We may have to pay cash, incur debt or issue equity securities to pay for any such acquisition, each of which could affect our financial condition or the value of our capital stock. The sale of equity to finance any such acquisitions could result in dilution to our stockholders. If we incur debt it would result in increased fixed obligations and could also subject us to covenants or other restrictions that would impede our ability to manage our operations. In addition, our future operating results may be impacted by performance earnouts or contingent payments. Furthermore, acquisitions may require large one-time charges and can result in increased debt or contingent liabilities, adverse tax consequences, additional stock-based compensation expense and the recording and subsequent amortization or impairments of amounts related to certain purchased intangible assets, any of which could negatively impact our future results of operations.

When we enter into mergers or other strategic transactions in which we acquire other companies, for example, our acquisitions of Voxter Communications, Inc. (“Voxter”) in March 2018 and Butterfleye, Inc. (“Butterfleye”) in December 2017, we cannot guarantee we will be able to successfully integrate the teams, assets, or business of these target companies into our business, that we will be able to fully recover the costs of such transactions or that we will be successful in leveraging such strategic transactions into increased business for our products.

We are expanding our international operations, which may expose us to significant risks.

To date, we have not generated significant revenue from outside of the U.S. and Canada, but we have expanded operations outside North America as we ramp up to provide services in certain countries internationally. For example, Voxter operates in Canada, and its customers have operations in Canada and certain other countries outside of the U.S. The future success of our business will depend, in part, on our ability to expand our operations and customer base worldwide. Operating in international markets requires significant resources and management attention and will subject us to regulatory, economic and political risks different from those in the U.S. Because of our limited experience with international operations and developing and managing sales and distribution channels in international markets, our international expansion efforts may not be successful. In addition, we will face risks in doing business internationally that could materially and adversely affect our business, including:

- our ability to comply with differing technical and environmental standards, data privacy and telecommunications regulations, and certification requirements outside the U.S.;
- potential contractual and other liability to our business partners if we fail to meet their aggressive expansion schedules in new locations;
- difficulties and costs associated with staffing and managing foreign operations;
- potentially greater difficulty collecting accounts receivable and longer payment cycles;
- the need to adapt and localize our services for specific countries;
- the need to offer customer care in various native languages;
- reliance on third parties over which we have limited control, including international resellers, for marketing and reselling our services;
- availability of reliable broadband connectivity and wide area networks in targeted areas for expansion;
- lower levels of adoption of credit or debit card usage for internet related purchases by foreign customers and compliance with various foreign regulations related to credit or debit card processing and data privacy requirements;
- difficulties in understanding and complying with local laws, regulations, and customs in foreign jurisdictions;
- export controls and trade and economic sanctions administered by the Department of Commerce Bureau of Industry and Security and the Treasury Department’s Office of Foreign Assets Control;
- tariffs and other non-tariff barriers, such as quotas and local content rules;
- tariffs imposed by the U.S. on goods from other countries and tariffs imposed by other countries on U.S. goods, including the tariffs recently implemented and additional tariffs that have been proposed by the U.S. government on various imports from China, Canada, Mexico and the EU, and by the governments of these jurisdictions on certain U.S. goods, and any other possible tariffs that may be imposed on services such as ours, the scope and duration of which, if implemented, remain uncertain;
- compliance with various anti-bribery and anti-corruption laws such as the U.S. Foreign Corrupt Practices Act of 1977, as amended, or the FCPA;
- limited protection for intellectual property rights in some countries;
- adverse tax consequences;
- fluctuations in currency exchange rates, which could increase the price of our services outside of the U.S., increase the expenses of our international operations, including expenses related to foreign contractors, and expose us to foreign currency exchange rate risk;
- exchange control regulations, which might restrict or prohibit our conversion of other currencies into U.S. Dollars;
- restrictions on the transfer of funds;
- deterioration of political relations between the U.S. and other countries; and
-

- political or social unrest or economic instability in a specific country or region, which could have an adverse impact on our third-party software development and quality assurance operations there.

Our failure to manage any of these risks successfully could harm our future international operations and our overall business.

If significant tariffs or other restrictions are placed on our goods imported from other countries, or if the United States were to withdraw from or modify existing trade agreements or regulations, our revenue, gross margin, and results of operations may be materially harmed.

If significant tariffs or other restrictions are placed on goods imported into the United States from China or other countries, or any related counter-measures are taken by China or other countries, our revenue and results of operations may be materially harmed. For example, during the fourth quarter of fiscal 2019, we incurred expenses of approximately $0.2 million for recently imposed tariffs, which were recorded as cost of product revenue in our consolidated statements of operations. The Trump Administration recently indicated it may alter trade terms between China and the United States, which may include limiting trade with China, imposing new or increased tariffs on imports from China, or other trade restrictions. Trade restrictions, including tariffs, quotas, embargoes, safeguards, and customs restrictions, could increase the cost or reduce the supply of products available to us, or could increase the lead times of certain raw material and equipment that we may purchase from foreign vendors located in China and other countries, or may require us to modify our supply chain organization or other current business practices, any of which could harm our business, financial condition and results of operations. For example, the U.S. federal government recently passed the National Defense Authorization Act for Fiscal Year 2019, which imposes a ban on the use of certain surveillance, telecommunications, and other equipment manufactured in China, to help protect critical infrastructure and other sites deemed to be sensitive for national security purposes in the U.S. This federal government ban is scheduled to be implemented in August 2019 and may require us to find new sources of system assembly, which may result in higher costs and disruption to our business. We are dependent on international trade agreements and regulations, such as the North American Free Trade Agreement, or NAFTA, and the pending United States-Mexico-Canada Agreement, or USMC. If the United States were to withdraw from or materially modify certain international trade agreements or regulations, our business and operating results could be materially and adversely affected and our customer relationships in Canada and other countries could be harmed.

We may not be able to manage our inventory levels effectively, which may lead to shortages of inventory, excess inventory or inventory obsolescence that would force us to have inventory issues.

Our vendor-supplied on-premise appliances and end-point devices have lead times of up to several months for delivery and are built to satisfy our demand forecasts that are necessarily imprecise. It is likely that from time to time we will have either an excess or shortage of product inventory. In addition, because we rely on third-party vendors for the supply of our devices, our inventory levels are subject to the conditions regarding the timing of purchase orders and delivery dates not within our control. Excess inventory levels would subject us to the risk of inventory obsolescence, while insufficient levels of inventory may negatively affect relations with customers. For instance, our customers rely upon our ability to meet committed delivery dates, and any disruption in the supply of our services could result in loss of customers or harm to our ability to attract new customers. Retailers may elect to return any unsold inventory without any penalty, which could result in a write down for excess inventory. Any of these factors could have a material adverse effect on our business, financial condition or results of operations.

Catastrophic events or political instability could disrupt and cause harm to our business.

Our corporate headquarters, offices and one of our data center facilities are located in Northern California, a region that frequently experiences earthquakes. In addition, our third-party contract manufacturer facilities in China and our sole third-party customer service and support facility in the Philippines are located on the Pacific Rim near known earthquake fault zones that are vulnerable to damage from earthquakes, tsunamis and/or typhoons. We and our contractors are also vulnerable to other types of disasters, such as power loss, fire, floods, pandemics, cyber-attack, war, political unrest and terrorist attacks and similar events that are beyond our control. If any disasters were to occur, our ability to operate our business could be seriously impaired, and we may endure system interruptions, reputational harm, loss of intellectual property, delays in our services development, lengthy interruptions in our services, breaches of data security and loss of critical data, all of which could harm our future results of operations. In addition, we do not carry earthquake insurance and we may not have adequate insurance to cover our losses resulting from other

disasters or other similar significant business interruptions. Any significant losses not recoverable under our insurance policies could seriously impair our business and financial condition.

Changes in effective tax rates, or adverse outcomes resulting from examination of our income or other tax returns, could adversely affect our results of operations and financial condition.

Our future effective tax rates could be subject to volatility or adversely affected by a number of factors, including:

- changes in the valuation of our deferred tax assets and liabilities;
- expiration of, or lapses in, the research and development tax credit laws;
- expiration or non-utilization of net operating loss carryforwards;
- tax effects of share-based compensation;
- certain non-deductible expenses as a result of acquisitions;

- expansion into new jurisdictions;
- potential challenges to and costs related to implementation and ongoing operation of our intercompany arrangements; and
- changes in tax laws and regulations and accounting principles, or interpretations or applications thereof.

As we expand our operations outside the U.S. and Canada, certain changes to U.S. tax laws, including limitations on the ability to defer U.S. taxation on earnings outside of the U.S. until those earnings are repatriated to the U.S. could affect the tax treatment of our foreign earnings. Any changes in our effective tax rate could adversely affect our results of operations.

We may be unable to use some or all of our net operating loss carryforwards, which could materially and adversely affect our reported financial condition and results of operations.

As of January 31, 2019, we had federal and state net operating loss carryforwards, or NOLs, of $99.0 million and $71.8 million, respectively, available to offset future taxable income, which will begin to expire in 2030 if not utilized. We also have federal and research and development tax credit carryforwards that will begin to expire in 2030 and California research and development tax credit carryforwards with no expiration date. Realization of these net operating loss and research tax credit carryforwards depends on future income, and there is a risk that our existing carryforwards could expire unused and be unavailable to offset future income tax liabilities, which could materially and adversely affect our results of operations. No deferred tax assets have been recognized on our balance sheet related to these NOLs, as they are fully reserved by a valuation allowance. If we have previously had, or have in the future, one or more Section 382 “ownership changes”, or if we do not generate sufficient taxable income, we may not be able to utilize a material portion of our NOLs, even if we achieve profitability. If we are limited in our ability to use our NOLs in future years in which we have taxable income, we will pay more taxes than if we were able to fully utilize our NOLs. This could materially and adversely affect our results of operations.

Risks Related to Federal, State and International Regulation

Our services are subject to regulation and future legislative or regulatory actions could adversely affect our business and expose us to liability.

Federal Regulation. Our business is regulated by the Federal Communications Commission, or FCC. As a communications services provider, we are subject to FCC regulations relating to privacy, disability access, law enforcement access, porting of numbers, revenue reporting, Federal Universal Service Fund contributions and other regulatory assessments, E 911, and other matters. If we do not comply with FCC rules and regulations, we could be subject to FCC enforcement actions, substantial fines, loss of licenses, and possibly restrictions on our ability to operate or offer certain of our services. Any enforcement action by the FCC, which may include a public process, would hurt our reputation in the industry, possibly impair our ability to sell our services to customers and could have a materially adverse impact on our revenue.

State Regulation. We are also subject to state consumer protection laws, as well as U.S. state, municipal and local sales, use, excise, utility user and ad valorem taxes, fees or surcharges. The imposition of such regulatory obligations or the imposition of additional taxes on our services could increase our cost of doing business and limit our growth.

International Regulation. As we expand internationally, we may be subject to telecommunications, consumer protection, data privacy and other laws and regulations in the foreign countries where we offer our services. For example, we are subject to regulation in Canada by the CRTC, subject to Canadian federal privacy laws and provincial consumer protection legislation. Our international operations are potentially subject to country-specific governmental regulation and related actions that may increase our costs and prevent us from offering or providing our products and services in certain countries. Certain of our services may be used by customers located in countries where VoIP and other forms of IP communications may be illegal or require special licensing. In countries where local laws and regulations prohibit (or come to prohibit) the use of our products, users may continue to use our

products and services, which could subject us to costly penalties or governmental action adverse to our business and damaging to our brand and reputation, our international expansion efforts, or our business and operating results.

The adoption of additional 911 requirements by the FCC could increase our costs that could make our service more expensive, decrease our profit margins, or both.

The FCC is actively considering additional 911 requirements for interconnected VoIP providers, providers of enterprise telephone services, non-interconnected VoIP providers and texting providers. The outcome of the FCC's proceedings cannot be determined at this time and we may or may not be able to comply with any obligations that may be adopted. At present, we have no means to automatically identify the physical location of our customers. Changes to the FCC's VoIP E 911 rules may adversely affect our ability to deliver our service to new and existing customers in all geographic regions or to nomadic customers who move to a location where emergency calling services compliant with the FCC's mandates are unavailable. Our compliance with the FCC's VoIP E-911 order and related costs puts us at a competitive disadvantage to VoIP service providers who are either not subject to the requirements or have chosen not to comply with the FCC's mandates. We cannot guarantee emergency calling service consistent with the VoIP E 911 order will be available to all of our customers, especially those accessing our services on a mobile device or from outside of the U.S. The FCC's current E-911 requirements and changes to those requirements, including their impact on our customers due to service price increases or other factors could have a material adverse effect on our business, financial condition or operating results.

The FCC order reforming the system of payments between regulated carriers we partner with to interface with the public switched telephone network, or PSTN, could increase our costs of providing service, which could result in increased rates for service, making our offerings less competitive than others in the marketplace, or reduce our profitability.

In 2011, the FCC reformed the system under which regulated providers of telecommunications services compensate each other for various types of traffic, including VoIP traffic that terminates on the PSTN, and applied new call signaling requirements to VoIP and other service providers. The FCC's rules concerning charges for transmission of VoIP traffic could result in an increased cost to terminate the traffic, could reduce the availability of services or increase the price of services from our underlying providers, or could otherwise impact the wholesale telecommunications market in a way that adversely impacts our business. To the extent that we transmit traffic not subject to a specific intercarrier compensation arrangement and another provider were to assert that the traffic we exchange with them is subject to higher levels of compensation than what we, or the third parties terminating our traffic to the PSTN, pay today (if any), our termination costs could increase.

If we cannot comply with the FCC's rules imposing call signaling requirements on VoIP providers like us, we may be subject to fines, cease and desist orders, or other penalties.

The FCC's rules regarding the system of compensation for various types of traffic require, among other things, interconnected VoIP providers like us, who originate interstate or intrastate traffic destined for the PSTN, to transmit the telephone number associated with the calling party to the next provider in the call path. Intermediate providers must pass unaltered calling party number or charge number signaling information they receive from other providers to subsequent providers in the call path. To the extent that we pass traffic that does not have appropriate calling party number or charge number information, we could be subject to fines, cease and desist orders, or other penalties. Additionally, as a VoIP provider we rely on the FCC to design rules that do not disadvantage our service relative to those of incumbent local exchange carriers and competitive local exchange carriers. Should the FCC decide to do so, it could result in an inferior user experience for Ooma's service, which may negatively impact our business.

We may not be able to comply with FCC rules governing completion of calls to rural areas and related reporting requirements.

In April 2018, the FCC adopted new rules governing the completion of calls to rural areas and related reporting requirements. The new rules retain the existing rural call completion data recording and retention requirements on VoIP providers like us, but dropped the related reporting requirements. These new rules require us to monitor the

performance of our intermediate providers – telecom companies we use to help complete telephone calls to rural areas and take steps to prevent rural call completion problems that may be caused by our intermediate providers, such as persistent low answer or completion rates, unexplained anomalies in performance, or repeated complaints to the FCC. Under certain circumstances, if our routing choices, meaning the intermediate providers we chose to help us complete calls to rural areas, result in lower quality service, we may be held liable for the actions taken by our intermediate providers. If we cannot comply with these rules, we could be subject to investigation and enforcement action and could be exposed to substantial liability. The FCC also has increased enforcement activity related to completion of calls to rural customers, and we could be subject to substantial fines and to conduct requirements that could increase our costs if we are the subject of an enforcement proceeding and cannot demonstrate calls from our customers to rural customers are completed at a satisfactory rate.

Failure to comply with communications and telemarketing laws could result in significant fines or place significant restrictions on our business.

We rely on a variety of marketing techniques in connection with our sales efforts, including telemarketing and email marketing campaigns. We also record certain telephone calls between our customers or potential customers and our sales and service representatives for training and quality assurance purposes. These activities are subject to a variety of state and federal laws such as the Telephone Consumer Protection Act of 1991 (also known as the Federal Do-Not-Call law, or the TCPA), the Telemarketing Sales Rule, the Controlling the Assault of Non-Solicited Pornography and Marketing Act of 2003 (also known as the CAN-SPAM Act) and various U.S. state laws regarding telemarketing and telephone call recording. These laws are subject to varying interpretations by courts and governmental authorities and often require subjective interpretation, making it difficult to predict their application and therefore making our compliance efforts more challenging. We cannot be certain our efforts to comply with these laws, rules and regulations will be successful, or, if they are successful, that the cost of such compliance will not be material to our business. Changes to these or similar laws, or to their application or interpretation, or new laws, rules and regulations governing our communication and marketing activities could adversely affect our business. In the event that any of these laws, rules or regulations significantly restricts our business, we may not be able to develop adequate alternative communication and marketing strategies. Further, non-compliance with these laws, rules and regulations carries significant financial penalties and the risk of class action litigation, which would adversely affect our financial performance and significantly harm our reputation and our business.

The FCC has continued to increase regulation of interconnected VoIP services and may at any time determine certain VoIP services are telecommunications services subject to traditional common carrier regulation.

The FCC is considering, in various proceedings, issues arising from the transition from traditional copper networks to IP networks. The FCC is also considering whether interconnected VoIP services should be treated as telecommunications services, which could subject interconnected VoIP services to additional common carrier regulation. The FCC's efforts may result in additional regulation of IP network and service providers, which may negatively affect our business.

Reform of federal and state Universal Service Fund programs could increase the cost of our service to our customers, diminishing or eliminating our pricing advantage.

The FCC and a number of states are considering reform or other modifications to Universal Service Fund programs, including the manner in which companies, like us, contribute to the federal USF program, and whether non-interconnected VoIP providers, texting providers and broadband providers, among others, should contribute to the USF. If the FCC or certain states adopt new contribution mechanisms or otherwise modify contribution obligations that increase our contribution burden, we will either need to raise the amount we currently collect from our customers to cover this obligation or absorb the costs, which would reduce our profit margins. A number of states require us to contribute funds to state USF programs, while others are actively considering extending their programs to include the services we provide. We currently pass-through USF contributions and certain other fees and surcharges to our customers, which may result in our services becoming less competitive as compared to those provided by others. If our pricing advantage is diminished or eliminated, or if we are required to absorb these increased costs and not pass-through to our customers, our results of operations would be negatively impacted.

Our products must comply with industry standards, FCC regulations, state, local, country specific and international regulations, and changes may require us to modify existing products and/or services.

In addition to reliability and quality standards, the market acceptance of telephony over broadband IP networks is dependent upon the adoption of industry standards so that products from multiple manufacturers are able to communicate with each other. Our unique hybrid SaaS connectivity platform relies on communication standards such as SIP, SRTP and network standards such as TCP/IP and UDP to interoperate with other vendors' equipment. There is

currently a lack of agreement among industry leaders about which standard should be used for a particular application and about the definition of the standards themselves. We also must comply with certain rules and regulations of the FCC regarding electromagnetic radiation and safety standards established by Underwriters Laboratories, as well as similar regulations and standards applicable in other countries. As standards evolve, we may be required to modify our existing products or develop and support new versions of our products. We must comply with certain federal, state and local requirements regarding how we interact with our customers, including marketing practices, consumer protection, privacy, and billing issues, the provision of 9-1-1 emergency service and the quality of service we provide to our customers. The failure of our products and services to comply, or delays in compliance, with various existing and evolving standards could delay or interrupt volume production of our VoIP telephony products, subject us to fines or other imposed penalties, or harm the perception and adoption rates of our service, any of which would have a material adverse effect on our business, financial condition or operating results.

We process, store, and use personal information and other data, which subjects us and our customers to a variety of evolving industry standards, contractual obligations and other legal rules related to privacy, which may increase our costs, decrease adoption and use of our products and services, and expose us to liability.

There are numerous U.S. federal, state and local, and foreign laws and regulations, as well as contractual obligations and industry standards, that provide for certain obligations and restrictions with respect to data privacy and security, and the collection, storage, retention, protection, use, processing, transmission, sharing, disclosure, and protection of personal information and other customer data. The scope of these obligations and restrictions is changing, subject to differing interpretations, and may be inconsistent among countries or conflict with other rules, and their status remains uncertain.

For example, in the U.S. and in other jurisdictions, a variety of regulations are currently being proposed that would increase restrictions on online service providers in the field of data privacy and security, and we believe that the adoption of such increasingly restrictive regulation is likely. In Canada, penalties for non-compliance with certain Canadian anti-spam legislation are considerable, including administrative monetary penalties of up to $10 million and a private right of action. Within the EU, strict laws already apply in connection with the collection, storage, retention, use, processing, transmission, sharing, disclosure and protection of personal information, and other customer data. Data protection regulators within the EU and other jurisdictions have the power to fine non-compliant organizations significant amounts and seek injunctive relief, including the cessation of certain data processing activities.

