

UNITED STATES SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549  
**Form 10-K**

(Mark One)

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

For the Fiscal Year Ended December 31, 2019

OR

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

For the transition period from to

Commission file number 1-37745

**RealNetworks, Inc.**

(Exact name of registrant as specified in its charter)

Washington

(State of incorporation)

91-1628146

(I.R.S. Employer Identification Number)

1501 First Avenue South, Suite 600, Seattle, Washington, 98134

(206) 674-2700

(Address of principal executive offices, zip code, telephone number)

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

Title of Each Class	Trading Symbol (s)	Name of Each Exchange on Which Registered
Common Stock, Par Value \$0.001 per share	RNWK	The NASDAQ Stock Market
Preferred Share Purchase Rights	RNWK	The NASDAQ Stock Market

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

None

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

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

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

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

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

Large accelerated filer

Accelerated filer

Non-accelerated filer

Smaller reporting company

Emerging growth company

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

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

The aggregate market value of the common stock held by non-affiliates of the registrant was \$46 million on June 30, 2019, based on the closing price of the common stock on that date, as reported on the Nasdaq Global Select Market. Shares held by each executive officer and director have been excluded in that such persons may be deemed to be affiliates. In the case of 10% or greater shareholders, we have not deemed such shareholders to be affiliates unless there are facts and circumstances which would indicate that such shareholders exercise any control over our company. This determination of affiliate status is not necessarily a conclusive determination for other purposes.

The number of shares of the registrant's common stock outstanding as of March 9, 2020 was 38,228,328.

**DOCUMENTS INCORPORATED BY REFERENCE**

The registrant has incorporated by reference the information required by Part III of this Annual Report from its Proxy Statement relating to its 2020 Annual Meeting of Shareholders or an amendment to this Form 10-K, to be filed within 120 days after the end of its fiscal year ended December 31, 2019.

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## PART I.

*This Annual Report on Form 10-K and the documents incorporated herein by reference contain forward-looking statements that have been made pursuant to the provisions of the Private Securities Litigation Reform Act of 1995. These forward-looking statements are based on current expectations, estimates, and projections about RealNetworks' industry, products, management's beliefs, and certain assumptions made by management. Words such as "anticipates," "expects," "intends," "plans," "believes," "seeks," "estimates," and similar expressions are intended to identify forward-looking statements. All statements contained in this report that do not relate to matters of historical fact should be considered forward-looking statements. Forward-looking statements include statements with respect to:*

- the expected benefits and other consequences of our growth plans, strategic initiatives, and restructurings;*
- our expected introduction, and related monetization, of new and enhanced products, services and technologies across our businesses;*
- future revenues, operating expenses, income and other taxes, tax benefits, net income (loss) per diluted share available to common shareholders, acquisition costs and related amortization, and other measures of results of operations;*
- the effects of our past acquisitions, including our January 18, 2019 acquisition of a controlling interest in Napster, and expectations for future acquisitions and divestitures;*
- plans, strategies and expected opportunities for future growth, increased profitability and innovation;*
- our expected financial position, including liquidity, cash usage and conservation, and the availability of funding or other resources;*
- the effects of legislation, regulations, administrative proceedings, court rulings, settlement negotiations and other factors that may impact our businesses;*
- the continuation and expected nature of certain customer relationships;*
- impacts of competition and certain customer relationships on the future financial performance and growth of our businesses;*
- our involvement in potential claims, legal proceedings and government investigations, and the potential outcomes and effects of such potential claims, legal proceedings and governmental investigations on our business, prospects, financial condition or results of operations;*
- the effects of U.S. and foreign income and other taxes on our business, prospects, financial condition or results of operations; and*
- the effect of economic and market conditions, including global pandemics and financial crises, on our business, prospects, financial condition or results of operations.*

*These statements are not guarantees of future performance and actual actions or results may differ materially. These statements are subject to certain risks, uncertainties and assumptions that are difficult to predict, including those noted in the documents incorporated herein by reference. Particular attention should also be paid to the cautionary language in Item 1A entitled "Risk Factors." RealNetworks undertakes no obligation to update publicly any forward-looking statements as a result of new information, future events or otherwise, unless required by law. Readers should, however, carefully review the risk factors included in other reports or documents filed by RealNetworks from time to time with the Securities and Exchange Commission, particularly the Quarterly Reports on Form 10-Q and any Current Reports on Form 8-K.*

## Item 1. *Business*

### Overview

RealNetworks invented the streaming media category in 1995 and continues to build on its foundation of digital media expertise and innovation, creating a new generation of products and services to enhance and secure our daily lives. We provide our software and services to consumers, mobile carriers, device manufacturers, system integrators, and other businesses.