The EU's General Data Protection Regulation, or GDPR, became effective in May 2018 and comprehensively regulates the processing of personal data of any individual residing in the EU. The GDPR provides for significant penalties in the event of violations, including fines of up to 4% of the violating company's worldwide revenue. We have taken administrative, contractual and other measures designed to achieve compliance with the GDPR, but we cannot guarantee these measures are sufficient.

Obligations and restrictions imposed by current and future applicable laws, regulations, contracts and industry standards may increase the cost of our operations, affect our ability to provide all the current features of our small business, residential and mobile products and services and our customers' ability to use our products and services, and could require us to modify the features and functionality of our products and services. Such obligations and restrictions may limit our ability to collect, store, process, use, transmit and share data, and to allow our customers to collect, store, retain, protect, use, process, transmit, share and disclose data with others through our products and services. Compliance with such obligations and restrictions could increase the cost of our operations. Failure to comply with obligations and restrictions related to data privacy and security could subject us to lawsuits, fines, criminal penalties, statutory damages, consent decrees, injunctions, adverse publicity and other losses that could harm our business.

Our customers can use our services to store contact and other personal or identifying information, and to process, transmit, receive, store and retrieve a variety of communications and messages, including, for our Ooma Business customers, information about their own customers and other contacts. In addition, customers may use our services to transmit and store protected health information, or PHI, that is protected under the Health Insurance Portability and Accountability Act, or HIPAA. Noncompliance with laws and regulations relating to privacy such as HIPAA, as amended, and the HIPAA regulations, may lead to significant fines, penalties or liabilities. Our actual compliance, our customers' perception of our compliance, costs of compliance with such regulations and customer concerns regarding their own compliance obligations (whether factual or in error) may limit the use and adoption of our service and reduce overall demand. Furthermore, privacy concerns, including the inability or impracticality of providing advance notice to customers of privacy issues related to the use of our services, may cause our customers' customers to resist providing the personal data necessary to allow our customers to use our services effectively. Even the perception of privacy concerns, whether or not valid, may inhibit market adoption of our service in certain industries.

In addition to government activity, privacy advocacy groups and industry groups have adopted and are considering the adoption of various self-regulatory standards and codes of conduct that may place additional burdens on us and our customers, which may further reduce demand for our services and harm our business.

While we try to comply with all applicable data protection laws, regulations, standards, and codes of conduct, as well as our own posted privacy policies and contractual commitments to the extent possible, any failure by us to protect our users' privacy and data, including as a result of our systems being compromised by hacking or other malicious or surreptitious activity, could result in a loss of user confidence in our services and ultimately in a loss of users, which could materially and adversely affect our business. Our customers may also accidentally disclose their passwords, store them on a mobile device that is lost or stolen, or otherwise fall prey to attacks outside our system, creating the perception that our systems are not secure against third-party access. If our third-party contractors or vendors violate applicable laws or our policies, such violations may also put our customers' information at risk and could in turn have a material and adverse effect on our business.

Use or delivery of our services may become subject to new or increased regulatory requirements, taxes or fees.

The increasing growth and popularity of internet voice communications heighten the risk that governments will regulate or impose new or increased fees or taxes on internet voice communications services. To the extent the use of our services continues to grow, regulators may be more likely to seek to regulate or impose new or additional taxes, surcharges or fees on our services. Similarly, advances in technology, such as improvements in locating the geographic origin of internet voice communications, could cause our services to become subject to additional regulations, fees or taxes, or could require us to invest in or develop new technologies, which may be costly. In addition, as we continue to expand our user base and offer more services, we may become subject to new regulations, taxes, surcharges or fees. Increased regulatory requirements, taxes, surcharges or fees on internet voice communications services, which could be assessed by governments retroactively or prospectively, would substantially increase our costs, and, as a result, our business would suffer. In addition, the tax status of our services could subject us to conflicting taxation requirements and complexity with regard to the collection and remittance of applicable taxes. Any such additional taxes could harm our results of operations.

We are subject to anti-corruption and anti-money laundering laws with respect to our operations and non-compliance with such laws can subject us to criminal and/or civil liability and harm our business.

We are subject to the FCPA, the U.S. domestic bribery statute contained in 18 U.S.C. § 201, the U.S. Travel Act, the USA PATRIOT Act, and possibly other anti-bribery and anti money laundering laws in countries in which we conduct activities. Anti-corruption laws are interpreted broadly and prohibit companies and their employees and third-party intermediaries from authorizing, offering, or providing, directly or indirectly, improper payments or benefits to recipients in the public or private sector. We use third-party representatives for product testing, customs, export, and import matters outside of the U.S. As we increase our international sales and business, we may engage with business partners and third party intermediaries to sell our products and services abroad and to obtain necessary permits, licenses, and other regulatory approvals. We or our third-party intermediaries may have direct or indirect interactions with officials and employees of government agencies or state-owned or affiliated entities. We can be held liable for the corrupt or other illegal activities of these third-party intermediaries, our employees, representatives, contractors, partners, and agents, even if we do not explicitly authorize such activities.

Noncompliance with anti-corruption and anti-money laundering laws could subject us to whistleblower complaints, investigations, sanctions, settlements, prosecution, other enforcement actions, disgorgement of profits, significant fines, damages, other civil and criminal penalties or injunctions, suspension and/or debarment from contracting with certain persons, the loss of export privileges, reputational harm, adverse media coverage, and other collateral consequences. If any subpoenas or investigations are launched, or governmental or other sanctions are imposed, or if we do not prevail in any possible civil or criminal litigation, our business, results of operations and financial condition could be materially harmed. In addition, responding to any action will likely result in a materially significant diversion of management's attention and resources, significant defense costs and other professional fees. Enforcement actions and sanctions could further harm our business, results of operations, and financial condition.

We are subject to governmental export and import controls, economic embargoes and trade sanctions that could impair our ability to expand our business to, and compete in, international markets and could subject us to liability if we are not in compliance with applicable laws.

Our products and services are subject to export and import laws and regulations, including the U.S. Export Administration Regulations, U.S. Customs regulations, and various economic and trade sanctions regulations administered by the U.S. Treasury Department's Office of Foreign Assets Controls. U.S. export control laws and economic sanctions programs generally prohibit the export of certain products and services to countries, governments and persons subject to U.S. economic embargoes and trade sanctions unless a license, approval, or other authorization is obtained from the U.S. Government. Obtaining the necessary authorizations and licenses for a particular sale may be time-consuming, is not guaranteed and may result in the delay or loss of sales opportunities. If we fail to comply

with these laws and regulations, we and certain of our employees could be subject to substantial civil or criminal penalties, including the possible loss of export or import privileges, government investigations, reputational harm, fines which may be imposed on us and responsible employees or managers, and, in extreme cases, the incarceration of responsible employees or managers.

In addition, any changes in our products or services, or changes in applicable export, import, embargo and trade sanctions regulations, may create delays in the introduction and sale of our products and services in international markets or, in some cases, prevent the export or import of our products and services to certain countries, governments, or persons altogether. Any change in export, import, embargo, or trade sanctions regulations, shift in the enforcement or scope of existing regulations, or change in the countries, governments, persons or technologies targeted by such regulations, could also result in decreased use of our products and services, or in our decreased ability to export or sell our products and services to existing or potential customers with international operations. Any decreased use of our products and services or limitation on our ability to export or sell our products and services would likely adversely affect our business.

We may be subject to liabilities on past services for taxes, surcharges and fees.

We collect and remit state or municipal sales, use, excise, utility user and ad valorem taxes, fees, or surcharges on the charges to our customers for our services or goods in only those jurisdictions where we believe we have a legal obligation to do so or for business reasons to reduce risk. In addition, we have historically substantially complied with the collection of certain California sales/use taxes and financial contributions to the California 9-1-1 system (the Emergency Telephone Users Surcharge) and federal USF. With limited exception, we believe we are generally not subject to taxes, fees, or surcharges imposed by other state and municipal jurisdictions or that such taxes, fees, or surcharges do not apply to our service. There is uncertainty as to what constitutes sufficient "in state presence" for a state or local municipality to levy taxes, fees and surcharges for sales made over the internet. Taxing authorities have in the past, and likely will in the future, challenge our position on the lack of enforceability of such taxes, fees and surcharges where we have no relevant presence, and audit our business and operations with respect to sales, use, telecommunications and other taxes, which could result in increased tax liabilities for us or our customers, which could materially and adversely affect our results of operations and our relationships with our customers. We have seen an increase in the number and frequency of such state and local tax authority challenges, audits and related demands, which we are defending against vigorously. A complaint was filed by the County of Berks, Pennsylvania on January 21, 2016 alleging that we are subject to their taxes, fees and surcharges and have failed to remit the required 911 charges. In addition, on November 28, 2016, Ooma filed a complaint against the Oregon Department of Revenue contesting a tax assessment against the Company for the Oregon Emergency Communications Tax, to which the Department of Revenue alleges we are subject. See Note 11: Commitments and Contingencies of the accompanying notes of our consolidated financial statements.

Finally, the application of other indirect taxes (such as sales and use tax, value added tax, or VAT, goods and services tax, business tax, and gross receipt tax) to e-commerce businesses, such as ours, is a complex and evolving area. In 2016, the U.S. federal government enacted legislation indefinitely extending the moratorium on states and other local authorities imposing access or discriminatory taxes. This moratorium does not prohibit federal, state, or local authorities from collecting taxes on our income or from collecting taxes due under existing tax rules. The application of existing, new, or future laws, whether in the U.S. or internationally, could have adverse effects on our business, prospects, and results of operations. There have been, and will continue to be, substantial ongoing costs associated with complying with the various indirect tax requirements in the numerous markets in which we conduct or will conduct business.

Risks Related to Being a Public Company

If we fail to develop and maintain an effective system of internal control over financial reporting, we may not be able to accurately report our financial results in a timely manner, which may adversely affect investor confidence in our company and, as a result, the value of our common stock.

As a public company, we are subject to the reporting requirements of the Exchange Act, the Sarbanes-Oxley Act of 2002, or the Sarbanes-Oxley Act, and the rules and regulations of the applicable listing standards of the New York Stock Exchange. Compliance with these rules and regulations has increased and will continue to increase our legal and financial compliance costs, and has made and will continue to make some activities more difficult, time-consuming or costly, and increase demand on our systems and resources, particularly after we are no longer an "emerging growth company."

The Sarbanes-Oxley Act requires, among other things, that we make a formal assessment and provide an annual management report on the effectiveness of our internal control over financial reporting. In order to maintain and, if required, improve our disclosure controls and procedures and internal control over financial reporting to meet this standard, significant resources and management oversight may be required. As a result, management's attention may be diverted from other business concerns, which could harm our business and results of operations.

Our control environment may not be sufficient to remediate or prevent future material weaknesses or significant deficiencies from occurring. A control system, no matter how well designed and operated, can provide only reasonable assurance that the control system's objectives will be met. Due to the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that misstatements due to error or fraud will not occur or that all control issues and all instances of fraud will be detected. If we are unable to conclude that our internal control over financial reporting is effective, or if we are required to restate our financial statements as a result of ineffective internal control over financial reporting, we could lose investor confidence in the accuracy and completeness of our financial reports, which would cause the price of our common stock to decline.

Our independent registered public accounting firm is not required to formally attest to the effectiveness of our internal control over financial reporting pursuant to Section 404 of the Sarbanes-Oxley Act until the later of the year following our first annual report required to be filed with SEC, or the date we are no longer an "emerging growth company," as defined by the Jumpstart Our Business Startups Act ("JOBS Act"); see below. At such time, our independent registered public accounting firm may issue a report that is adverse in the event it is not satisfied with the level at which our controls are documented, designed or operating. Our remediation efforts may not enable us to avoid a material weakness in the future.

Our actual operating results may differ significantly from our guidance.

From time to time, we plan to release earnings guidance in our quarterly earnings conference calls, quarterly earnings releases, or otherwise, regarding our future performance that represents our management's estimates as of the date of release. This guidance, which will include forward looking statements, will be based on projections prepared by our management. Projections are based upon a number of assumptions and estimates that, while presented with numerical specificity, are inherently subject to significant business, economic and competitive uncertainties and contingencies, many of which are beyond our control and are based upon specific assumptions with respect to future business decisions, some of which will change. We intend to state possible outcomes as high and low ranges which are intended to provide a sensitivity analysis as variables are changed but are not intended to imply that actual results could not fall outside of the suggested ranges. The principal reason that we release guidance is to provide a basis for our management to discuss our business outlook with analysts and investors. Accordingly, we do not accept any responsibility for any projections or reports published by any such third parties.

Guidance is necessarily speculative in nature, and it can be expected that some or all of the assumptions underlying the guidance furnished by us will not materialize or will vary significantly from actual results. Accordingly, our guidance is only an estimate of what management believes is realizable as of the date of release. Actual results may vary from our guidance and the variations may be material. In light of the foregoing, investors are urged not to rely upon our guidance in making an investment decision regarding our common stock.

Any failure to successfully implement our operating strategy or the occurrence of any of the events or circumstances set forth in this "Risk Factors" section in this report could result in the actual operating results being different from our guidance, and the differences may be adverse and material.

We are an "emerging growth company," and we cannot be certain if the reduced disclosure requirements applicable to emerging growth companies will make our common stock less attractive to investors.

We are an "emerging growth company," as defined in the JOBS Act, and are taking advantage of certain exemptions from various reporting requirements that are applicable to public companies that are not "emerging growth companies," including, but not limited to, not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act, reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved. We cannot predict if investors will find our common stock less attractive because we may rely on these exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock, and our stock price may be more volatile and may decline.

We will cease to be an "emerging growth company" upon the earliest of (i) January 31, 2021, (ii) the last day of the first fiscal year in which our annual gross revenue exceeds $1.0 billion, (iii) the date on which we have, during the previous three-year period, issued more than $1.0 billion in non-convertible debt securities or (iv) as of the end of any fiscal year in which the market value of our common stock held by non-affiliates exceeded $700 million as of the end of the second quarter of that fiscal year.

Risks Related to Owning Our Common Stock

Sales of a substantial number of shares of our common stock in the public market, or the perception these sales might occur, could cause our stock price to decline.

Sales of a substantial number of shares of our common stock in the public market, or the perception these sales might occur, could cause the market price of our common stock to decline and could impair our ability to raise capital through the sale of additional equity securities. In addition, we have registered shares of common stock which we may

issue under our employee stock plans and they may be sold freely in the public market upon issuance. We may issue our shares of common stock or securities convertible into our common stock from time to time in connection with a financing, acquisition, and investments or otherwise. Any such issuance could result in substantial dilution to our existing stockholders and cause the trading price of our common stock to decline.

If securities analysts do not publish or cease publishing research or reports about our business or if they publish negative evaluations of our stock, the price of our stock could decline.

We expect that the trading price for our common stock will be affected by any research or reports that industry or financial analysts publish about us or our business. If one or more of the analysts who elect to cover us downgrade their evaluations of our stock or provide more favorable relative recommendations about our competitors, the price of our stock could decline. If one or more of these analysts cease coverage of our company, our stock may lose visibility in the market, which in turn could cause its price to decline.

We have never paid cash dividends and do not anticipate paying any cash dividends on our common stock.

We do not anticipate paying any cash dividends on our common stock in the foreseeable future. If we do not pay cash dividends, you would receive a return on your investment in our common stock only if the market price of our common stock increases before you sell your shares.

Our charter documents and Delaware law could prevent a takeover that stockholders consider favorable and could also reduce the market price of our stock.

Our Amended and Restated Certificate of Incorporation and our Amended and Restated Bylaws contain provisions that could delay or prevent a change in control of our company. These provisions could also make it more difficult for stockholders to elect directors and take other corporate actions. These provisions include:

- providing for a classified board of directors with staggered, three-year terms;
- authorizing the issuance of "blank check" preferred stock that our board of directors could issue to increase the number of outstanding shares to discourage a takeover attempt;
- prohibiting cumulative voting in the election of directors;
- providing that vacancies on our board of directors may be filled only by a majority of directors then in office, even though less than a quorum;
- prohibiting stockholder action by written consent;
- limiting the persons who may call special meetings of stockholders; and
- requiring advance notification of stockholder nominations and proposals.

These provisions may frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace members of our board of directors, which is responsible for appointing the members of our management. In addition, the provisions of Section 203 of the Delaware General Corporate Law govern us. These provisions may prohibit large stockholders, in particular those owning 15% or more of our outstanding voting stock, from merging or combining with us for a certain period of time without the consent of our board of directors. These and other provisions in our amended and restated certificate of incorporation and our bylaws and under Delaware law could discourage potential takeover attempts, reduce the price investors might be willing to pay in the future for shares of our common stock and result in the market price of our common stock being lower than it would be without these provisions.

Our amended and restated certificate of incorporation provides that the Court of Chancery of the State of Delaware will be the exclusive forum for substantially all disputes between us and our stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers or other employees.

Our amended and restated certificate of incorporation provides that the Court of Chancery of the State of Delaware is the sole and exclusive forum for any derivative action or proceeding brought on our behalf, any action asserting a breach of fiduciary duty owed by any of our directors, officers or other employees to us or our stockholders, any action asserting a claim against us arising pursuant to any provisions of the General Corporation Law of the State of Delaware, our amended and restated certificate of incorporation or our amended and restated bylaws, or any action asserting a claim against us that is governed by the internal affairs doctrine. The choice of forum provision may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, officers or other employees, which may discourage such lawsuits against us and our directors, officers and other employees. If a court were to find the choice of forum provision contained in our amended and restated certificate of incorporation to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving such action in other jurisdictions.

Our stock price has been and will likely continue to be volatile and could fluctuate or decline, resulting in a substantial loss of your investment.

Our stock price may fluctuate in response to a number of events and factors, such as quarterly operating results; changes in our financial projections provided to the public or our failure to meet those projections; our operating and financial performance and prospects and the performance of other similar companies; the public's reaction to our press releases, other public announcements and filings with the SEC; significant transactions, or new features, products or services by us or our competitors; changes in financial estimates and recommendations by securities analysts; failure of securities analysts to cover or track our common stock; media coverage of our business and financial performance; trends in our industry; any significant change in our management; sales of common stock by us, our investors or members of our management team; and changes in general market, economic and political conditions in the U.S. and global economies or financial markets.

The market price of our common stock could be subject to wide fluctuations in response to, among other things, the factors described in this "Risk Factors" section or otherwise, and other factors beyond our control, such as fluctuations in the valuations of companies perceived by investors to be comparable to us. In addition, the stock market in general, and the market prices for companies in our industry, have experienced volatility that often has been unrelated to operating performance. These broad market and industry fluctuations may adversely affect the price of our stock, regardless of our operating performance. In the past, many companies that have experienced volatility in their stock price have become subject to securities class action litigation. We have been the target of this type of litigation and may continue to be a target in the future. Securities litigation against us could result in substantial costs and divert our management's attention from other business concerns, which could harm our business.

If we fail to meet expectations related to future growth, profitability, or other market expectations, our stock price may decline significantly, which could have a material adverse impact on investor confidence and employee retention.

We are currently subject to securities class action litigation in connection with our initial public offering and may be subject to similar litigation in the future. If the outcome of this litigation is unfavorable, it could have a material adverse effect on our financial condition, results of operations and cash flows.

The Company, its directors, and certain officers have been named as defendants in a consolidated securities class actions ("the Securities Litigation"). See Note 11: Commitments and Contingencies of the notes of our consolidated financial statements for a detailed description of the Securities Litigation and the allegations currently made therein. The Company is vigorously defending itself against the allegations in the Securities Litigation. However, as with all litigation, the Company cannot predict the outcome of the proceedings or estimate the losses that it may incur in connection with the Securities Litigation. The Company will, however, incur certain costs and fees associated with its defense, including costs related to its obligation to indemnify certain parties named in the action. While the Company carries insurance that may offset some of the costs associated with the Securities Litigation, the Company may incur substantial costs, expenses and burdens not covered by insurance. In addition, the pendency of the Securities Litigation may cause burdens and distractions to the Company's management. Any adverse judgments, settlements, or consequences of the Securities Litigation could have a material, adverse effect on the Company's business and financial condition.

In the future, especially following periods of volatility in the market price of our shares, other purported class action or derivative complaints may be filed against us. The outcome of the pending and potential future litigation is difficult to predict and quantify and the defense of such claims or actions can be costly. In addition to diverting financial and management resources and general business disruption, we may suffer from adverse publicity that could harm our brand or reputation, regardless of whether the allegations are valid or whether we are ultimately held liable. A judgment or settlement that is not covered by or is significantly in excess of our insurance coverage for any claims, or our obligations to indemnify the underwriters and the individual defendants, could materially and adversely affect our financial condition, results of operations and cash flows.

ITEM 1B. Unresolved Staff Comments

None.

ITEM 2. Properties

Our corporate headquarters are located in Sunnyvale, California and consists of lease space aggregating approximately 33,400 square feet. We lease additional office and warehouse space in the San Francisco Bay Area for various product development, operational and customer support purposes. We also lease offices in several other locations throughout the U.S. as well as Vancouver, British Columbia.