Consumers use our digital media products and services to store, organize, play, manage and enjoy their digital media content, either directly from us or through our distribution partners. For 25 years, RealNetworks has advanced the renowned RealPlayer, which has provided millions of people worldwide a powerful way to download, store, organize, and experience the rapidly expanding universe of digital media content, regardless of format. Our computer vision SAFR (Secure Accurate Facial Recognition) platform, a key investment initiative for us, enables new applications for security, convenience, and analytics, and is optimized for live video. Our consumer products feature GameHouse Original Stories, a unique IP portfolio of free-to-play mobile casual games. Our consumer products also include ringback tones, which we license to mobile operators, and our video compression technology, which we primarily license to OEMs, including manufacturers of mobile devices, smart TVs, and set-top boxes. Our product line also includes Kontxt, our artificial intelligence platform for categorizing Application to Person (A2P) messages to help messaging aggregators and mobile carriers provide a better customer experience, strengthen customer loyalty, and drive new revenue through text message management, classification and anti-spam. We acquired an additional 42% stake in Napster music business on January 18, 2019 (the "Napster Acquisition"), which offers a comprehensive set of digital music products and services designed to provide consumers with broad access to digital music.

The monetization, distribution, and licensing of our technology products and services are heavily dependent on contracts with third parties, such as mobile carriers, system integrators, and device manufacturers.

We were incorporated in 1994 in the State of Washington. Our common stock is listed on the NASDAQ Stock Market under the symbol "RNWK."

In this Annual Report on Form 10-K ("10-K") for the year ended December 31, 2019, RealNetworks, Inc., together with its subsidiaries, is referred to as "RealNetworks," the "Company," "we," "us," or "our." "RealPlayer," "RMHD," "RealMedia," "GameHouse," "Kontxt," "SAFR" and other trademarks of ours appearing in this report are our property.

### Segments

We report revenue and operating income (loss) in four segments: (1) Consumer Media, (2) Mobile Services, (3) Games, and (4) Napster. RealNetworks allocates to its Consumer Media, Mobile Services, and Games reportable segments certain corporate expenses which are directly attributable to supporting these businesses, including but not limited to a portion of finance, IT, legal, human resources and headquarters facilities. Remaining expenses, which are not directly attributable to supporting these businesses, are reported as corporate items. These corporate items also can include restructuring charges and stock compensation expense. As stated in Note 4. Acquisitions, Napster, our 84% affiliate, reports its corporate expenses, including restructuring charges, in the Napster segment results. RealNetworks does not allocate any expenses to the Napster segment as Napster is operated as an independent business with its own board of directors, strategy, and leadership team.

#### *Consumer Media*

In our Consumer Media segment, revenue is primarily derived from the licensing of our portfolio of video codecs. Codecs are an encoding and decoding technology which are designed to reduce the amount of bits required to stream or store media content, and modern codecs achieve significant savings in streaming bandwidth and storage costs. Our latest codec technology, RealMedia High Definition, which we refer to as RealMedia HD or RMHD, offers significant compression advantages over our prior-generation codec, RealMedia Variable Bitrate, or RMVB, which is still widely used. Our codec technologies business is primarily focused in the Chinese market, where although RMVB remains a popular format, we currently focus most of our efforts embedding RMHD into the digital media ecosystem.

We continue to develop and innovate our codec technology to meet or exceed user demands for increasing compression efficiency and visual quality. We license our codec technology to a variety of electronic equipment, microchip, and integrated circuit manufacturers who embed our codec in their products, including mobile devices, laptops, smart TVs and other devices. To ensure a robust ecosystem for our codec technologies, we also promote the use of our codec technology to producers of media content and users of RealPlayer, thus encouraging the widespread adoption by device manufacturers.