In addition, we lease space from third-party data center hosting facilities under co-location agreements in Northern California, Texas and Virginia that support our cloud infrastructure.

We believe our existing facilities are adequate to meet our current requirements. We believe that we will be able to obtain additional space at other locations at commercially reasonable terms to support our continuing expansion.

ITEM 3. Legal Proceedings

For a discussion of legal proceedings, see Note 11: Commitments and Contingencies – Legal Proceedings in the notes to our consolidated financial statements included in Part II, Item 8, "Financial Statements and Supplementary Data" of this Form 10-K, which information is incorporated herein by reference.

ITEM 4. Mine Safety Disclosures

Not applicable.

PART II

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

Market Information for Common Stock. Our common stock has been trading on the NYSE under the symbol "OOMA" since July 17, 2015.

Holders of Record. As of January 31, 2019, there were approximately 85 holders of record of our common stock. Because many of our shares of common stock are held by brokers and other institutions on behalf of stockholders, we are unable to estimate the total number of stockholders represented by these record holders.

Dividend Policy. We have not declared or paid, and do not anticipate declaring or paying in the foreseeable future, any cash dividends on our capital stock.

Stock Price Performance Graph. The following graph compares the cumulative total return on our common stock with that of the NASDAQ Telecommunications Index and the NYSE. The period shown commences on July 17, 2015, our initial public offering date, and ends on January 31, 2019, the end of our last fiscal year. The graph assumes $100 was invested at the close of market on July 17, 2015 in our common stock, the NASDAQ Telecommunications Index and the NYSE. The stock price performance on the following graph is not intended to forecast or be indicative of future stock price performance of our common stock.

This performance graph shall not be deemed "filed" for purposes of Section 18 of the Exchange Act, or incorporated by reference into any filing of Ooma, Inc. under the Securities Act of 1933, as amended, or the Securities Act, except as shall be expressly set forth by specific reference in such filing. The stock price performance on this performance graph is not necessarily indicative of future stock price performance.

Sales of Unregistered Securities. In accordance with the terms of a share purchase agreement, between us and Voxter Communications, on March 12, 2018, we issued 35,513 shares of our common stock to the former shareholders of Voxter Communications for an aggregate offering price of $0.4 million. Such shares were issued in reliance on the exemption from registration under Regulation S promulgated under the Securities Act of 1933, as amended (Securities Act) as all shares were issued in offshore transactions and no directed selling efforts were made in the United States by us as the issuer, a distributor, or any affiliates or other person acting on our behalf. All such shares were issued with a restrictive legend and may only be resold pursuant the resale restrictions set forth in Regulation S and/or Rule 144 under the Securities Act.

Use of Proceeds. Not applicable.

ITEM 6. Selected Consolidated Financial Data

The information set forth below for the five years ended January 31, 2019 is not necessarily indicative of results of future operations, and should be read in conjunction with MD&A and the consolidated financial statements, related notes and other financial information included elsewhere in this Form 10-K (in thousands, except share and per share data):

Consolidated Statement of Operations Data:

	Fiscal Year Ended January 31,				
	2019	2018	2017	2016	2015
Revenue	$129,231	$114,490	$104,524	$88,775	$72,201
Gross margin	$76,491	$68,092	$59,329	$46,910	$35,477
Net loss	$(14,572)	$(13,121)	$(12,949)	$(14,052)	$(6,410)
Basic and diluted net loss per share	$(0.74)	$(0.71)	$(0.74)	$(1.38)	$(2.81)
Weighted-average common shares outstanding	19,799,781	18,570,128	17,490,448	10,173,095	2,284,241

Consolidated Balance Sheet Data:

	As of January 31,				
	2019	2018	2017	2016	2015
Cash, cash equivalents and short-term investments	$42,623	$51,790	$53,201	$55,404	$9,133
Working capital (deficit)	$17,191	$29,338	$34,299	$35,891	$(5,863)
Total assets	$78,388	$73,431	$73,338	$76,536	$31,277
Debt and capital lease obligations	$—	$—	$—	$632	$11,960
Deferred revenue, current and non-current	$15,750	$15,984	$16,030	$15,072	$14,383
Total liabilities	$45,341	$36,363	$33,518	$33,646	$42,785
Total stockholders' equity (deficit)	$33,047	$37,068	$39,820	$42,890	$(45,145)

On February 1, 2018, we adopted Topic 606, Revenue from Contracts with Customers using the modified retrospective method, which resulted in timing and presentation changes affecting our consolidated balance sheet and statement of operations. Our financial results for fiscal 2019 are presented in accordance with the provisions under Topic 606. Comparative prior period amounts have not been adjusted and continue to be reported under the historic accounting standards in effect for the periods presented. (See Note 2: Significant Accounting Policies in the notes to the consolidated financial statements.)

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

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our consolidated financial statements and the related notes to those statements included elsewhere in this Form 10-K. In addition to historical financial information, the following discussion and analysis contains forward-looking statements that involve risks, uncertainties and assumptions. Our actual results could differ materially from those anticipated in these forward-looking statements as a result of many factors, including those discussed under "Risk Factors" and elsewhere in this Form 10-K. The last day of our fiscal year is January 31, and we refer to our fiscal year ended January 31, 2019 as fiscal 2019, our fiscal year ended January 31, 2018 as fiscal 2018, and our fiscal year ended January 31, 2017 as fiscal 2017. All other references to years are references to calendar years.

Executive Overview

Ooma creates powerful connected experiences for businesses and consumers. Our smart cloud-based SaaS platform serves as a communications hub, which offers cloud-based communications solutions, smart security and other connected services. Our business and residential solutions deliver our proprietary PureVoice high-definition voice quality, advanced functionality and integration with mobile devices, at competitive pricing and value. Our platform helps create smart workplaces and homes by providing communications, monitoring, security, automation, productivity and networking infrastructure applications.

We drive the adoption of our platform by providing communications solutions to the large and growing markets for business, residential and mobile users, and then accelerate growth by offering new and innovative connected services to our user base. Our customers adopt our platform by making a one-time purchase of one of our on-premise appliances, connecting the appliance to the internet, and activating services, for which they primarily pay on a monthly basis. We believe we have achieved high levels of customer retention and loyalty by delivering exceptional quality and customer satisfaction.

We generate subscription and services revenue by selling subscriptions and other services for our communications services, as well as other connected services. We generate our product and other revenue from the sale of our on-premise appliances and our end-point devices, as well as from porting fees to enable customers to transfer their existing phone numbers to the Ooma service. We primarily offer our solutions in the U.S. and Canadian markets.

On February 1, 2018, we adopted Topic 606, Revenue from Contracts with Customers using the modified retrospective method, which resulted in timing and presentation changes affecting our consolidated balance sheet and statement of operations. Product revenue for sales made through our channel partners is recognized when we deliver product to our partners (sell-in basis) rather than deferring recognition until resale by the partners to the end customers (sell-through basis). We also capitalize a significant portion of our sales commission costs as an incremental cost of obtaining a customer contract and amortize them to sales and marketing expense over an expected period of benefit of five years. In prior years, all sales commissions were expensed as incurred. Our financial results for fiscal 2019 are presented in accordance with the provisions under Topic 606. Comparative prior period amounts have not been adjusted and continue to be reported under the historic accounting standards in effect for the periods presented. (See Note 2: Significant Accounting Policies in the notes to the consolidated financial statements.)

In March 2018, we acquired Voxter, a provider of customizable UCaaS offerings for mid-market and enterprise businesses for upfront cash consideration of $2.4 million, net of cash acquired of $0.1 million. (See Note 12: Acquisitions and Divestitures in the notes to the consolidated financial statements). We believe Voxter's UCaaS offerings, which we refer to as Ooma Enterprise, will complement our Ooma Office solution and allow us to meet the needs of larger organizations. Although Ooma Enterprise was not material to our consolidated financial statements for fiscal 2019, we expect it to be a strategic growth initiative for our business long-term.

Beginning with fiscal 2019, we refer to Ooma Office and Ooma Enterprise collectively as Ooma Business. Ooma Residential includes Ooma Telo basic and premier services as well as our Smart Security solutions. Beginning in fiscal 2018, we modified our key business metrics to focus on data related to our core business which is Ooma Residential and Ooma Business. Accordingly, our key business metrics below for core users, annualized exit recurring revenue and net dollar subscription retention rate reflect this change and exclude Business Promoter users and revenue for all periods presented.

See Item 1. Business above for additional information regarding our business, products and services, competitive market and regulatory matters.

Fiscal 2019 Highlights

- Total revenue was $129.2 million, up 13% year-over-year, reflecting a 5% increase in core users, primarily driven by Ooma Business. We have grown our core users 14% from approximately 858,000 as of January 31, 2017 to approximately 976,000 as of January 31, 2019.
- Subscription and services revenue has increased as a percentage of our total revenue over the last three years, from approximately 87% in fiscal 2017 to 90% in fiscal 2019. We expect subscription and services revenue to continue to increase for the foreseeable future.
- Subscription and services revenue from Ooma Business and Ooma Residential grew 51% and 8% year-over-year, respectively.
- Total gross margin was 59%, flat from 59% in fiscal 2018 and up from 57% in fiscal 2017, driven by the higher growth of our subscription and services revenue as compared to product and other revenue.
- Net loss was $14.6 million, compared to $13.1 million in fiscal 2018 and $12.9 million in fiscal 2017, reflecting continued investments in research and development, brand marketing and sales channels.
- Adjusted EBITDA was ($1.9) million, compared to ($0.2) million in fiscal 2018 and ($1.4) million in fiscal 2017.
- Cash used in operations was $3.9 million, compared to cash provided from operations of $3.2 million in fiscal 2018 and $0.4 million in fiscal 2017. Cash usage reflects our investments in operating expenses to execute on our growth initiatives.
- As of January 31, 2019, we had total cash, cash equivalents and short-term investments of $42.6 million.

Key Factors Affecting Our Performance

Our historical financial performance and key business metrics have been, and we expect that our financial performance and key business metrics in the future will be, primarily driven by the following factors.

Core user growth. Our core user growth is a key indicator of our market penetration, the growth of our business and our anticipated future subscription and services revenue, especially Ooma Business.

Low core user churn. We believe that maintaining our current low core user churn is an important factor in our ability to continue to improve our financial performance and is a distinguishing advantage over many of our competitors. We focus on providing high-quality services and support to our users so they are motivated to remain with us. Our core user churn rate is higher for Ooma Business customers than Ooma Residential customers, which is driven in part by the failure rate of small businesses. Accordingly, we expect that our overall core user churn rate will increase if sales of our business products increase relative to sales of residential products.

Growth in additional services. We believe that there is significant opportunity for us to increase the additional subscription and services that our customers purchase from us in both the business and residential markets. Customers who purchase additional subscription and services from us generate more value to Ooma over the life of our customer relationship. In order to drive adoption of additional services, we will need to continue to enhance our existing solutions and develop new connected services. For example, we are investing to develop our comprehensive smart security solution and continue to invest in Ooma Business to launch additional features.

Investing in long-term revenue growth. We believe that our total addressable market opportunity is large and we intend to continue investing in sales and marketing to grow our user base. However, we expect the markets in which we conduct our business will remain highly competitive. We recently entered the home security market and face significant competition from incumbent providers promoting their own offerings. We also expect to continue investing in research and development to enhance our platform and develop additional connected services. We may evaluate additional possible acquisitions of businesses, products and technologies that are complementary to our business.

Key Business Metrics

We review the key metrics below to evaluate our business, measure our performance, identify trends affecting our business, formulate financial projections and make strategic decisions. Key business metrics exclude Business Promoter data for all periods presented because it is not part of our core cloud communications business. We believe that this change enables us to better evaluate the performance of our core cloud communications business in a given period compared to those in prior and future periods.

The following table sets forth our key metrics for each of the periods indicated (in thousands, except percentages):

	As of January 31,		
	2019	2018	2017
Core users	976	929	858
Annualized exit recurring revenue (AERR)	$119,102	$102,992	$85,247
Net dollar subscription retention rate	99%	101%	96%
Adjusted EBITDA	$(1,859)	$(217)	$(1,414)

Core Users increased 5% year-over-year, which was primarily driven by growth in business users. We believe that the number of our core users is an indicator of our market penetration, the growth of our business and our anticipated future subscription and services revenue. We define our core users as the number of active residential user accounts and office user extensions. We believe that the relationship that we establish with our core users positions us to sell additional premium communications services and other new connected services to them.

Annualized Exit Recurring Revenue increased year-over-year due to an increase in the average revenue per core user, which was largely driven by the increase in our total core user base. We believe that AERR is an indicator of recurring subscription and services revenue for near-term future periods. We estimate our AERR by dividing our recurring quarterly subscription revenue (excluding Talkatone revenue) by the average number of core users each quarter, and annualize by multiplying by four. We then multiply that result by the number of core users at the end of the period to calculate AERR.

Net Dollar Subscription Retention Rate was 99% for fiscal 2019, driven by growth in average revenue per user and net retention rate. This rate declined by 2% year-over-year due to minor changes in retention rate and lower growth in average revenue per user, primarily for residential customers. We believe that our net dollar subscription retention rate provides insight into our ability to retain and grow our subscription and services revenue, and is an indicator of the long-term value of our customer relationships and the stability of our revenue base. It measures the percentage year-over-year change in our recurring subscription revenue per core user (excluding Talkatone revenue), which is then adjusted by factoring in the percentage of our core users we have retained during the same period. Our net dollar subscription retention rate is affected by changes in average amounts that our core users pay to us, fluctuations in the number of our core users, and our core user churn rate.

We calculate our estimated net dollar subscription retention rate for our core users by multiplying:

(i) our year-over-year percentage change in annual recurring revenue per core user, which is calculated by:

determining the annual recurring revenue per core user by dividing annual recurring revenue for the period ended by the number of core users at the end of that particular period; and

calculating the year-over-year percentage change in annual recurring revenue per core user by dividing the current period recurring revenue per core user by the annual recurring revenue per core user for the same period in the prior year.

by:

(ii) our core user annual retention rate, which is calculated by:

determining our core user churn, by identifying the number of paying core users who terminate service during a month, excluding infant churn, which we define as office extensions and home users who terminate service prior to the end of the second full calendar month after their activation date;

- calculating our monthly churn rate by dividing our churn in a month by the number of core users at the beginning of that month; and
- calculating our annual retention rate as one minus the sum of our monthly churn rates for the preceding 12-month period.

Adjusted EBITDA

We use Adjusted EBITDA to manage our business, evaluate our performance and make planning decisions. We consider this measure to be a useful measure of our operating performance, because it contains adjustments for unusual events or factors that do not directly affect what management considers being the core operating performance, and are used by our management for that purpose. We also believe this measure enables us to better evaluate our performance by facilitating a meaningful comparison of our core operating results in a given period to those in prior and future periods. In addition, investors often use similar measures to evaluate the operating performance with competitors. Adjusted EBITDA represents net loss before interest and other income, non-cash income tax benefit, change in fair value of acquisition-related contingent consideration, depreciation and amortization, stock-based compensation and related taxes, amortization of acquired intangible assets and other acquisition-related charges, and certain litigation costs that are not representative of the ordinary course of our business.

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:

- Adjusted EBITDA does not consider any expenses for assets being depreciated and amortized that are necessary to our business;
- Adjusted EBITDA does not consider the impact of stock-based compensation and related taxes, amortization of acquired intangible assets and other acquisition-related charges, certain litigation costs, non-cash income tax benefits, and change in fair value of acquisition-related contingent consideration;
- Adjusted EBITDA does not reflect other non-operating expenses, net of other non-operating income, including net interest and other income/expense; 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 provides a reconciliation of net loss (the most directly comparable GAAP financial measure) to Adjusted EBITDA for each of the periods indicated (in thousands):

	Fiscal Year Ended January 31,		
	2019	2018	2017
GAAP net loss	$(14,572)	$(13,121)	$(12,949)
Reconciling items:			
Interest and other income, net	(830)	(603)	(327)
Income tax benefit	(384)	—	—
Change in fair value of acquisition-related contingent consideration	(342)	—	—
Litigation costs	142	—	—
Depreciation and amortization	2,269	1,958	1,648
Acquisition-related costs and amortization of intangible assets	1,163	431	348
Stock-based compensation and related taxes	10,695	11,118	9,866
Adjusted EBITDA	$(1,859)	$(217)	$(1,414)

Components of Results of Operations

Revenue

Subscription and services revenue consists primarily of recurring subscription fees from customers accessing our communications solutions, such as Ooma Residential, Ooma Business and other subscriptions, and to a lesser extent from payments associated with advertisements through the Talkatone mobile application. We expect our subscription and services revenue to continue to grow as we continue to expand our core user base, driven primarily by growth in Ooma Business.

Product and other revenue consists primarily of sales of our on-premise appliances and end-point devices used in connection with our services, including shipping and handling fees for our direct customers, and to a lesser extent from porting fees we charge our customers to enable them to transfer their existing phone numbers to Ooma Business or Residential. We expect our product and other revenue to remain relatively flat or grow modestly on a year-over-year basis.

Cost of revenue and gross margin

Cost of subscription and services revenue includes payments made for third-party network operations and telecommunications services, Federal Universal Service Fund contributions, credit card processing fees, costs to maintain third-party data centers, including co-location fees for the right to place our servers in third-party data

centers, depreciation and maintenance of servers and equipment, personnel costs associated with customer care and network operations support, and allocated costs of facilities and information technology.

Cost of product and other revenue includes the costs associated with the manufacturing of our on-premise appliances and end-point devices, as well as personnel costs for employees and contractors, costs related to porting our customers' phone numbers to our service, shipping and handling costs, and allocated costs of facilities and information technology.

Subscription and services gross margin may fluctuate from period-to-period based on the interplay of a number of factors, including the costs we pay to third-party telecommunications providers, the timing of capital expenditures and related depreciation charges, and changes in our headcount. We expect our subscription and services gross margin to increase over the long-term, in part as our business revenue becomes a larger portion of total subscription revenue.

Product and other gross margin may fluctuate from period-to-period based on a number of factors, including total units shipped during a period as compared to the direct costs of production and relatively fixed personnel costs incurred during the period. We sell our on-premise appliances at an aggressive price point to facilitate the adoption of our platform and services. We expect our product and other gross margin to continue to be negative for the foreseeable future.

Our subscription and services gross margin is significantly higher than product and other gross margin. As a result, any significant change in the mix between subscription and services revenue and product and other revenue will cause our total gross margin to change. For example, in periods where we sell significantly more on-premise appliances, we would expect our total gross margin to be impacted.

Operating expenses

Sales and marketing expenses are the largest component of our operating expenses and consist primarily of personnel costs for employees and contractors directly associated with sales and marketing activities, internet, television, radio advertising fees, public relations expenses, commissions we pay to internal sales personnel, third-party sales entities and resellers, trade show expenses, travel expenses, marketing and promotional activities and allocated costs of facilities and information technology. We expect our sales and marketing expenses to increase as a percentage of revenue as well as in absolute dollars as we continue to grow our business.

Research and development expenses are focused on developing new and expanded features for our services and improvements to our platform and backend architecture. Research and development is expensed as incurred and consists primarily of personnel costs for employees and contractors, allocated costs of facilities and information technology, software tools and product certification. We expect our research and development expenses to continue to grow in absolute dollars.

General and administrative expenses consist of personnel costs for our finance, legal, human resources and other administrative employees and contractors. In addition, it includes professional service fees, legal fees, acquisition-related transaction costs and earn-outs, and allocated costs of facilities and information technology. We expect our general and administrative expenses to remain relatively flat as a percentage of total revenue.

Consolidated Results of Operations

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

	Fiscal Year Ended January 31,		
	2019	2018	2017
Revenue:			
Subscription and services	$116,429	$101,999	$91,127
Product and other	12,802	12,491	13,397
Total revenue	129,231	114,490	104,524
Cost of revenue:			
Subscription and services	36,108	31,406	29,650
Product and other	16,632	14,992	15,545
Total cost of revenue	52,740	46,398	45,195
Gross profit	76,491	68,092	59,329
Operating expenses:			
Sales and marketing	40,761	37,302	33,768
Research and development	33,903	29,328	24,239
General and administrative	17,613	15,186	14,598
Total operating expenses	92,277	81,816	72,605
Loss from operations	(15,786)	(13,724)	(13,276)
Interest and other income, net	830	603	327
Loss before income taxes	(14,956)	(13,121)	(12,949)
Income tax benefit	384	—	—
Net loss	$(14,572)	$(13,121)	$(12,949)

Costs and expenses included stock-based compensation expense and related payroll taxes as follows (in thousands):

	Fiscal Year Ended January 31,		
	2019	2018	2017
Cost of revenue	$957	$1,129	$1,038
Sales and marketing	1,501	1,857	1,455
Research and development	3,906	4,046	3,619
General and administrative	4,331	4,086	3,754
Total stock-based compensation and related taxes	$10,695	$11,118	$9,866

Consolidated Statement of Operations: Comparison of fiscal 2019, 2018 and 2017 (dollars in tables are in thousands)

Revenue

	Fiscal Year Ended January 31,			Change			
	2019	2018	2017	2019 vs. 2018		2018 vs. 2017	
Revenue:							
Subscription and services	$116,429	$101,999	$91,127	$14,430	14%	$10,872	12%
Product and other	12,802	12,491	13,397	311	2 %	(906)	(7)%
Total revenue	$129,231	$114,490	$104,524	$14,741	13%	$9,966	10%
Percentage of revenue:							
Subscription and services	90 %	89 %	87 %				
Product and other	10 %	11 %	13 %				
Total	100 %	100 %	100 %				

Fiscal 2019 Compared to Fiscal 2018

We derived approximately 68% and 71% of our total revenue from Ooma Residential and approximately 28% and 22% from Ooma Business in fiscal 2019 and 2018, respectively.

Subscription and services revenue increased $14.4 million or 14% year-over-year, primarily driven by a 5% increase in our core users and in part by changes to our residential pricing structure that were implemented in October 2017. Year-over-year revenue growth reflected a combined 19% increase in subscription and services revenue from Ooma Business and Ooma Residential that was offset in part by a decline in revenue from Talkatone and the non-existence of revenue from Business Promoter (due to the sale of the Business Promoter service in August 2017). Revenue earned from Business Promoter was approximately $1.8 million for fiscal 2018.

Product and other revenue increased $0.3 million or 2% year-over-year, reflecting an increase for sales of our smart security products offset in part by a decline in sales of on-premise appliances and other accessories.

Adoption of the new Topic 606 revenue recognition rules resulted in a $0.2 million increase to revenue for fiscal 2019 as compared to what would have been recognized under the legacy Topic 605 rules. See Note 3: Recent Accounting Standards in the notes to the consolidated financial statements.

Fiscal 2018 Compared to Fiscal 2017

We derived approximately 71% and 72% of our total revenue from Ooma Residential and approximately 22% and 16% from Ooma Business in fiscal 2018 and 2017, respectively.

Subscription and services revenue increased $10.9 million, or 12%, year-over-year, driven by a 59% increase in revenue from Ooma Business and a 12% increase from Ooma Residential, offset in part by a decline in revenue from Talkatone and Business Promoter. Year-over-year revenue growth reflected an 8% increase in our core users to approximately 929,000 as of January 31, 2018 from approximately 858,000 as of January 31, 2017, as well as changes to our residential customer pricing structure that were implemented in October 2017. Revenue earned from Business Promoter declined to approximately $1.8 million in fiscal 2018 from approximately $5.4 million in the prior year, due

to our sale of the Business Promoter service in August 2017.

Product and other revenue decreased $0.9 million or 7% year-over-year, primarily attributable to lower Ooma Residential-related sales, offset in part by growth in unit sales of smart security sensors and end-point devices.

Cost of Revenue and Gross Margin

	Fiscal Year Ended January 31,			Change			
				2019 vs. 2018		2018 vs. 2017	
	2019	2018	2017				
Cost of revenue:							
Subscription and services	$36,108	$31,406	$29,650	$4,702	15%	$1,756	6 %
Product and other	16,632	14,992	15,545	1,640	11%	(553)	(4)%
Total cost of revenue	$52,740	$46,398	$45,195	$6,342	14%	$1,203	3 %
Gross profit:							
Subscription and services	$80,321	$70,593	$61,477	$9,728	14%	$9,116	15%
Product and other	(3,830)	(2,501)	(2,148)	(1,329)	53%	(353)	16%
Total	$76,491	$68,092	$59,329	$8,399	12%	$8,763	15%
Gross margin:							
Subscription and services	69 %	69 %	67 %				
Product and other	(30)%	(20)%	(16)%				
Total	59 %	59 %	57 %				

Fiscal 2019 Compared to Fiscal 2018

Subscription and services gross margin of 69% was flat year-over-year. Cost of subscription and services revenue for fiscal 2019 increased $4.7 million or 15% year-over-year, reflecting a $2.8 million increase in regulatory costs, primarily associated with changes made to our residential pricing structure in October 2017, and a $0.8 million increase in personnel-related costs and a $0.3 million increase in network infrastructure related costs.

Product and other revenue gross margin of negative 30% decreased year-over-year from negative 20% due to a $0.4 million increase in freight charges, including recently imposed tariffs, as well as a $0.3 million increase in material product costs and a $0.2 million increase in other period costs.

Fiscal 2018 Compared to Fiscal 2017

Subscription and services gross margin increased to 69% in fiscal 2018 as compared to 67% in fiscal 2017, primarily due to higher proportionate growth of subscription and services revenue. The improvement in gross margin was driven by higher revenues from Ooma Business and the benefits of scale on a larger core user base. Cost of subscription and services revenue for fiscal 2018 increased $1.8 million year-over-year, reflecting a $0.9 million increase in credit card processing fees, a $0.7 million increase in network infrastructure related costs, driven by our international expansion, and to a lesser extent increases in personnel and consultant costs that were partly offset by a decline in the Business Promoter cost of sales due to our sale of the Business Promoter service in August 2017.

Product and other revenue gross margin of negative 20% decreased year-over-year from negative 16% due to a decrease in the sale of end-point devices and related porting fees. The decrease in cost of product and other revenue of $0.6 million reflected higher freight costs due to increased direct consumer shipments in fiscal 2018 as compared to fiscal 2017.

Operating Expenses

	Fiscal Year Ended January 31,			Change			
				2019 vs. 2018		2018 vs. 2017	
	2019	2018	2017				
Sales and marketing	$40,761	$37,302	$33,768	$3,459	9 %	$3,534	10%
Research and development	33,903	29,328	24,239	4,575	16%	5,089	21%

General and administrative	17,613	15,186	14,598	2,427	16%	588	4 %
Total operating expenses	$92,277	$81,816	$72,605	$10,461	13%	$9,211	13%

Sales and Marketing

Fiscal 2019 Compared to Fiscal 2018. Sales and marketing expenses for fiscal 2019 increased $3.5 million or 9% year-over-year, primarily due to a $3.7 million increase in personnel related costs, driven by higher headcount and our business acquisitions, coupled with a $1.6 million increase in marketing activities, and a $0.3 million increase in facilities related costs, driven by our continued business expansion. These increases were offset in part by a $2.5 million year-over-year decrease in sales commissions expenses, as we started capitalizing these costs in fiscal 2019 under the new Topic 606 accounting rules. The year-over-year increase in sales and marketing reflects our strategy to drive continued growth in Ooma Business and create further market awareness of our products.

Fiscal 2018 Compared to Fiscal 2017. Sales and marketing expenses for fiscal 2018 increased $3.5 million or 10% year-over-year, due to a $3.7 million increase in sales commissions, a net $1.1 million increase in personnel related costs, driven by higher headcount, coupled with a $0.6 million increase in facilities related costs and a $0.4 million increase in stock-based compensation. These higher expenses were offset in part by a net $2.6 million decrease in marketing activities, primarily Ooma Residential-related advertising expenses. The year-over-year growth in sales and marketing supported the expansion of our sales efforts to drive growth in our small business solutions.

Research and Development

Fiscal 2019 Compared to Fiscal 2018. Research and development expenses for fiscal 2019 increased $4.6 million or 16% year-over-year, primarily due to a $3.9 million increase in personnel related costs, driven by higher headcount and our recent acquisitions, as well as a $0.3 million increase in non-recurring engineering and license costs. The year-over-year growth in research and development reflects continued enhancements to Ooma Business as well as adding new features and product offerings to our Smart Security solution, including the Butterfleye smart camera.

Fiscal 2018 Compared to Fiscal 2017. Research and development expenses for fiscal 2018 increased $5.1 million or 21% year-over-year, primarily due to a $3.5 million increase in personnel related costs, driven by higher headcount, a $1.0 million increase in facilities, supplies and equipment related costs and a $0.4 million increase in stock-based compensation. The year-over-year growth in research and development supported the continued development of our office platform, including international expansion, as well as adding new features and product offerings to our home security solution.

General and Administrative

Fiscal 2019 Compared to Fiscal 2018. General and administrative expenses for fiscal 2019 increased $2.4 million or 16% year-over-year, mainly reflecting a $1.8 million increase in personnel related costs that were driven by higher headcount, as well as a $0.3 million increase in acquisition-related transaction expenses.

Fiscal 2018 Compared to Fiscal 2017. General and administrative expenses for fiscal 2018 increased $0.6 million or 4% year-over-year, reflecting a $1.0 million increase in personnel related costs and stock-based compensation costs, driven by higher headcount, offset in part by a $0.5 million decrease in legal expenses.

Income Taxes

We recorded an income tax benefit of $0.4 million for fiscal 2019, primarily associated with our acquisition of Voxter. We did not record a provision or benefit for income taxes in fiscal years 2018 and 2017. We continue to maintain a full valuation allowance against our deferred tax assets. See Note 9: Income Taxes in the notes to our consolidated financial statements.

Non-GAAP Financial Measures

In addition to disclosing financial measures prepared in accordance with GAAP, this Form 10-K contains certain non-GAAP financial measures, including non-GAAP net loss and Adjusted EBITDA (see above). These non-GAAP financial measures exclude non-cash stock-based compensation expense and related taxes, change in fair value of acquisition-related contingent consideration, acquisition-related transaction costs, amortization of acquired intangibles, non-cash acquisition-related income tax benefit, and certain litigation costs that are not representative of the ordinary course of our business.

These non-GAAP financial measures are presented to provide investors with additional information regarding our financial results and core business operations. We consider these non-GAAP financial measures to be useful measures of the operating performance of the Company, because they contain adjustments for unusual events or factors that do

not directly affect what management considers to be our core operating performance, and are used by our management for that purpose. We also believe that these non-GAAP financial measures allow for a better evaluation of our performance by facilitating a meaningful comparison of our core operating results in a given period to those in prior and future periods. In addition, investors often use similar measures to evaluate the operating performance of a company.

Non-GAAP financial measures are presented for supplemental informational purposes only to aid an understanding of our operating results. The non-GAAP financial measures should not be considered a substitute for financial information presented in accordance with GAAP, and may be different from non-GAAP financial measures presented by other companies. A limitation of the non-GAAP financial measures presented is that the adjustments relate to items that the Company generally expects to continue to recognize. The adjustment of these items should not be construed as an inference that the adjusted gains or expenses are unusual, infrequent or non-recurring. Therefore, both GAAP financial measures of Ooma's financial performance and the respective non-GAAP measures should be considered together.

Reconciliations of our GAAP and non-GAAP financial measures were as follows (in thousands):

	Fiscal Year Ended January 31,		
	2019	2018	2017
GAAP net loss	$(14,572)	$(13,121)	$(12,949)
Stock-based compensation and related taxes	10,695	11,118	9,866
Acquisition-related costs and amortization of intangible assets	1,163	431	348
Litigation costs	142	—	—
Income tax benefit	(69)	—	—
Change in fair value of acquisition-related contingent consideration	(342)	—	—
Non-GAAP net loss	$(2,983)	$(1,572)	$(2,735)

Quarterly Results of Operations and Trends

The following table sets forth selected quarterly financial data for each of the eight quarterly periods ended January 31, 2019 (in thousands, except percentages):

	Three Months Ended			
	January 31	October 31	July 31	April 30
Fiscal 2019				
Total revenue	$34,720	$32,608	$31,681	$30,222
Gross profit	$19,707	$20,073	$18,773	$17,938
Gross margin	57%	62%	59%	59%
Total operating expenses	$23,534	$23,937	$22,937	$21,869
Net loss	$(3,489)	$(3,494)	$(3,904)	$(3,685)
Fiscal 2018				
Total revenue	$30,220	$28,505	$28,187	$27,578
Gross profit	$18,312	$17,166	$16,581	$16,033
Gross margin	61%	60%	59%	58%
Total operating expenses	$21,419	$20,493	$20,373	$19,531
Net loss	$(2,927)	$(3,179)	$(3,623)	$(3,392)

On February 1, 2018, we adopted Topic 606, Revenue from Contracts with Customers using the modified retrospective method, which resulted in timing and presentation changes affecting our consolidated balance sheet and statement of operations. Our financial results for fiscal 2019 are presented in accordance with the provisions under Topic 606. Comparative prior period amounts have not been adjusted and continue to be reported under the historic accounting standards in effect for the periods presented. (See Note 2: Significant Accounting Policies in the notes to the consolidated financial statements.)

Revenue. Our total revenue has grown sequentially each quarter due to the continued growth in our subscriber base driven by an increase in our core users.

Gross Margin. Over the past eight fiscal quarters, our gross margin has fluctuated between 57% and 62% due to changes in our product mix and the introduction of new products.

Operating Expenses. Our quarterly operating expenses in absolute dollars have increased significantly from fiscal 2018 to fiscal 2019, primarily driven by growing headcount and personnel-related expenses, as well as marketing and advertising expenses associated with our efforts to increase our overall subscriber base and product sales.

Liquidity and Capital Resources

As of January 31, 2019, we had $42.6 million of total cash, cash equivalents and investments. Our primary source of cash is receipts from sales to our customers. We believe that our existing cash, cash equivalents and short-term investments will be sufficient to meet our cash needs for at least the next 12 months. Our future capital requirements will depend on many factors, including our growth rate, the timing and extent of our sales and marketing and research and development expenditure, and the continuing market acceptance of our solutions.

We may in the future make investments in or acquisitions of businesses or technologies, which may require the use of cash. For example, in the first quarter of fiscal 2019, we completed the acquisition of Voxter for upfront cash consideration of approximately $2.4 million, net of cash acquired of $0.1 million, and in the fourth quarter of fiscal 2019, we invested $1.3 million in cash to a small privately-held technology company, in exchange for an 18-month convertible promissory note (see Note 6: Balance Sheet Components of the notes to our consolidated financial statements).

The table below provides selected cash flow information, for the periods indicated (in thousands):

	Fiscal Year Ended January 31,		
	2019	2018	2017
Net cash (used in) provided by operating activities	$(3,926)	$3,173	$385
Net cash provided by (used in) investing activities	14,853	(2,155)	(22,969)
Net cash used in financing activities	(40)	(525)	(839)
Net increase (decrease) in cash and cash equivalents	$10,887	$493	$(23,423)

Operating Activities

The table below provides selected cash flow information, for the periods indicated (in thousands):

	Fiscal Year Ended January 31,		
	2019	2018	2017
Net loss	$(14,572)	$(13,121)	$(12,949)
Non-cash charges	12,321	13,327	11,979
Changes in operating assets and liabilities:			
(Increase) decrease in accounts receivable	(1,050)	1,856	895
(Increase) decrease in inventories and deferred inventory costs	(4,213)	310	(426)
(Increase) decrease in other assets	(5,334)	(1,519)	84
Increase (decrease) in accounts payable and accrued expenses	8,150	2,366	(156)
Increase (decrease) in deferred revenue	772	(46)	958
Net cash (used in) provided by operating activities	$(3,926)	$3,173	$385

For fiscal 2019, our net loss of $14.6 million included non-cash charges of $12.3 million primarily related to stock-based compensation and depreciation and amortization. Operating asset and liability changes for fiscal 2019 included:

- an increase of $1.1 million in accounts receivable primarily due to timing of billing and our collection efforts
- a net increase of $4.2 million in our inventory and related deferred costs to scale our business
- an increase of $5.3 million in other current and non-current asses primarily due to the capitalization of sales commissions under Topic 606
- an increase of $8.2 million in accounts payable, accrued expenses and other liabilities to support the growth of our business, including higher headcount

Overall, the decrease in operating cash flow from fiscal 2018 to fiscal 2019 was primarily driven by an increase in cash-based operating expenses (see “Results of Operations” above) coupled with increased inventory procurement to scale our business.

For fiscal 2018, our net loss of $13.1 million included non-cash charges of $13.3 million primarily related to stock-based compensation and depreciation and amortization. Operating asset and liability changes for fiscal 2018 included:

- a decrease of $1.9 million in accounts receivable primarily due to timing of billing and our cash collections, driven by lower revenue from Talkatone during fiscal 2018 as well as due to the sale of the Business Promoter service in August 2017
- an increase of $2.4 million in accounts payable and accrued liabilities primarily due to the timing of payments and reflecting higher operating expenses compared to the prior year
- a net increase of $1.5 million in prepaid expenses and other assets due to the timing of certain payments

- a net decrease of $0.3 million in our inventory and related deferred costs, reflecting lower inventory levels at channel partners

The increase in operating cash flow from fiscal 2017 to fiscal 2018 was primarily due to increased cash collections from our customers, driven by revenue growth year-over-year, as well as favorable changes in operating assets and liabilities.

Investing Activities

Our investing activities include short-term investment activities, capital expenditures and business acquisitions. Our capital expenditures have primarily been for general business purposes, including expansion of our network operations centers, computer equipment used internally, website development and leasehold improvements as we have expanded our office space to accommodate our growth in headcount.

During fiscal 2019, cash provided by investing activities was $14.9 million, which consisted of proceeds of $59.0 million from maturities and sales of short-term investments, offset in part by $38.5 million used for purchases of short-term investments, $1.9 million used for capital expenditures, $2.4 million used for the acquisition of Voxter in the first quarter, and $1.3 million used to invest in a privately-held technology company in the fourth quarter (see Note 6: Balance Sheet Components of the notes to our consolidated financial statements).

During fiscal 2018, cash used in investing activities was $2.2 million, which consisted of purchases of short-term investments of $49.3 million, purchases of property and equipment of $2.5 million, and a business acquisition for $1.4 million, offset by proceeds from maturities and sales of short-term investments totaling $51.0 million. The decrease in cash outflow from fiscal 2017 to fiscal 2018 was attributable primarily to activity in our investment portfolio, reflecting a decrease in investment purchases and an increase in maturities.

Financing Activities

Cash generated from financing activities include net proceeds from common stock issuances related to employee stock benefit plans and proceeds from borrowings, if any, under our credit facilities, if any. Cash used in financing activities includes payment of shares repurchased for tax withholdings on vesting of restricted stock units (“RSUs”), repayment of debt and capital leases and payment of acquisition-related earn-outs.

During fiscal 2019, financing activities consisted of payments of $2.9 million related to shares repurchased for tax withholdings on vesting of RSUs, offset by proceeds of $2.9 million from common stock issuances under our employee stock plans.

During fiscal 2018, cash used in financing activities was $0.5 million, which consisted of payments of $2.4 million related to shares repurchased for tax withholdings on vesting of RSUs, offset by proceeds of $1.9 million from common stock issuances under our employee stock plans.

Contractual Obligations and Commitments

As of January 31, 2019, our total future expected payment obligations under non-cancelable operating leases with terms longer than one year were approximately $4.6 million. See Note 11: Commitments and Contingencies in the notes to our consolidated financial statements for a table of contractual obligations, including payments due by period. As of January 31, 2019, non-cancelable purchase commitments with our contract manufacturers totaled approximately $4.2 million.

We do not have any material relationships with unconsolidated entities or financial partnerships, including entities such as structured finance or special purpose entities that were established for the purpose of facilitating off-balance sheet arrangements.

Critical Accounting Policies and Estimates

Our discussion and analysis of our financial condition and results of operations is based upon our consolidated financial statements, which have been prepared in accordance with U.S. GAAP, which requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenue and expenses, cash flows and related disclosures of contingent assets and liabilities. We base our estimates on historical experience and on various other assumptions we believe to be reasonable under the circumstances. Actual results may differ from these estimates. Our future consolidated financial statements will be affected to the extent that our actual results materially differ from these estimates. Note 2 to the notes to consolidated financial statements of this Form 10-K describes the significant accounting policies and methods used in the preparation of the consolidated financial statements. We believe that the accounting policies discussed below are critical to understanding our historical and future performance as these policies involve a greater degree of judgment and complexity.

Revenue Recognition

We derive revenue from two sources: (1) subscription and services revenue, which is generated from the sale of subscription plans and other services; and (2) product and other revenue. Our financial results for fiscal 2019 are presented in accordance with the provisions under Topic 606. Comparative prior period amounts have not been adjusted and continue to be reported under Topic 605, Revenue Recognition, the historic accounting standard in effect for the prior periods presented.

Subscription revenue is derived primarily from recurring subscription fees related to service plans such as Ooma Business, Ooma Residential and other communications services. All subscription revenue is recognized ratably over the contractual service term. Product and other revenue is generated from the sale of on-premise appliances and end-point devices, including shipping and handling fees for our direct customers, and to a lesser extent from porting fees that enable customers to transfer their existing phone numbers. Beginning fiscal 2019, we recognize revenue from sales to direct end-customers and channel partners at the point in time that control transfers which is typically when we deliver the product or when all customer contractual provisions have been met, if any. Our distribution agreements with channel partners typically contain clauses for price protection and right of return. Prior to fiscal 2019, we deferred product revenue and related costs of revenue on these product channel sales until title was transferred to the end-customer. See Note 2: Significant Accounting Policies in the notes to our consolidated financial statements for additional information regarding our subscription and services revenue and product and other revenue.

Our contracts with customers typically contain multiple performance obligations that consist of product(s) and related communications services. For these contracts, we account for individual performance obligations separately if they are distinct. The contract transaction price is then allocated to the separate performance obligations on a relative stand-alone selling price (“SSP”) basis. We determine the SSP for our communications services based on observable historical stand-alone sales to customers, for which we require that a substantial majority of selling prices fall within a reasonably narrow pricing range. We do not have a directly observable SSP for our on-premise appliance and end-point devices, and therefore we establish SSP based on our best estimates and judgments, considering company-specific factors such as pricing strategies, estimated product and other costs, and bundling and discounting practices. The determination of SSP is made through consultation with and approval by our management. As our business offerings evolve over time, we may be required to modify our estimated selling prices in subsequent periods, and the timing of our revenue recognition could be affected.

Sales Reserves. We record reductions to revenue for estimated product returns from end users and customer sales incentives at the time the related revenue is recognized. Product returns and customer sales incentives are estimated based on our historical experience, current trends and expectations regarding future experience. Trends are influenced by product life cycles, new product introductions, market acceptance of products, the type of customer, seasonality and other factors. Product return and sales incentive rates may fluctuate over time but are sufficiently predictable to allow our management to estimate expected future amounts. If actual future returns and sales incentives differ from

past experience, additional reserves may be required. To date, actual results have not been materially different from our estimates.

Inventories

At each balance sheet date, we evaluate our ending inventories for excess quantities and obsolescence based on projected future demand, actual historical experience and certain other factors. We adjust our inventory balances to approximate the lower of our standard manufacturing cost or net realizable value. In determining the adequacy of inventory write-downs, we analyze the following, among other things:

- current inventory quantity on hand;
- product acceptance and competitiveness in the marketplace;
- customer demand;
- historical sales;

- forecast sales;
- product life cycles and obsolescence, and;
- technological innovations

Inventory write downs for excess and obsolete inventory are recorded in cost of goods sold within the consolidated statement of operations during the period in which such write-downs are determined as necessary by management. If actual future demand or market conditions are less favorable than those projected by management, additional inventory write-downs may be required. This would have a negative impact on our gross margin in that period. If in any period we are able to sell inventories that were not valued or that had been written down in a previous period, related revenues would be recorded without any offsetting charge to cost of sales resulting in a net benefit to our gross margin in that period. Inventory write-downs recorded for fiscal 2019, 2018 and 2017 were not material.

Stock-Based Compensation

Stock-based compensation expense for all stock-based awards granted is measured at the grant date based on the fair value of the equity award and is recognized as expense over the requisite service period, which is generally the vesting period. The fair value of options granted is estimated on the date of grant using the Black-Scholes option pricing model. The fair value of each RSU granted is determined using the fair value of our common stock on the date of grant. The fair value of each stock purchase right under our Employee Stock Purchase Plan (“ESPP”) is calculated based on the closing price of our stock on the date of grant and the value of put and call options is estimated using the Black-Scholes option pricing model.

The determination of the grant date fair value of options using an option-pricing model is affected by our common stock fair value as well as assumptions regarding a number of variables, of which the most subjective were estimated as follows:

- Expected Term. We do not have sufficient historical exercise data to provide a reasonable basis upon which to estimate expected term due to the limited period of time stock-based awards have been exercisable since the completion of our IPO in July 2015. As a result, we used the simplified method to calculate the expected term estimate based on the vesting and contractual terms of the option. Under the simplified method, the expected term is equal to the average of the stock-based award’s weighted average vesting period and its contractual term.
- Expected Stock Price Volatility. As we do not have a significant trading history for our common stock, we determined the expected volatility using a combination of the average historical volatility of a group of comparable publicly traded companies and our own common stock.

Refer to Note 8: Stock-Based Compensation in the notes to our consolidated financial statements for additional information on our estimates related to stock-based compensation.

Income Taxes

We account for income taxes using the asset and liability method, under which deferred tax assets and liabilities are recognized for the expected future tax consequences of temporary differences between financial statement carrying amounts and the tax basis of assets and liabilities and net operating loss and tax credit carryforwards. Valuation allowances are established when necessary to reduce deferred tax assets to the amount expected to be realized. We have recorded a full valuation allowance against our deferred tax assets as of January 31, 2019 and 2018.

We use a recognition threshold and measurement attribute for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. A tax position is recognized when it is more likely than not that the tax position will be sustained upon examination, including resolution of any related appeals or litigation processes. A tax position that meets the more-likely-than-not recognition threshold is measured at the largest amount of benefit that is greater than 50% likely of being realized upon ultimate settlement with a taxing authority. Deferred tax assets associated with our unrecognized tax benefits were fully offset by a valuation allowance as of January 31, 2019 and 2018.

ITEM 7A. Quantitative and Qualitative Disclosures About Market Risk

Interest Rates

Our exposure to market risk for changes in interest rates primarily relates to our cash and cash equivalents and short-term investments. Our cash equivalents and investments are held in money market funds, U.S. treasury securities, U.S. agency debt securities, commercial papers, corporate debt securities and asset-backed securities. Due to the short-term nature of these instruments, we do not have any material exposure to changes in the fair value of our investment portfolio as a result of changes in interest rates. Declines in interest rates, however, would reduce our future interest income. The effect of a hypothetical 100 basis point increase or decrease in interest rates would not have had a material impact on the fair value of our available-for-sale securities as of January 31, 2019 and 2018, or our interest income for each of the three years in the period ended January 31, 2019. We did not hold any debt as of January 31, 2019 and 2018.

Foreign Currencies

To date, substantially all of our revenue has been denominated in U.S. and Canadian dollars. As a result, some of our revenue is subject to fluctuations due to changes in the Canadian dollar relative to the U.S. dollar. Substantially all of our operating expenses have been denominated in U.S. dollars. The functional currency for all of our entities is the U.S. dollar. To date, gains and losses from foreign currency transactions have not been material to our consolidated financial statements, and we have not engaged in any foreign currency hedging transactions. A hypothetical 10% increase or decrease in overall foreign currency rates would not have had a material impact on our consolidated financial statements. As our international operations grow, we will continue to reassess our approach to managing the risks relating to fluctuations in currency rates.

ITEM 8. Consolidated Financial Statements and Supplementary Data

Index

Report of Independent Registered Public Accounting Firm	55
Consolidated Balance Sheets	56
Consolidated Statements of Operations	57
Consolidated Statements of Stockholders' Equity	58
Consolidated Statements of Cash Flows	59
Notes to Consolidated Financial Statements	60

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the stockholders and the Board of Directors of Ooma, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Ooma, Inc. and subsidiaries (the "Company") as of January 31, 2019 and 2018, the related consolidated statements of operations, stockholders' equity, and cash flows, for each of the three years in the period ended January 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 January 31, 2019 and 2018, and the results of its operations and its cash flows for each of the three years in the period ended January 31, 2019, in conformity with accounting principles generally accepted in the United States of America.

Change in Accounting Principle

As discussed in Note 3 to the financial statements, the Company has changed its method of accounting for revenue from contracts with customers in fiscal year 2019 due to the adoption of Accounting Standards Update No. 2014-09, Revenue from Contracts with Customers, using the modified retrospective approach.

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

San Jose, California

April 2, 2019

We have served as the Company's auditor since 2012.

OOMA, INC.

CONSOLIDATED BALANCE SHEETS

(Amounts in thousands, except share and per share data)

	January 31, 2019	January 31, 2018
Assets		
Current assets:		
Cash and cash equivalents	$15,370	$4,483
Short-term investments	27,253	47,307
Accounts receivable, net	3,723	2,858
Inventories	10,117	6,079
Other current assets	5,450	4,397
Total current assets	61,913	65,124
Property and equipment, net	4,563	4,732
Intangible assets, net	2,635	1,292
Goodwill	3,898	1,947
Other assets	5,379	336
Total assets	$78,388	$73,431
Liabilities and stockholders' equity		
Current liabilities:		
Accounts payable	$10,231	$5,453
Accrued expenses	19,048	14,777
Deferred revenue	15,443	15,556
Total current liabilities	44,722	35,786
Other liabilities	619	577
Total liabilities	45,341	36,363
Commitments and contingencies (Note 11)		
Stockholders' equity:		
Preferred stock $0.0001 par value: 10 million shares authorized; none issued and outstanding	—	—
Common stock $0.0001 par value: 100 million shares authorized; 20.3 million and 19.1 million shares issued and outstanding, respectively	4	2
Additional paid-in capital	138,848	128,081
Accumulated other comprehensive loss	(10)	(84)
Accumulated deficit	(105,795)	(90,931)
Total stockholders' equity	33,047	37,068
Total liabilities and stockholders' equity	$78,388	$73,431

See notes to consolidated financial statements.

Ooma, Inc.

Consolidated Statements of Operations

(Amounts in thousands, except shares and per share data)

	Fiscal Year Ended January 31,		
	2019	2018	2017
Revenue:			
Subscription and services	$116,429	$101,999	$91,127
Product and other	12,802	12,491	13,397
Total revenue	129,231	114,490	104,524
Cost of revenue:			
Subscription and services	36,108	31,406	29,650
Product and other	16,632	14,992	15,545
Total cost of revenue	52,740	46,398	45,195
Gross profit	76,491	68,092	59,329
Operating expenses:			
Sales and marketing	40,761	37,302	33,768
Research and development	33,903	29,328	24,239
General and administrative	17,613	15,186	14,598
Total operating expenses	92,277	81,816	72,605
Loss from operations	(15,786)	(13,724)	(13,276)
Interest and other income, net	830	603	327
Loss before income taxes	(14,956)	(13,121)	(12,949)
Income tax benefit	384	—	—
Net loss	$(14,572)	$(13,121)	$(12,949)
Net loss per share of common stock:			
Basic and diluted	$(0.74)	$(0.71)	$(0.74)
Weighted-average number of shares used in per share amounts:			
Basic and diluted	19,799,781	18,570,128	17,490,448

See notes to consolidated financial statements.

Ooma, Inc.

Consolidated Statements of Stockholders' EQuity

(Amounts in thousands, except shares and share data)

	Common Stock		Additional	Accumulated Other Comprehensive	Accumulated	Stockholders'
	Shares	Amount	Paid-In Capital	Income (Loss)	Deficit	Equity
BALANCE - January 31, 2016	16,916,250	$ 2	$ 107,679	$ 17	$ (64,808)	$ 42,890
Issuance of common stock related to acquisition	26,375	—	165	—	—	165
Issuance of common stock under equity-based plans	1,223,211	—	1,558	—	—	1,558
Shares repurchased for tax withholdings on vesting of RSUs	(170,281)	—	(1,588)	—	—	(1,588)
Stock-based compensation	—	—	9,772	—	—	9,772
Changes in comprehensive loss	—	—	—	(28)	—	(28)
Cumulative stock-based compensation forfeiture adjustment	—	—	53	—	(53)	—
Net loss	—	—	—	—	(12,949)	(12,949)
BALANCE - January 31, 2017	17,995,555	2	117,639	(11)	(77,810)	39,820
Issuance of common stock under equity-based plans	1,345,392	—	1,964	—	—	1,964
Shares repurchased for tax withholdings on vesting of RSUs	(244,865)	—	(2,443)	—	—	(2,443)
Exercise of warrants to common stock	19,352	—	—	—	—	—
Stock-based compensation	—	—	10,921	—	—	10,921
Changes in comprehensive loss	—	—	—	(73)	—	(73)
Net loss	—	—	—	—	(13,121)	(13,121)
BALANCE - January 31, 2018	19,115,434	2	128,081	(84)	(90,931)	37,068
Issuance of common stock under equity-based plans	1,374,336	2	2,933	—	—	2,935

Shares repurchased for tax withholdings on vesting of RSUs	(213,181)	—	(2,926)	—	—	(2,926)
Issuance of common stock for business acquisition (Note 12)	35,513	—	390	—	—	390
Stock-based compensation (Note 8)	—	—	10,370	—	—	10,370
Changes in comprehensive loss	—	—	—	74	—	74
Cumulative adjustment upon adoption of Topic 606 (Note 3)	—	—	—	—	(292)	(292)
Net loss	—	—	—	—	(14,572)	(14,572)
BALANCE - January 31, 2019	20,312,102	$ 4	$ 138,848	$ (10)	$ (105,795)	$ 33,047

See notes to consolidated financial statements.

Ooma, Inc.

Consolidated Statements of Cash Flows

(Amounts in thousands)

	Fiscal Year Ended January 31,		
	2019	2018	2017
Cash flows from operating activities:			
Net loss	$(14,572)	$(13,121)	$(12,949)
Adjustments to reconcile net loss to net cash (used in) provided by operating activities:			
Stock-based compensation expense	10,370	10,921	9,772
Depreciation and amortization of property and equipment	2,269	1,958	1,648
Amortization of acquired intangible assets	740	313	348
Change in fair value of acquisition-related contingent consideration	(342)	—	—
Deferred income taxes	(384)	—	—
Amortization and accretion of premiums from investments	(332)	135	211
Changes in operating assets and liabilities, net of effect of acquisitions:			
Accounts receivable, net	(1,050)	1,856	895
Inventories	(4,034)	(249)	(819)
Deferred inventory costs	(179)	559	393
Prepaid expenses and other assets	(5,334)	(1,519)	84
Accounts payable and other liabilities	8,150	2,366	(156)
Deferred revenue	772	(46)	958
Net cash (used in) provided by operating activities	(3,926)	3,173	385
Cash flows from investing activities:			
Purchases of short-term investments	(38,485)	(49,331)	(59,007)
Proceeds from maturities of short-term investments	53,736	49,217	32,330
Proceeds from sales of short-term investments	5,225	1,800	5,266
Capital expenditures	(1,921)	(2,478)	(1,558)
Business acquisition, net of cash assumed	(2,402)	(1,363)	—
Payment for purchase of convertible note	(1,300)	—	—
Net cash provided by (used in) investing activities	14,853	(2,155)	(22,969)
Cash flows from financing activities:			
Shares repurchased for tax withholdings on vesting of RSUs	(2,926)	(2,443)	(1,588)
Proceeds from issuance of common stock	2,886	1,918	1,477
Repayment of debt, capital leases and warrants	—	—	(628)
Payment of acquisition related earn-out	—	—	(100)
Net cash used in financing activities	(40)	(525)	(839)
Net increase (decrease) in cash and cash equivalents	10,887	493	(23,423)
Cash and cash equivalents at beginning of period	4,483	3,990	27,413
Cash and cash equivalents at end of period	$15,370	$4,483	$3,990
Supplemental disclosure of cash flow information:			
Income taxes paid	$1	$—	$3
Interest paid	$—	$—	$18

Non-cash investing and financing activities:			
Unpaid portion of capital expenditures	$201	$146	$122
Contingent consideration for business acquisition	$231	$311	$—
Holdback payable for business acquisition	$780	$—	$—
Shares issued for business acquisition and related earn-out	$390	$—	$165

See notes to consolidated financial statements.

Ooma, Inc.

Notes to Consolidated Financial Statements

Note 1: Overview and Basis of Presentation

Ooma, Inc. and its wholly-owned subsidiaries (collectively, "Ooma" or the "Company") create new communications experiences for businesses and consumers. The Company's smart SaaS platform serves as a communications hub, which offers cloud-based communications solutions, smart security and other connected services.

Principles of Presentation and Consolidation. The accompanying consolidated financial statements have been prepared in accordance with U.S. generally accepted accounting principles ("GAAP") and include the accounts of the Company and its wholly owned subsidiaries. All intercompany transactions and balances have been eliminated upon consolidation. In the opinion of the Company's management, the consolidated financial statements reflect all adjustments, which are normal and recurring in nature, necessary for fair financial statement presentation.

Fiscal Year. The Company's fiscal year ends on January 31. References to fiscal 2019, fiscal 2018 and fiscal 2017 refer to the fiscal years ended January 31, 2019, January 31, 2018 and January 31, 2017, respectively.

Use of Estimates. The preparation of the Company's financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the amounts reported in these consolidated financial statements and accompanying notes. Actual results could differ materially from those estimates.

Comprehensive Loss. For all periods presented, comprehensive loss approximated net loss in the consolidated statements of operations and the difference was not material. Therefore, the consolidated statements of comprehensive loss have been omitted.

Segment Reporting. The chief operating decision maker for the Company is the chief executive officer. The Company's subscription plans, services and product offerings operate on a single SaaS platform and the chief executive officer reviews financial information presented on a consolidated basis for purposes of allocating resources and evaluating financial performance. Accordingly, management has determined that the Company operates in one reportable segment.

Revenue was principally derived from customers located in the United States for all periods presented. All of the Company's long-lived assets were attributable to operations in the United States, with a small portion attributable to operations in Canada and other countries, for all periods presented.

Secondary Public Offering. The Company completed its IPO in July 2015. In January and March 2017, the Company completed two secondary offerings in which certain stockholders of the Company sold an aggregate of 3.3 million shares and 3.3 million shares, respectively, of the Company's common stock at a public offering price of $8.65 per share and $8.85 per share, respectively, including 0.4 million shares sold upon the underwriters' exercise of the overallotment option in the March offering. The Company did not receive any of the proceeds from these offerings.

Note 2: Significant Accounting Policies

Revenue Recognition

On February 1, 2018, the Company adopted Topic 606, Revenue from Contracts with Customers. The Company's financial results for fiscal 2019 are presented in accordance with the provisions under Topic 606. Comparative prior

period amounts have not been adjusted and continue to be reported under Topic 605, Revenue Recognition, the historic accounting standard in effect for the prior periods presented. See Note 3: Recent Accounting Standards below.

The Company derives its revenue from two sources: (1) subscription and services revenue, which are generated from sales of subscription plans for communications services and other connected services; and (2) product and other revenue. Subscriptions and services are sold directly to end-customers. Products are sold to end-customers through several channels, including but not limited to, distributors, retailers and resellers (collectively the “channel partners”), and Ooma sales representatives.

Under Topic 606, the Company determines revenue recognition through the following steps:

- identification of the contract(s) with a customer;
- identification of the performance obligations in the contract;
- determination of the transaction price;
- allocation of the transaction price to the performance obligations in the contract; and
- recognition of revenue when, or as, the Company satisfies a performance obligation

Ooma, Inc.

Notes to Consolidated Financial Statements

Revenue is recorded net of any sales and telecommunications taxes collected from customers to be remitted to government authorities. Under Topic 606, the Company has maintained its policy to exclude these taxes from revenue.

Revenue disaggregated by revenue source consisted of the following (in thousands):

	Fiscal Year Ended January 31,		
	2019	2018	2017
Subscription and services revenue	$116,429	$101,999	$91,127
Product and other revenue	12,802	12,491	13,397
Total revenue	$129,231	$114,490	$104,524

The Company derived approximately 68%, 71% and 72% of its total revenue from Ooma Residential and approximately 28%, 22% and 16% from Ooma Business in fiscal 2019, 2018 and 2017, respectively. No individual country outside of the United States represented 10% or more of total revenue for the periods presented. No single customer accounted for 10% or more of total revenue for the periods presented.

Subscription and Services Revenue. Most of the Company's revenue is derived from recurring subscription fees related to service plans such as Ooma Business, Ooma Residential and other communications services. All subscription revenue is recognized ratably over the contractual service term. The Company's service plans are generally sold as monthly subscriptions; however, certain plans are also offered as annual subscriptions. A small portion of the Company's revenue is recognized on a point-in-time usage basis from services such as: prepaid international calls, directory assistance, and advertisements displayed through its Talkatone mobile application.

Product and Other Revenue. Product and other revenue is generated from the sale of on-premise appliances and end-point devices, including shipping and handling fees for the Company's direct customers, and to a lesser extent from porting fees that enable customers to transfer their existing phone numbers. The Company recognizes revenue from sales to direct end-customers and channel partners at the point in time that control transfers which is typically when it delivers the product or when all customer contractual provisions have been met, if any. The Company's distribution agreements with channel partners typically contain clauses for price protection and right of return. Therefore, the amount of product revenue recognized is adjusted for any variable consideration, such as expected returns and customer sales incentives as described in "Sales Allowances" below.

Amounts billed to customers related to shipping and handling are classified as revenue. Shipping and handling costs are expensed as incurred and classified as cost of revenue.

Multiple performance obligations. The Company's contracts with customers typically contain multiple performance obligations that consist of product(s) and related communications services. For these contracts, the Company accounts for individual performance obligations separately if they are distinct. The contract transaction price is then allocated to the separate performance obligations on a relative stand-alone selling price ("SSP") basis. The Company determines the SSP for its communications services based on observable historical stand-alone sales to customers, for which the Company requires that a substantial majority of selling prices fall within a reasonably narrow pricing range. The Company does not have a directly observable SSP for its on-premise appliance and end-point devices, and therefore establishes SSP based on its best estimates and judgments, considering company-specific factors such as pricing strategies, estimated product and other costs, and bundling and discounting practices.

Sales allowances. Credits and/or rebates issued to customers for product returns and sales incentives are deemed to be variable consideration under Topic 606, which the Company estimates and records as a reduction to revenue at the point of sale. Product returns and customer sales incentives are estimated based on the Company's historical experience, current trends and expectations regarding future experience. Trends are influenced by product life cycles, new product introductions, market acceptance of products, the type of customer, seasonality and other factors. Product return and sales incentive rates may fluctuate over time but are sufficiently predictable to allow the Company to estimate expected future amounts. If actual future returns and sales incentives differ from past experience, additional reserves may be required. As of January 31, 2019 and 2018, the Company had total reserves for product returns and customer sales incentives of $0.6 million and $0.6 million, respectively.

Ooma, Inc.

Notes to Consolidated Financial Statements

Cash Equivalents and Short-term Investments. All highly liquid investments with an original maturity of three months or less at the date of purchase are classified as cash equivalents. Short-term investments are classified as available-for-sale and carried at fair value, with unrealized gains and losses, net of tax, recorded as a separate component of stockholders' equity within accumulated other comprehensive (loss) income. All realized gains and losses and unrealized losses believed to be other-than-temporary are recorded in other expense, net in the current period. The cost of securities sold is based upon the specific identification method.

Fair Value of Financial Instruments. The Company records its financial assets and liabilities at fair value. Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the reporting date. The Company estimates and categorizes the fair value of its financial assets by applying the following hierarchy:

Level 1: Quoted prices (unadjusted) for identical assets or liabilities in active markets.
Level 2: Observable prices based on inputs not quoted in active markets but are corroborated by market data.
Level 3: Unobservable inputs that are supported by little or no market activity

Transfers among Level classifications are recognized as of the actual date of the events or change in circumstances that caused the transfers. The carrying value of the Company's financial instruments, including cash equivalents, accounts receivable, inventory, accounts payable and other current assets and current liabilities approximates fair value due to their short maturities.

Concentration of Credit Risk. Financial instruments that potentially subject the Company to a concentration of credit risk consist of cash equivalents, short-term investments, accounts receivables and other receivables. The Company's cash equivalents and short-term investments are held by financial institutions that management believes are of high-credit quality. Such investments and deposits may, at times, exceed federally insured limits. The Company performs credit evaluations of its channel partners' financial condition and generally does not require collateral for sales made on credit.

As of January 31, 2019 and 2018, one of the Company's customers accounted for 15% and 10%, respectively, of the Company's net accounts receivable balance.

Accounts Receivable. Accounts receivable are stated at invoice value less estimated allowances for doubtful accounts, product returns and customer sales incentives. The Company records its allowances for doubtful accounts based upon its assessment of several factors, including historical experience, aging of receivable balances and economic conditions. As of January 31, 2019 and 2018, the Company recorded allowances for doubtful accounts of $0.1 million and $0.4 million, respectively. (See "Sales Allowances" above regarding allowances for product returns and sales incentives.)

Inventories. Inventories, which consist of raw materials and finished goods, include the cost to purchase manufactured products, allocated labor and overhead. Inventories are stated at the lower of actual cost or market on a first-in, first-out basis. The Company writes down its inventory for estimated excess and obsolete inventory based upon management's assessment of future demand and market conditions, and establishes a new cost basis for the inventory. Adjustments to reduce inventory to net realizable value are recognized as a component of cost of revenue in the consolidated statement of operations.

Customer Acquisition Costs. Sales commissions and other costs paid to internal sales personnel, third-party sales entities and value-added resellers are considered incremental and recoverable costs of obtaining customer contracts. (The resellers are selling agents for the Company and earn sales commissions which are directly tied to the value of the contracts that the Company enters with the end-user customers.) Under Topic 606, beginning fiscal 2019, these costs are capitalized and amortized on a systematic basis over the expected period of benefit of five years, calculated based on both qualitative and quantitative factors, such as expected subscription term and expected renewal periods of its customer contracts, product life cycles and customer attrition. Amortization expense is included in sales and marketing expenses in the consolidated statement of operations. The Company pays sales commissions on initial contracts and contracts for increased purchases with existing customers (expansion contracts). The Company does not pay sales commissions for contract renewals. The Company periodically evaluates whether there have been any changes in its business, the market conditions in which it operates or other events which would indicate that its amortization period should be changed or if there are potential indicators of impairment.

As of January 31, 2019, total deferred commission costs on the consolidated balance sheet was approximately $4.5 million, of which the $1.1 million current portion was included in other current assets and the $3.4 million non-current portion was

Ooma, Inc.

Notes to Consolidated Financial Statements

included in other assets. During fiscal 2019, amortization expense was $0.7 million and there was no impairment loss in relation to the costs capitalized.

Website Development Costs. The Company capitalizes certain costs to develop its websites when preliminary development efforts are successfully completed, management has authorized and committed project funding, and it is probable that the project will be completed and the software will be used as intended. Such costs are amortized on a straight-line basis over the estimated useful life of approximately two years. Costs related to preliminary project activities and post-implementation activities are expensed as incurred. The Company capitalized website development costs of approximately $0.8 million, $0.6 million and $0.4 million in fiscal 2019, 2018 and 2017, respectively.

Property and Equipment. Property and equipment are stated at cost, less accumulated depreciation. Depreciation is computed over the estimated useful lives of the assets, using the straight-line method, generally three to five years. Leasehold improvements are amortized over the shorter of the lease term or estimated useful lives of the respective assets. Repairs and maintenance costs that do not extend the life or improve the asset are expensed as incurred.

Goodwill. Goodwill represents the excess of the purchase price over the fair value of the net assets acquired in a business combination. Goodwill is evaluated for impairment annually in the fourth quarter of its fiscal year, or more frequently if indicators of potential impairment arise. The Company has a single reporting unit and consequently evaluates goodwill for impairment based on an evaluation of the fair value of the Company as a whole. No impairment has been recognized for any of the periods presented.

Intangible Assets. Acquired intangible assets other than goodwill, which primarily consist of developed technology and customer relationships, are amortized over their useful lives unless the lives are determined to be indefinite. For intangible assets acquired in a business combination, the estimated fair values of the assets received are used to establish their recorded values. Valuation techniques consistent with the market approach, income approach and/or cost approach are used to measure fair value.

Impairment of Long-Lived Assets. Long-lived assets, such as property and equipment, capitalized website development costs, and intangible assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to estimated undiscounted future cash flows expected to be generated by the asset. If the carrying amount of an asset exceeds its estimated future cash flows, an impairment charge is recognized by the amount by which the carrying amount of the asset exceeds the fair value of the asset. The Company has not recorded any material impairment charges.

Research and Development. Research and development costs, including new product development, are charged to operating expenses as incurred in the consolidated statements of operations. Research and development included personnel-related costs (including stock-based compensation), allocated costs of facilities and information technology, supplies, software tools and product certification.

Advertising. Advertising costs are included in sales and marketing and expensed as incurred, except for production costs associated with television and radio advertising, which are expensed on the first date of airing. Advertising costs were $13.7 million, $14.4 million and $16.5 million for fiscal 2019, 2018 and 2017, respectively.

Advertising payments to the Company’s channel partners are recorded as a reduction in revenue. These costs totaled $0.3 million annually for each of the fiscal years 2019, 2018 and 2017, respectively.

Stock-Based Compensation. Stock-based compensation expense for all stock-based awards granted to employees is measured at the grant date based on the fair value of the equity award and is recognized as expense over the requisite service period, which is generally the vesting period. The fair value of options granted is estimated on the date of grant using the Black-Scholes option pricing model. The fair value of each RSU granted is determined using the fair value of the Company’s common stock on the date of grant. The fair value of each stock purchase right under the Company's ESPP is calculated based on the closing price of the Company's stock on the date of grant and the value of a call and put option is estimated using the Black-Scholes pricing model. See Note 7: Stockholders’ Equity and Note 8: Stock-based Compensation below for additional information.

Ooma, Inc.

Notes to Consolidated Financial Statements

Income Taxes. Income taxes are recorded using the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and operating loss and tax credit carryforwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income (or loss) in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date.

Valuation allowances are established when necessary to reduce deferred tax assets to the amount expected to be realized. A tax position is recognized when it is more-likely-than-not that the tax position will be sustained upon examination, including resolution of any related appeals or litigation processes. A tax position that meets the more likely than not recognition threshold is measured at the largest amount of benefit that is greater than 50% likely of being realized upon ultimate settlement with a taxing authority.

Interest and penalties associated with unrecognized tax benefits are classified as income tax expense. The Company had no interest or penalty accruals associated with uncertain tax benefits in its consolidated balance sheets and statements of operations for any periods presented.

Foreign currency. The U.S. dollar is the functional currency of the Company's foreign subsidiaries. Foreign currency remeasurement and transaction gains and losses are included in other expense, net and have not been material for any periods presented.

Ooma, Inc.

Notes to Consolidated Financial Statements

Note 3: Recent Accounting Standards

Adopted Accounting Standards

Revenue Recognition. In May 2014, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") 2014-09, Revenue from Contracts with Customers (Topic 606), which superseded the revenue recognition guidance in Topic 605 with a comprehensive revenue measurement and recognition standard and expanded disclosure requirements. Topic 606 also includes Subtopic 340-40, Other Assets and Deferred Costs – Contracts with Customers, which requires the deferral of incremental costs to acquire customer contracts, including sales commissions. The Company adopted the new standard effective February 1, 2018 under the modified retrospective method applied to only those contracts that were not completed as of the adoption date. The Company's financial results for fiscal 2019 are presented in accordance with the provisions under Topic 606. Comparative prior period amounts have not been adjusted and continue to be reported under the historic accounting standards in effect for the periods presented. The Company has implemented policies, processes and controls to support the standard's measurement and disclosure requirements.

The new standard impacted revenue recognition timing on product sales made to certain channel partners, whereby revenue is now recognized when the Company delivers product to the channel partner (sell-in basis) rather than deferring recognition until resale by the partner to the end customer (sell-through basis). The adoption of the new standard also changed the treatment of sales commissions, whereby the Company now capitalizes its incremental costs of acquiring customer contracts and amortizes these deferred costs over the expected period of benefit. Previously, all sales commissions were expensed as incurred. See Note 2: Significant Accounting Policies above for further discussion of the Company's updated significant accounting policies.

As a result of adopting Topic 606, the February 1, 2018 beginning balance of accumulated deficit increased by $0.3 million, reflecting a net decrease to deferred revenue of approximately $1.0 million and adjustments to deferred inventory costs and other related accounts of approximately $1.3 million. Deferred inventory costs represented the inventory that was shipped to a channel partner and had not been sold through to an end-customer. Deferred commissions related to open contracts as of the adoption date were immaterial.

The following tables summarize the impact of adopting Topic 606 on the Company's consolidated statement of operations and balance sheet (in thousands, except per share amounts):

Statement of Operations:	Fiscal Year Ended January 31, 2019		
	As Reported	Effect of Change	Balances without adoption of Topic 606
Total revenue	$129,231	$(169)	$129,062
Total cost of revenue	52,740	(493)	52,247

Gross profit	76,491	324	76,815
Sales and marketing expense	40,761	4,468	45,229
Net loss	(14,572)	(4,144)	(18,716)
Net loss per share - basic and diluted	(0.74)	(0.21)	(0.95)

Balance Sheet:	As of January 31, 2019		
	As Reported	Effect of Change	Balances without adoption of Topic 606
Accounts receivable, net	$3,723	$49	$3,772
Other current assets [1]	5,450	308	5,758
Other assets [2]	5,379	(3,387)	1,992
Accrued expenses [3]	19,048	(732)	18,316
Deferred revenue	15,443	1,554	16,997
Accumulated deficit	(105,795)	(3,852)	(109,647)

[1] Other current assets include deferred commissions and deferred inventory costs.

[2] Other assets include non-current deferred commissions.

[3] Accrued expenses include certain accrued sales incentives.

The adoption of the new standard did not have any impact on net cash flows for operating, investing and financing activities in the consolidated statements of cash flows.

Ooma, Inc.

Notes to Consolidated Financial Statements

Business Combinations. The Company adopted ASU 2017-01, Business Combinations (Topic 805) – Clarifying the Definition of a Business in the first quarter of fiscal 2019. The updated standard provided guidance to assist entities in evaluating when a set of transferred assets and activities constitutes a business. To be considered a business, an acquisition would have to include an input and a substantive process that together significantly contributes to the ability to create outputs. The adoption of this standard had no impact on the Company's consolidated financial statements.

Accounting Standards Not Yet Adopted

Leases. In February 2016, the FASB issued ASU 2016-02, Leases (Topic 842) which supersedes the lease accounting guidance in Topic 840 and requires that the Company recognize operating leased assets and corresponding liabilities on the balance sheet and provide enhanced disclosure of lease activity.

The Company is adopting Topic 842 effective February 1, 2019 using the optional transition method, whereby it will not be adjusting comparative period financial statements for the new standard. The Company has substantially completed its process to identify its population of lease arrangements and its evaluation of each arrangement under the guidance. The Company has elected the package of practical expedients, which among other things, allows the Company to maintain its existing classification of its current leases. The Company has also elected as an accounting policy not to separate non-lease components from lease components and instead to account for these components as a single component. Additionally, the Company has made a policy election to not recognize leased assets and liabilities on the balance sheet for leases with an initial term of 12 months or less.

The Company expects to record right-of-use leased assets and corresponding liabilities between $3.8 million and $4.8 million at the beginning of the first quarter of fiscal 2020. The Company does not expect the adoption to have a material impact on its consolidated statement of operations and its consolidated statement of cash flows. The Company is in the process of implementing policies and controls to support the standard's measurement and disclosure requirements.

Stock-based Compensation. In June 2018, the FASB issued ASU 2018-07, Compensation – Stock Compensation (Topic 718): Improvements to Nonemployee Share-Based Payment Accounting, which expands the scope of Topic 718 to include and simplify the accounting for share-based payments issued to nonemployees. Under the amended standard, most of the guidance on nonemployee share-based payments would be aligned with the requirements for share-based payments granted to employees. The new standard is effective for the Company beginning in fiscal 2020. The Company does not expect the adoption to have a material impact on its consolidated financial statements.

Fair Value Measurement. In August 2018, the FASB issued ASU 2018-13, Fair Value Measurement (Topic 820): Disclosure Framework – Changes to the Disclosure Requirements for Fair Value Measurements, which expands the disclosure requirements for Level 3 fair value measurements as well as eliminates, adds and modifies certain other disclosure requirements for fair value measurements. The amendment is effective for the Company beginning in fiscal 2020. The Company is evaluating the effect of adoption on its consolidated financial statements.

Ooma, Inc.

Notes to Consolidated Financial Statements

Note 4: Fair Value Measurements

The Company's financial assets and liabilities that are measured at fair value on a recurring basis by level within the fair value hierarchy were as follows (in thousands):

	Balance as of January 31, 2019				Balance as of January 31, 2018			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Assets:								
Cash and cash equivalents:								
Money market funds	$5,951	$—	$—	$5,951	$554	$—	$—	$554
Commercial paper	—	5,429	—	5,429	—	2,844	—	2,844
Total cash equivalents	$5,951	$5,429	$—	$11,380	$554	$2,844	$—	$3,398
Cash				3,990				1,085
Total cash and cash equivalents				$15,370				$4,483
Short-term investments:								
U.S. government securities	$11,087	$—	$—	$11,088	$20,867	$—	$—	$20,867
Corporate debt securities	—	4,735	—	4,735	—	13,895	—	13,895
Commercial paper	—	8,253	—	8,253	—	9,272	—	9,272
U.S. agency securities	—	990	—	990	—	1,996	—	1,996
Asset-backed securities	—	2,187	—	2,187	—	1,277	—	1,277
Total short-term investments	$11,087	$16,165	$—	$27,253	$20,867	$26,440	$—	$47,307
Liabilities:								
Contingent consideration	$—	$—	$200	$200	$—	$—	$311	$311
Total liabilities	$—	$—	$200	$200	$—	$—	$311	$311

The Company classifies its cash equivalents and short-term investments within Level 1 or Level 2 because it uses quoted market prices or alternative pricing sources and models utilizing market observable inputs to determine their fair value. The fair value of Level 2 financial instruments were obtained from an independent pricing service, which used quoted market prices for identical or comparable instruments or model driven valuations that used observable market data or inputs corroborated by observable market data. Commercial paper was valued using market prices, if available, adjusted for accretion of the purchase price to face value at maturity. There were no transfers of financial assets or liabilities between levels during the periods presented.

For the periods presented, the amortized cost of cash equivalents and marketable securities approximated their fair value and there were no material realized or unrealized gains or losses, either individually or in the aggregate. No investments in the Company's portfolio were other-than-temporarily impaired.

Level 3 liabilities consisted of contingent consideration related to the Company's acquisitions of Butterfleye in December 2017 and Voxter in March 2018 that were estimated using an income-based approach. Key inputs included

assumptions regarding the achievement of certain performance milestones and discount rates consistent with the level of risk and economy in general. Contingent consideration is classified as a component of accrued expenses on the consolidated balance sheets and changes in fair value are recorded to general and administrative expenses in the consolidated statements of operations.

Changes in the Level 3 fair value category for the periods presented were as follows (in thousands):

	Contingent Consideration
Balance at January 31, 2017	$ —
Add: contingent consideration from Butterfleye acquisition	311
Balance at January 31, 2018	311
Add: contingent consideration from Voxter acquisition	231
Changes in fair value	(342)
Balance at January 31, 2019	$ 200

Ooma, Inc.

Notes to Consolidated Financial Statements

The following table classifies the Company's short-term investments by contractual maturities (in thousands):

	As of January 31, 2019		As of January 31, 2018	
	Amortized Value	Fair Value	Amortized Value	Fair Value
One year or less	$27,263	$27,253	$43,227	$43,172
Over one year and less than two years	—	—	4,164	4,135
Total	$27,263	$27,253	$47,391	$47,307

Note 5: Goodwill and Acquired Intangible Assets

The carrying amount of goodwill was $3.9 million and $1.9 million as of January 31, 2019 and 2018, respectively. The Company recognized $2.1 million in intangibles and $1.9 million in goodwill following the acquisition of Voxter in March 2018. See Note 12: Acquisitions and Divestitures below. Goodwill increased $0.1 million subsequent to this acquisition based on a deferred tax liability adjustment recorded in the fourth quarter of fiscal 2019.

The gross value, accumulated amortization and carrying values of intangible assets were as follows (in thousands):

	Estimated life	As of January 31, 2019			As of January 31, 2018		
		Gross		Carrying	Gross		Carrying
	(in years)	Value	Accumulated Amortization	Value	Value	Accumulated Amortization	Value
Developed technology	5	$2,716	$ (1,121)	$ 1,595	$1,568	$ (630)	$ 938
Customer relationships	5	902	(157)	745	—	—	—
Trade name	5	451	(166)	285	262	(81)	181
Patents and licenses	3.8-7	714	(704)	10	714	(698)	16
User relationships	N/A	—	—	—	458	(458)	—
Total amortizable assets		4,783	(2,148)	2,635	3,002	(1,867)	1,135
In-process R&D [1]	N/A	—	—	—	157	—	157
Total intangible assets		$4,783	$ (2,148)	$ 2,635	$3,159	$ (1,867)	$ 1,292

[1] Reclassified to developed technology in the fourth quarter of fiscal 2019.

Amortization expense was $0.7 million, $0.3 million and $0.3 million in fiscal 2019, 2018 and 2017, respectively. At January 31, 2019, the estimated future amortization expense for intangible assets is as follows (in thousands):

Fiscal Years Ending January 31,	Total
2020	691

2021	642
2022	638
2023	612
2024 and thereafter	52
Total	$2,635

Ooma, Inc.

Notes to Consolidated Financial Statements

Note 6: Balance Sheet Components

The following sections and tables provide details of selected balance sheet items (in thousands):

Inventories

	As of January 31,	
	2019	2018
Finished goods	$7,567	$5,517
Raw materials	2,550	562
Total inventory	$10,117	$6,079

Other current assets

	As of January 31,	
	2019	2018
Prepaid expenses	$2,681	$1,921
Deferred sales commissions [1]	1,081	—
Deferred inventory costs [1]	334	1,061
Other current assets	1,354	1,415
Total other current assets	$5,450	$4,397

[1] Changes in deferred inventory costs and deferred sales commissions were attributable to the Company's adoption of Topic 606 on February 1, 2018.

See Note 2: Significant Accounting Policies above.

Property and equipment, net

	Estimated Life	As of January 31,	
	(in years)	2019	2018
Computer equipment and software	3-4	$7,109	$7,180
Website development costs	2	3,323	2,579
Machinery and equipment	3-5	1,190	1,473
Office furniture and fixtures	5	114	88
Leasehold improvements		449	651

	Shorter of estimated life or remaining lease term		
Total property and equipment		$12,185	$11,971
Less: accumulated depreciation and amortization		(7,622)	(7,239)
Property and equipment, net		$4,563	$4,732

Depreciation and amortization of property and equipment (including website development) totaled $2.3 million, $2.0 million and $1.6 million in fiscal 2019, 2018 and 2017, respectively.

Other long-term assets

	As of January 31, 2019	2018
Deferred sales commissions [1]	$3,387	$—
Convertible note receivable	1,300	—
Other assets	692	336
Total other assets	$5,379	$336

[1] Changes in deferred sales commissions were attributable to the Company's adoption of Topic 606 on February 1, 2018. See Note 2: Significant Accounting Policies above.

Ooma, Inc.

Notes to Consolidated Financial Statements

In December 2018, the Company invested $1.3 million in cash to Global Telecomm Corporation (“GTC”), a small privately-held technology company, in exchange for an 18-month convertible promissory note, bearing interest at 10% annually. The principal and unpaid accrued interest on the promissory note will convert to shares of GTC common or preferred stock upon the occurrence of certain future events. The Company has partnered with GTC on certain research and development efforts. The Company is required to consolidate the assets and liabilities of variable interest entities (“VIEs”) in which it is deemed to be the primary beneficiary. The primary beneficiary is the party that has the power to make the decisions that most significantly affect the economic performance of the VIE and has the obligation to absorb losses or the right to receive benefits that could potentially be significant to the VIE. GTC is considered a VIE because, among other factors, it lacks sufficient equity to permit the entity to finance its activities without additional subordinated financial support from other parties. The Company’s convertible promissory note represents a variable interest. However, the Company does not participate in the day-to-day operating decisions or other decisions that would allow it to control GTC, and therefore, the Company is not considered the primary beneficiary and does not need to consolidate GTC’s financial statements. As of January 31, 2019, the Company’s maximum exposure to loss was equal to the carrying value of its convertible promissory note. For all periods presented, the Company had no other variable interests in VIEs.

Accrued expenses

	As of January 31,	
	2019	2018
Payroll and related expenses	$7,926	$5,423
Regulatory fees and taxes	5,645	5,239
Acquisition-related consideration	925	353
Other	4,552	3,762
Total accrued expenses	$19,048	$14,777

Deferred revenue

Deferred revenue primarily consists of billings or payments received in advance of meeting revenue recognition criteria. The Company’s communications services are sold as monthly or annual subscriptions, payable in advance. The Company recognizes deferred services revenue on a ratable basis over the term of the contract as the services are provided. For all arrangements, any revenue that has been deferred and is expected to be recognized beyond one year is classified in long term liabilities on the consolidated balance sheets.

	As of January 31,	
	2019	2018
Deferred revenue:		
Subscription and services	$15,682	$14,568
Product and other	68	1,416
Total deferred revenue	15,750	15,984
Less: current deferred revenue	15,443	15,556
Noncurrent deferred revenue included in other long-term liabilities	$307	$428

During fiscal 2019, the Company recognized revenue of approximately $14.2 million pertaining to amounts deferred as of January 31, 2018. As of January 31, 2019, the Company's deferred revenue balance was primarily composed of subscription contracts that were invoiced during fiscal 2019.

Remaining Performance Obligations. As of January 31, 2019, revenue of approximately $0.5 million is expected to be recognized from remaining performance obligations for open contracts with an original expected length of more than one year. This amount includes both long-term deferred revenue and non-cancelable contract amounts that will be invoiced and recognized as revenue in future periods. The Company expects to recognize revenue of approximately $0.2 million over the next 12 months and the remainder thereafter.

Ooma, Inc.

Notes to Consolidated Financial Statements

Note 7: Stockholders' Equity

Common Stock Reserved for Future Issuance

The Company had shares of common stock reserved for issuance as follows:

	As of January 31,	
	2019	2018
Restricted stock units outstanding	1,925,311	1,966,895
Options to purchase common stock	1,691,272	1,801,232
Shares available for future issuance under stock plans	1,141,482	928,024
Shares reserved under ESPP	249,933	598,033
Warrants to purchase common stock	1,107	4,881
Total shares reserved for issuance	5,009,105	5,299,065

2015 Equity Incentive Plan ("2015 Plan")

The Company's 2015 Plan provides for the grant of incentive stock options to its employees and any of its subsidiary corporations' employees, and for the grant of RSUs, non-statutory stock options, stock appreciation rights, restricted stock, performance units and performance shares to its employees, directors and consultants and its subsidiary corporations' employees and consultants.

Stock Options. Options to purchase shares of common stock may be granted to employees, directors and consultants. These options vest from date of grant to up to five years and expire ten years from the date of grant. Options may be exercised anytime during their term in accordance with the vesting/exercise schedule specified in the recipient's stock option agreement and in accordance with the plan provisions. Shares issued upon exercise prior to vesting, are subject to a right of repurchase, which lapses according to the original option vesting schedule.

Stock option activity for fiscal 2019 was as follows:

	Number of Shares	Weighted Average Exercise Price Per Share	Weighted Average Contractual Term (in years)	Aggregate Intrinsic Value (in thousands)
Balance as of January 31, 2018	1,801,232	$ 6.09	6.2	$ 8,270
Granted	100,000	$ 11.75		
Exercised	(185,535)	6.03		
Canceled	(24,425)	9.48		
Balance as of January 31, 2019	1,691,272	$ 6.39	5.4	$ 14,755
Vested and exercisable - January 31, 2019	1,525,946	$ 5.86	5.1	$ 14,112

The aggregate intrinsic value of vested options exercised during fiscal 2019, 2018 and 2017 was $1.3 million, $0.3 million and $1.3 million, respectively. The weighted average grant date fair value of options granted during fiscal 2019, 2018 and 2017 was $5.28 per share, $4.81 per share and zero , respectively. No stock options were granted during fiscal 2017.

Restricted Stock Units. RSUs may be granted to employees, non-employee board members and consultants. These RSUs vest ratably over a period ranging from one to four years, and are subject to the participant's continuing service to the Company over that period. Until vested, RSUs do not have the voting and dividend participation rights of common stock and the shares underlying the awards are not considered issued and outstanding.

Ooma, Inc.

Notes to Consolidated Financial Statements

RSU activity for fiscal 2019 and 2018 was as follows:

	Number of Shares	Weighted Average Grant-Date Fair Value Per Share
Balance as of January 31, 2017	1,859,196	$ 7.65
Granted	1,222,605	10.17
Vested	(936,869)	8.54
Canceled	(178,037)	8.77
Balance as of January 31, 2018	1,966,895	8.85
Granted	1,176,647	11.96
Vested	(921,533)	9.12
Canceled	(296,698)	9.70
Balance as of January 31, 2019	1,925,311	$ 10.49

Vested RSUs included shares of common stock that the Company withheld on behalf of certain employees to satisfy the minimum statutory tax withholding requirements, as defined by the Company. The Company withheld an aggregate amount of $2.9 million, $2.4 million and $1.6 million in fiscal 2019, 2018 and 2017, respectively, which were classified as financing cash outflows in the consolidated statements of cash flows. The Company canceled and returned these shares to the 2015 Plan, which are available under the plan terms for future issuance.

Employee Stock Purchase Plan

The ESPP allows eligible employees to purchase shares of common stock at a discount through payroll deductions of up to 15% of their eligible compensation (subject to plan limitations). The ESPP provides for a 24-month offering period comprised of four purchase periods of approximately six months. Employees are able to purchase shares at 85% of the lower of the fair market value of the Company’s common stock as of the first date or the ending date of each six-month offering period. The offering periods are scheduled to start on the first trading day on or after March 15 and September 15 of each year.

During fiscal 2019, 2018 and 2017, employees purchased 0.3 million, 0.3 million and 0.2 million shares, respectively, at a weighted purchase price of $6.82, $5.48 and $5.01 per share, respectively.

Ooma, Inc.

Notes to Consolidated Financial Statements

Note 8: Stock-Based Compensation

Total stock-based compensation recognized for stock-based awards in the consolidated statements of operations was as follows (in thousands):

	Fiscal Year Ended January 31,		
	2019	2018	2017
Cost of revenue	$920	$1,102	$1,026
Sales and marketing	1,442	1,818	1,438
Research and development	3,762	3,972	3,586
General and administrative	4,246	4,029	3,722
Total stock-based compensation expense	$10,370	$10,921	$9,772

The income tax benefit related to stock-based compensation expense was zero for all periods presented due to a full valuation allowance on the Company's deferred tax assets (see Note 9: Income Taxes below). As of January 31, 2019, there was $20.2 million of unrecognized stock-based compensation expense related to unvested RSUs, stock options and ESPP that will be recognized on a straight-line basis over the remaining weighted-average vesting period of approximately 2.5 years.

Fair value disclosures. The fair value of stock options granted and purchased under the Company's ESPP was estimated using the Black-Scholes option pricing model. The expected term of options granted to employees was based on the simplified method as the Company does not have sufficient historical exercise data, and the expected term of the ESPP was based on the contractual term. As the Company does not have a significant trading history for its common stock, expected volatility was determined using a combination of the average historical volatility of a group of comparable publicly traded companies and its own common stock. Risk-free interest rate was based on the yields of U.S. Treasury securities with maturities similar to the expected term. Dividend yield was zero as the Company does not have any history of, nor plans to make, dividend payments.

The fair value of employee stock options and ESPP was estimated using the Black–Scholes model with the following assumptions, as applicable:

	Fiscal Year Ended January 31,		
	2019	2018	2017
Stock Options:			
Expected volatility	43%	47%	NA
Expected term (in years)	6.1	6.1	NA
Risk-free interest rate	2.7	1.8%-2.1%	NA
Dividend yield	NA	NA	NA

	Fiscal Year Ended January 31,		
	2019	2018	2017
ESPP:			
Expected volatility	39%-56%	35%-41%	37%-50%
Expected term (in years)	0.5-2.0	0.5-2.0	0.5-2.0
Risk-free interest rate	2.0%-2.8%	0.9%-1.4%	0.5%-1.0%
Dividend yield	NA	NA	NA

Ooma, Inc.

Notes to Consolidated Financial Statements

Note 9: Income Taxes

Income tax benefit differed from the amount computed by applying the federal blended statutory income tax rate of 21% to pretax loss as a result of the following (in thousands):

	Fiscal Year Ended January 31,					
	2019	Rate	2018	Rate	2017	Rate
Federal tax at statutory rate	$(3,141)	21 %	$(4,316)	33 %	$(4,403)	34 %
Impact of U.S. tax law change	58	—	11,667	(89)%	—	—
Change in valuation allowance	5,603	(37)%	(6,786)	52 %	4,881	(38)%
Research and development credit	(2,155)	14 %	(1,080)	8 %	(738)	6 %
State taxes	(494)	3 %	(396)	3 %	(230)	2 %
Stock-based compensation	(991)	7 %	387	(3)%	387	(3)%
Permanent tax adjustment	843	(6)%	527	(4)%	103	(1)%
Impact of foreign operations	(105)	1 %	—	—	—	—
Other	(2)	—	—	—	—	—
Total	$(384)	(3)%	$3	0 %	$—	0 %

Income tax expense differs from the amount computed by applying the statutory federal income tax rate primarily as the result of changes in the valuation allowance.

The tax effects of temporary differences that give rise to significant portions of the Company's deferred tax assets and liabilities related to the following (in thousands):

	As of January 31,	
	2019	2018
Deferred tax assets:		
Accruals and reserves	$1,549	$2,281
Stock-based compensation	1,071	1,030
Intangible assets amortization	(21)	61
Deferred revenue	73	125
Net operating loss carry forwards	26,277	22,047
Tax credit carryover	5,977	3,810
Gross deferred tax assets	34,926	29,354
Valuation allowance	(34,309)	(28,657)
Net deferred tax assets	$617	$697
Deferred tax liabilities:		
Acquired intangible assets	$(607)	$(313)
Fixed assets depreciation	(154)	(384)
Gross deferred tax liabilities	$(761)	$(697)
Total deferred tax liabilities	$(144)	$—

On December 22, 2017, the Tax Cuts and Jobs Act (“Tax Act”) was enacted, reducing the corporate income tax rate from 35% to 21%, effective January 1, 2018. The carrying value of the Company's deferred tax assets was also determined by the enacted U.S. corporate income tax rate. Consequently, any changes in the U.S. corporate income tax rate have impacted the carrying value of the Company’s deferred tax assets. Under the new corporate income tax rate of 21%, deferred income taxes decreased, with a corresponding decrease to the valuation allowance. Therefore, the Tax Act had no impact on the Company's fiscal 2019 net loss. As of January 31, 2019, the Company has completed its accounting of the tax effects from the enactment of the Tax Act.

Ooma, Inc.

Notes to Consolidated Financial Statements

The Company has a Section 162(m) stock awards limitation on deferred tax assets of $0.1 million. Effective for tax years beginning on January 1, 2018 or later, which is considered fiscal 2019 for the Company, tax reform legislation modifies Section 162(m) rules to repeal the performance-based compensation and commission exceptions to the $1.0 million deduction limitation. However, written binding contracts in effect on November 2, 2017, including plans where the right to participate in the plan is part of a written contract with an executive, are grandfathered and not subject to limitation under Section 162(m). The Company believes some of its contracts will not be subject to limitation and will continue to monitor the deferred tax assets related to deferred compensation expense and share-based compensation expense on a going forward basis.

Management believes that, based on available evidence, both positive and negative, it is more likely than not that the deferred tax assets will not be utilized, such that a full valuation allowance has been recorded. The valuation allowance for deferred tax assets was $34.3 million, $28.7 million and $34.9 million as of January 31, 2019, 2018 and 2017, respectively. The net change in the total valuation allowance for fiscal 2019 and 2018 was an increase of $5.7 million and a decrease of $6.2 million, respectively.

As of January 31, 2019, the Company had approximately $99.0 million and $71.8 million of net operating loss (“NOL”) carryforwards available to offset future taxable income for both federal and state purposes, respectively. If not utilized, these available carryforward losses will expire in various amounts for federal and state tax purposes beginning in 2030. In addition, the Company had approximately $5.8 million and $5.2 million of federal and state research and development tax credits, respectively, available to offset future taxes. If not utilized, the available federal credits will begin to expire in 2030. California state research and development tax credits can be carried forward indefinitely.

Uncertain Tax Positions

The Company has unrecognized tax benefits (“UTBs”) of approximately $4.4 million as of January 31, 2019. Deferred tax assets associated with these UTBs are fully offset by a valuation allowance. If recognized, these UTBs would not affect the effective tax rate before consideration of the valuation allowance. The following table summarizes the activity related to UTBs (in thousands):

Balance at January 31, 2017	$1,815
Increase related to prior year positions	139
Increase related to current year tax positions	871
Balance at January 31, 2018	2,825
Increase related to prior year positions	8
Increase related to current year tax positions	1,592
Balance at January 31, 2019	$4,425

The UTBs reported above, if recognized, would not affect the effective tax rate before consideration of the valuation allowance. The Company had no interest or penalty accruals associated with uncertain tax benefits in its balance sheets and statements of operations for both fiscal 2019 and 2018. The Company does not have any tax positions for which it is reasonably possible the total amount of gross unrecognized benefits will increase or decrease within

12 months of the year ended January 31, 2019. Because the Company has net operating loss and credit carryforwards, there are open statutes of limitations in which federal, state and foreign taxing authorities may examine the Company's tax returns for all years from 2009 through the current period.

Note 10: Retirement Plan

The Company offers a qualified 401(k) defined contribution plan to eligible full-time employees that provides for discretionary employer matching and profit-sharing contributions. Eligible employees may contribute up to a maximum of $18,500 per year, or $24,500 for employees over 50 years of age, and the Company matches 50% of the first 6% of each employee's eligible compensation that is contributed to the 401(k) plan. Contributions made by the Company vest 100% upon contribution. The Company's matching contributions to the plan, which are expensed immediately as compensation costs, were $0.7 million, $0.5 million and $0.4 million in fiscal 2019, 2018 and 2017, respectively.

Ooma, Inc.

Notes to Consolidated Financial Statements

Note 11: Commitments and Contingencies

Operating Leases. The Company's principal commitments consist of obligations under enforceable and legally binding lease agreements for office space and data center facilities. The Company assumes renewals in its determination of the lease term if the renewals are deemed to be reasonably assured. Rent expense was $2.5 million, $1.9 million and $2.0 million for fiscal 2019, 2018 and 2017, respectively.

As of January 31, 2019, future minimum rental commitments under non-cancelable operating leases were as follows (in thousands):

Fiscal Year Ending January 31,	Operating Leases
2020	$ 1,983
2021	1,408
2022	917
2023	266
2024 and thereafter	49
Total	$ 4,623

Purchase Commitments. As of January 31, 2019, non-cancelable purchase commitments with the Company's contract manufacturers were $4.2 million.

Legal Proceedings

In addition to the litigation matters described below, from time to time, the Company may be involved in a variety of other claims, lawsuits, investigations, and proceedings relating to contractual disputes, intellectual property rights, employment matters, regulatory compliance matters, and other litigation matters relating to various claims that arise in the normal course of business. Defending such proceedings is costly and can impose a significant burden on management and employees, the Company may receive unfavorable preliminary or interim rulings in the course of litigation, and there can be no assurances that favorable final outcomes will be obtained.

The Company determines whether an estimated loss from a contingency should be accrued by assessing whether a loss is deemed probable and can be reasonably estimated. The Company assesses its potential liability by analyzing specific litigation and regulatory matters using reasonably available information. The Company develops its views on estimated losses in consultation with inside and outside counsel, which involves a subjective analysis of potential results and outcomes, assuming various combinations of appropriate litigation and settlement strategies. Legal fees are expensed in the period in which they are incurred.

As of January 31, 2019, the Company does not have any accrued liabilities recorded for loss contingencies in its consolidated financial statements.

Berks County Litigation

On January 21, 2016, the County of Berks, Pennsylvania filed a lawsuit in the Berks County Court of Common Pleas naming the Company and 113 other telephone service providers as defendants (the "Berks County Litigation"), alleging breach of fiduciary duty, fraud, and negligent misrepresentation in connection with alleged violations of the Pennsylvania 911 Emergency Communication Services Act ("PA 911 Act") for failure to collect from subscribers and remit certain fees pursuant to the PA 911 Act. The plaintiff seeks a declaratory judgment that the Company must comply with the PA 911 Act, compensatory and punitive damages and such other relief as the court may deem proper. The Company believes that the plaintiff's claims are without merit since the Company has no employees, property or other indicia of a "substantial nexus" with the State of Pennsylvania. The Company intends to continue vigorously defending against this lawsuit. However, litigation is unpredictable and there can be no assurances that the Company will obtain a favorable final outcome or that it will be able to avoid unfavorable preliminary or interim rulings in the course of litigation that may significantly add to the expense of its defense and could result in substantial costs and diversion of resources.

Based on the Company's current knowledge, the Company has determined that the amount of any material loss or range of any losses that is reasonably possible to result from the Berks County Litigation is not estimable.

Ooma, Inc.

Notes to Consolidated Financial Statements

Deep Green Wireless Litigation

On June 8, 2016, plaintiff Deep Green Wireless LLC filed a complaint in the U.S. District Court for the Eastern District of Texas against Ooma, Inc., alleging infringement of U.S. Patent No. RE42,714 (the "Deep Green Wireless Patent", and such litigation, the "Deep Green Wireless Litigation"). The complaint seeks unspecified monetary damages, costs, attorneys' fees and other appropriate relief. In February 2017, the Court granted the Company's motion to transfer the case to the Northern District of California, which proceeding has been stayed pending the outcome of an inter partes review of the Deep Green Wireless Patent by the United States Patent Trial and Appeal Board ("PTAB"). The PTAB has granted the Company's motion for inter partes review of the Deep Green Wireless Patent, and on August 13, 2018 the PTAB heard oral arguments from each party. On December 17, 2018, the PTAB issued its final decision regarding the claims at issue in the Deep Green Wireless Litigation, in which it determined that all challenged claims of the '714 patent are obvious and unpatentable. Plaintiff failed to timely file an appeal to the PTAB by the January 16, 2019 deadline. Plaintiff filed its Notice of Appeal to the Federal Circuit on February 19, 2019 and the Company filed a Notice of Appeal on the same date to preserve its right to challenge the PTAB's final decision concerning combinations of prior art that the PTAB determined did not render the '714 patent obvious and unpatentable. If the Federal Circuit rules in favor of the Company on appeal, the Deep Green Wireless Litigation should be dismissed.

Based on the Company's current knowledge, and as confirmed by the PTAB's final decision, the Company has determined that the amount of any material loss or range of any losses that is reasonably possible to result from the Deep Green Wireless Litigation is not estimable.

Dolemba Litigation

On September 4, 2018, plaintiff Scott Dolemba filed a putative class action complaint against the Company in the U.S. District Court for the Northern District of Illinois, Eastern Division, alleging violations of the Telephone Consumer Protection Act and the Illinois Consumer Fraud Act. The complaint seeks unspecified monetary damages, costs, attorneys' fees and other appropriate relief. The parties are commencing the discovery phase. Based on the Company's current knowledge, the Company has determined that the amount of any loss resulting from the Dolemba Litigation is not estimable.

Oregon Tax Litigation

On August 30, 2016, the Oregon Department of Revenue (the "DOR") issued tax assessments against the Company for the Oregon Emergency Communications Tax (the "Tax"), which the DOR alleges Ooma should have collected from its subscribers in Oregon and remitted to the DOR during the period starting on January 1, 2013 and ending on March 31, 2016 (collectively, the "Assessments"). On November 28, 2016, the Company filed a complaint in the Oregon Tax Court, asserting that the Assessments against the Company is in violation of applicable Oregon law and are barred by the United States Constitution, and asking the Oregon Tax Court to abate the Assessments in full (the "Complaint", and such dispute, the "Oregon Tax Litigation"). On February 10, 2017, the DOR filed an answer to the Complaint, and during April 2017, the Company voluntarily participated in an informal discovery process by providing certain information and documents to the DOR. The Company filed a motion for summary judgment on September 29, 2017, and on December 13, 2017 the Court heard oral arguments from the parties regarding such motion.

On March 27, 2018, the Magistrate Division of the Oregon Tax Court issued its decision denying the Company's motion, and granting the DOR's motion for summary judgment. Notwithstanding such decision, the Company believes that the Commerce Clause of the United States Constitution bars the application of the Tax and the Assessments to the Company, since the Company has no employees, property or other indicia of a "substantial nexus" with the State of Oregon. On June 12, 2018, the Company filed an appeal of the Magistrate Divisions decision and on October 12, 2018, the Company filed its motion for summary judgment with the Regular Division of the Oregon Tax Court. The DOR filed its motion for summary judgment on November 16, 2018. On January 17, 2019, the Regular Division of the Oregon Tax Court heard oral argument on the parties' cross motions for summary judgment, and no decision has been issued. The Company will continue to vigorously litigate the Complaint in pursuit of the full abatement of the Assessments. However, litigation is unpredictable and there can be no assurances that the Company will obtain a favorable final outcome or that it will be able to avoid further unfavorable interim rulings in the course of litigation that may significantly add to the expense of its defense and could result in substantial costs and diversion of resources.

During fiscal 2019, the Company paid $0.6 million to the State of Oregon in connection with the Oregon Tax Litigation, of which $0.3 million was charged to the consolidated statement of operations as the amount of loss deemed probable and reasonably estimable, and $0.3 million was recorded as a receivable in other current assets on the consolidated balance sheet for interest and penalties that the Company expects will be refunded.

Ooma, Inc.

Notes to Consolidated Financial Statements

Secure Cam Litigation

On May 2, 2018, plaintiff Secure Cam, LLC filed a complaint in the U.S. District Court for the Northern District of California against the Company's wholly-owned subsidiary, Butterfleye, Inc., alleging infringement of four United States patents (No. 8,531,555, No. 8,350,928, No. 8,836,819 and No. 9,363,408) (the "Secure Cam Litigation"). On September 28, 2018, the Company and Secure Cam, LLC settled the complaint for an immaterial amount and the complaint was voluntarily dismissed with prejudice.

Securities Litigation

On January 14, 2016, Michael Barnett filed a purported stockholder class action in the San Mateo County Superior Court of the State of California (Case No. CIV536959) against the Company, certain of its officers and directors, and certain of the underwriters of the Company's IPO on July 17, 2015. Since that time two additional purported class actions making substantially the same allegations against the same defendants were filed, and on May 18, 2016, all three complaints were combined into a "consolidated complaint" filed in the same court (the "Securities Litigation"). The consolidated complaint purports to be brought on behalf of all persons who purchased shares of common stock in the Company's IPO in reliance upon the Registration Statement and Prospectus the Company filed with the SEC. The consolidated complaint alleges that the Company and the other defendants violated the Securities Act of 1933, as amended (the "Securities Act") by issuing the Registration Statement and Prospectus, which the plaintiffs allege contained material misstatements and omissions in violation of Sections 11, 12(a)(2) and 15 of the Securities Act. The plaintiffs seek class certification, compensatory damages, attorneys' fees and costs, rescission or a rescissory measure of damages, equitable and/or injunctive relief, and such other relief as the court may deem proper.

On November 29, 2017, the Superior Court dismissed the claims that were based on Sections 12(a)(2) and 15 of the Securities Act with prejudice, but denied the Company's motion to stay the case pending the United States Supreme Court's decision in Cyan v. Beaver Cnty. Emp. Ret.' Fund. On March 20, 2018, the United States Supreme Court published its decision in the Cyan case, holding that state courts have subject matter jurisdiction to hear claims brought under the Securities Act, such as the claims alleging violations of Section 11 of the Securities Act (the only remaining claims in the Securities Litigation) brought against the Company in the Superior Court. The parties are now engaged in the discovery phase of the litigation.

The Company believes the plaintiffs' claims are without merit and the Company is vigorously defending against the Securities Litigation and will continue to do so. However, litigation is unpredictable and there can be no assurances that the Company will obtain a favorable final outcome or that it will be able to avoid unfavorable preliminary or interim rulings in the course of litigation that may significantly add to the expense of its defense and could result in substantial costs and diversion of resources.

Based on the Company's current knowledge, the Company has determined that the amount of any material loss or range of any losses that is reasonably possible to result from the Securities Litigation is not estimable.

Indemnification

The Company enters into standard indemnification arrangements in the ordinary course of business. Pursuant to these arrangements, the Company indemnifies, holds harmless and agrees to reimburse the indemnified parties for losses suffered or incurred by the indemnified party, in connection with any trade secret, copyright, patent or other

intellectual property infringement claim by any third party with respect to the Company's technology. The term of these indemnification agreements is generally perpetual. The maximum potential amount of future payments the Company could be required to make under these agreements is not determinable because it involves claims that may be made against the Company in the future, but have not yet been made.

The Company has entered into indemnification agreements with its directors and officers that may require the Company to indemnify its directors and officers against liabilities that may arise by reason of their status or service as directors or officers, other than liabilities arising from willful misconduct of the individual. The maximum potential amount of future payments the Company could be required to make under these indemnification agreements is unlimited; however, the Company has director and officer insurance coverage that reduces the Company's exposure and enables the Company to recover a portion of any future amounts paid.

To date the Company has not incurred costs to defend lawsuits or settle claims related to these indemnification agreements. No liability associated with such indemnifications has been recorded to date.

Ooma, Inc.

Notes to Consolidated Financial Statements

Note 12: Acquisitions and Divestitures

Acquisition of Voxter, Inc.

On March 12, 2018, the Company completed its acquisition of Voxter, a privately-held provider of UCaaS offerings for mid-market and enterprise businesses.

The acquisition date fair value consideration transferred for Voxter was approximately $3.9 million, which consisted of the following (in thousands):

	Fair Value
Cash paid at closing	$2,510
Common stock issued at closing	390
Holdback payable [1]	780
Contingent consideration [2]	231
Total	$3,911

[1] Amounts to be paid in cash after a one-year holdback period.

[2] Fair value of deferred earn-out payments ($0.8 million gross) contingent upon the achievement of certain performance targets.

The final purchase price allocation included identifiable intangible assets of approximately $2.1 million, net assets acquired of approximately $0.4 million, deferred tax liabilities of approximately $0.4 million and residual goodwill of approximately $2.0 million, based on the best estimates of management. See Note 5: Goodwill and Acquired Intangible Assets above. Acquisition-related transaction costs charged to expense during fiscal 2019 were $0.4 million. The goodwill recognized was attributable primarily to expected synergies in the acquired technologies that may be leveraged by the Company in future Ooma Business offerings. Goodwill is not expected to be deductible for U.S. or Canadian income tax purposes.

The operating results of the acquired company have been included in the Company's consolidated financial statements from the date of acquisition. Actual and pro forma results of operations for the Voxter acquisition have not been presented because it does not have a material impact on the Company's consolidated results of operations.

Acquisition of Butterfleye, Inc.

On December 14, 2017, the Company completed its acquisition of Butterfleye, Inc., a privately-held company that offers intelligent, wire-free security cameras. The fair value of consideration transferred included $1.5 million cash as well as deferred earnout payments contingent upon the achievement of certain performance targets during the

Company’s fiscal 2019. The fair market value and gross amount of the earn-out payments were estimated to be approximately $0.3 million and $0.9 million, respectively, at the time of acquisition (see Note 4: Fair Value Measurements above for additional information regarding fair value).

The final purchase price allocation included identifiable intangible assets of approximately $1.1 million, net liabilities assumed of approximately $0.1 million and residual goodwill of approximately $0.8 million, based on the best estimates of management. See Note 5: Goodwill and Acquired Intangible Assets above. Acquisition-related transaction costs charged to expense were not material. The goodwill recognized was attributable primarily to expected synergies in the acquired technologies that may be leveraged by the Company in future home security product offerings. Goodwill is not expected to be deductible for U.S. income tax purposes.

The operating results of the acquired company have been included in the Company's consolidated financial statements from the date of acquisition. Actual and pro forma results of operations for the Butterfleye acquisition have not been presented because it does not have a material impact on the Company's consolidated results of operations.

Sale of Business Promoter

On August 15, 2017, the Company completed the sale of its Business Promoter service to a third-party entity. The Company did not receive any cash proceeds nor did it recognize any losses or gains from this transaction. The Company is entitled to receive a quarterly earn-out for the next five years up to a maximum of $4.5 million, subject to certain quarterly thresholds. During fiscal 2019 and 2018, the Company recorded earn-outs of approximately $0.3 million and $0.2 million, respectively, as a reduction to general and administrative expense in its consolidated statement of operations.

Ooma, Inc.

Notes to Consolidated Financial Statements

Note 13: Net Loss Per Share

Basic and diluted net loss per share of common stock is calculated by dividing the net loss allocable to common stockholders by the weighted average number of common shares outstanding during the period. Diluted net loss per share of common stock is the same as basic net loss per share because the effects of potentially dilutive securities are antidilutive because the Company reported net losses for all periods presented.

The following table sets forth the computation of basic and diluted net loss per share (in thousands, except share and per share data):

	Fiscal Year Ended January 31,		
	2019	2018	2017
Numerator			
Net loss	$(14,572)	$(13,121)	$(12,949)
Denominator			
Weighted-average common shares	19,799,781	18,570,128	17,490,448
Basic and diluted net loss per share	$(0.74)	$(0.71)	$(0.74)

Potentially dilutive securities of approximately 3.9 million, 4.1 million and 4.1 million were excluded from the computation of diluted net loss per share for fiscal 2019, 2018 and 2017, respectively. These dilutive securities included the Company's RSUs, stock options and shares to be purchased under the ESPP.

Note 14: Related Party Transactions

In October 2017, the Company entered into an office sublease agreement with Fiserv Solutions, LLC ("Fiserv") to lease approximately 33,400 rentable square feet of an office building located in Sunnyvale, California, the Company's new corporate headquarters. One of the members of the Company's board of directors is also a current member of Fiserv's board of directors. The Company incurred total rental and common area maintenance expenses of approximately $1.2 million and $0.2 million in fiscal 2019 and 2018, respectively, under this sublease agreement.

ITEM 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

None.

ITEM 9A. Controls and Procedures

Evaluation of Disclosure Controls and Procedures. Our Management, with the participation of our chief executive officer and our chief financial officer, evaluated the effectiveness of our disclosure controls and procedures as of January 31, 2019. The term “disclosure controls and procedures,” as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act, means controls and other procedures of a company that are 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 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. Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives, and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on the evaluation of our disclosure controls and procedures as of January 31, 2019, our chief executive officer and chief financial officer concluded that, as of such date, our disclosure controls and procedures were effective at the reasonable assurance level.

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 defined in Rule 13a-15(f) under the Exchange Act). Management conducted an assessment of the effectiveness of our internal control over financial reporting based on the criteria set forth in Internal Control – Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework). Based on the assessment, management has concluded that its internal control over financial reporting was effective as of January 31, 2019 to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements in accordance with U.S. GAAP. This annual report does not include an attestation report of our registered public accounting firm due to a transition period established by rules of the SEC for newly public companies under the JOBS Act.

Changes in Internal Control over Financial Reporting. There were no changes in our internal control over financial reporting identified in connection with the evaluation required by Rule 13a-15(d) and 15d-15(d) of the Exchange Act that occurred during the quarter ended January 31, 2019 that have 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 will be included under the caption “Directors, Executive Officers and Corporate Governance” in our Proxy Statement for the 2019 Annual Meeting of Stockholders to be filed with the SEC within 120 days of the fiscal year ended January 31, 2019, which we refer to as our 2019 Proxy Statement, and is incorporated herein by reference. The Company has a “Code of Ethics and Business Conduct for Employees, Officers and Directors” that applies to all of our employees, including our Principal Executive Officer, Principal Financial Officer, Principal Accounting Officer and our Board of Directors. A copy of this code is available on our website at http://investors.ooma.com. We intend to satisfy the disclosure requirement under Item 5.05 of Form 8-K regarding amendment to, or waiver from, a provision of our Code of Ethics and Business Conduct for Employees, Officers and Directors by posting such information on our investor relations website under the heading “Corporate Governance—Governance Documents” at http://investors.ooma.com.

ITEM 11. Executive Compensation

The information required by this item will be included under the captions “Executive Compensation” and under the subheadings “Board’s Role in Risk Oversight, “Outside Director Compensation,” and “Compensation Committee Interlocks and Insider Participation” under the heading “Directors, Executive Officers and Corporate Governance” in the 2019 Proxy Statement and is incorporated herein by reference.

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

The information required by this item will be included under the captions “Security Ownership of Certain Beneficial Owners and Management” and under the subheading “Potential Payments upon Termination or Change in Control” and “Equity Compensation Plan Information” under the heading “Executive Compensation” in the 2019 Proxy Statement and is incorporated herein by reference.

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

The information required by this item will be included under the captions “Certain Relationships and Related Transactions” and “Directors, Executive Officers and Corporate Governance—Director Independence” in the 2019 Proxy Statement and is incorporated herein by reference.

ITEM 14. Principal Accounting Fees and Services

The information required by this item will be included under the caption “Proposal Two: Ratification of Selection of Independent Registered Public Accountants” in the 2019 Proxy Statement and is incorporated herein by reference.

PART IV

ITEM 15. Exhibits, Financial Statement Schedules

Documents filed as part of this report are as follows:

(a) Consolidated Financial Statements
Our Consolidated Financial Statements are listed in the “Index” Under Part II, Item 8 of this Annual Report on Form 10-K

(b) Consolidated Financial Statement Schedules
All financial statement schedules are omitted because the information called for is not required or is shown either in the consolidated financial statements or in the notes thereto.

(c) Exhibits
The exhibits filed or incorporated by reference as part of this Annual Report on Form 10-K are listed in the Exhibit Index below. We have identified in the Exhibit Index each management contract and compensation plan filed as an exhibit to this Annual Report on Form 10-K in response to Item 15(a)(3) of Form 10-K.

The documents listed in the Exhibit Index of this report are incorporated by reference or are filed with this Annual Report on Form 10-K, in each case as indicated therein (numbered in accordance with Item 601 of Regulation S-K).

ITEM 16. Form 10-K Summary

None.

EXHIBITS

Exhibit Number	Description	Filed / Furnished / Incorporated by Reference from Form	Incorporated by Reference from Exhibit Number	Date Filed
3.1	Amended and Restated Certification of Incorporation	10-Q	3.1	9/11/2015
3.2	Amended and Restated Bylaws	10-Q	3.2	9/11/2015
4.1	Form of common stock certificate.	S-1/A	4.1	7/6/2015
4.2	Fourth Amended and Restated Investors' Rights Agreement, by and among the Registrant and certain of its stockholders dated as of April 24, 2015.	S-1	4.2	6/15/2015
4.3	Form of Indenture	S-3	4.2	12/16/2016
10.1+	2005 Stock Incentive Plan and forms of agreements thereunder.	S-1	10.1	6/15/2015
10.2+	2015 Equity Incentive Plan and forms of agreements thereunder.	S-1/A	10.2	7/6/2015
10.3+	2015 Employee Stock Purchase Plan and form of agreement thereunder.	S-1/A	10.3	7/6/2015
10.4+	Executive Incentive Bonus Plan.	S-1	10.4	6/15/2015
10.5+	Executive Change in Control and Severance Agreement by and between the Company and Eric B. Stang, dated June 9, 2015.	S-1	10.5	6/15/2015
10.6+	Form of Executive Change in Control and Severance Agreement	S-1	10.6	6/15/2015
10.7+	Offer Letter by and between the Company and James A. Gustke, dated July 30, 2010.	S-1	10.7	6/15/2015
10.8	Change in Control Letter Agreement between the Company and James A. Gustke, dated August 31,	10-K	10.8	4/11/2017

	2016.			
10.9	Form of Indemnification Agreement between the Registrant and each of its directors and executive officers.	S-1	10.8	6/15/2015

Exhibit Number	Description	Filed / Furnished / Incorporated by Reference from Form	Incorporated by Reference from Exhibit Number	Date Filed
10.10	Sublease Agreement, dated as of September 12, 2017 by and among the Company and Fiserv Solutions, LLC.	8-K	10.1	10/10/2017
10.11+	Form of Restricted Stock Unit Agreement under the 2015 Equity Incentive Plan (effective for grants made on or after March 14, 2018).	10-Q	10.1	06/08/2018
21.1	List of subsidiaries of the Registrant.	Filed herewith.		
23.1	Consent of Deloitte & Touche LLP, Independent Registered Public Accounting Firm.	Filed herewith.		
31.1	Certification pursuant to Section 302 of the Sarbanes-Oxley Act of 2002, Rule 13(a)-14(a)/15d-14(a), by President and Chief Executive Officer.	Filed herewith.		
31.2	Certification pursuant to Section 302 of the Sarbanes-Oxley Act of 2002, Rule 13(a)-14(a)/15d-14(a), by Chief Financial Officer.	Filed herewith.		
32.1	Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, by President and Chief Executive Officer.	Furnished herewith.		
32.2	Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, by Chief Financial Officer.	Furnished herewith.		
101.INS	XBRL Instance Document	Filed herewith.		
101.SCH	XBRL Taxonomy Extension Schema Document	Filed herewith.		
101.CAL		Filed herewith.		

	XBRL Taxonomy Extension Calculation Linkbase Document	
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document	Filed herewith.
101.LAB	XBRL Taxonomy Extension Label Linkbase Document	Filed herewith.
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document	Filed herewith.

+ Indicates a management contract or compensatory plan.

SIGNATURES

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

April 2, 2019 Ooma, Inc.

By: /s/ Eric B. Stang
Eric B. Stang
President and Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below hereby constitutes and appoints Eric B. Stang, Ravi Narula and Jenny C. Yeh, and each of them individually, as his or her attorney-in-fact, each with full power of substitution, for him or her in any and all capacities to sign any and all amendments to this Annual Report on Form 10-K, and to file the same with, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all that said attorney-in-fact, or his or her substitute, may do or cause to be done by virtue hereof.

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

Signature	Title	Date
/s/ Eric B. Stang	President and Chief Executive Officer and Chairman of the Board of Directors	April 2, 2019
Eric B. Stang	(Principal Executive Officer)	
/s/ Ravi Narula	Chief Financial Officer	April 2, 2019
Ravi Narula	(Principal Financial and Accounting Officer)	
/s/ Susan Butenhoff	Director	April 2, 2019
Susan Butenhoff		
/s/ Alison Davis	Director	April 2, 2019
Alison Davis		

/s/ Andrew Galligan	Director	April 2, 2019
Andrew Galligan		
/s/ Peter J. Goettner	Director	April 2, 2019
Peter J. Goettner		
/s/ Russell Mann	Director	April 2, 2019
Russell Mann		
/s/ William D. Pearce	Lead Director	April 2, 2019
William D. Pearce		