We also generate revenue through online sales to consumers of our PC-based RealPlayer subscription products, including our SuperPass service, which provides consumers with access to digital entertainment content for a monthly fee. The RealPlayer media player, our enduring yet continually evolving software product, includes features and services that enable consumers to discover, play, download, manage and edit digital video, stream audio and video, download and save photos and

videos from the web, transfer and share content on social networks, and edit their own photo and video content. As part of our RealPlayer download process, we also offer distribution of third-party software products to consumers, which generates additional revenue.

### ***Mobile Services***

Mobile Services consists of the various digital media services we provide to mobile and online service providers as software as a service (SaaS) offerings. Included in our SaaS offerings are our messaging products, which include our intercarrier messaging service; Kontxt, our text message management, anti-spam, and classification product; and our ringback tone service. We provide these services to a large number of mobile carriers around the world, although a significant portion of our revenue for this segment results from contracts with a few mobile carriers and one service partner. We also offer business intelligence, subscriber management and billing for the carriers who make our offerings available to their customers. Also included in this segment is our recently introduced computer vision platform, SAFR (Secure Accurate Facial Recognition) and our RealTimes platform.

Our intercarrier messaging platform enables operators to send and receive SMS messages worldwide between networks and service providers, regardless of network technology, typically processing billions of SMS messages per day between users on hundreds of different networks. A portion of the revenue we earn from our intercarrier messaging service is based on a revenue-sharing arrangement with one service partner. Our next-generation mobile messaging platform, Kontxt, evaluates message streams sent from an application to a person (A2P) and classifies those messages into various categories allowing network operators and other service providers to create policies for prioritization and delivery of messages and blocking spam and fraudulent messages, resulting in more efficient text message delivery.

Our ringback tone services enable callers to hear subscriber-selected music or messages instead of the traditional electronic ringing sound while waiting for the person they have called to answer. We primarily offer ringback tone services via mobile carriers, where, in return for providing, operating and managing the ringback tone service for the carrier customers, we generally enter into revenue-sharing arrangements with the carriers based on monthly subscription fees, content download fees or a combination of such fees paid by subscribers.

Our photo and video sharing platform, RealTimes, is offered to wireless carriers for integration in their hosted cloud solutions. Within our Mobile Services group, we focus on leveraging current and prospective wireless carrier relationships to increase integration of the RealTimes platform.

Our computer vision platform, SAFR, detects faces by leveraging artificial intelligence-based machine learning. We continue to invest in and build industry partnerships for SAFR, typically licensing it to technology partners and system integrators through third-party resellers and directly to end customers.

### ***Games***

Our Games segment is focused on the development, publishing, and distribution of casual games, which are offered via mobile devices, digital downloads, and subscription play. Casual games typically have simple graphics, rules and controls, are quick to learn, and often include time-management, board, card, puzzle, word and hidden-object games. In the mobile market, we are focused on our GameHouse Original Stories product line, creating a large and diverse portfolio of products that combine casual game play and storytelling. Our Original Stories are based on a series of characters including Emily from our Delicious franchise, Amanda from Heart's Medicine, and Angela from Fabulous. The Original Stories portfolio continues to grow as new characters and story lines are developed, primarily by our in-house game studios or through partnerships with external game developers for both mobile and PC play. We also offer to our customers games that are licensed to us by third parties.

Our mobile games are digitally distributed through third-party application storefronts, such as the Apple App Store and Google Play, and are principally offered in North America, Europe and Latin America. We offer free-to-play games that generate revenue from player purchases of in-game virtual goods and from advertising displayed to consumers during play. Historically, we have also offered premium games that we typically introduce to consumers upon release on a free-trial basis. After reaching a certain level of game play, consumers then have the option of purchasing the full game. Although games previously offered for individual purchase will continue to be available, during 2019 we began to shift our strategy to free-to-play games and away from premium mobile games.

PC consumers can access and play both our Original Stories and hundreds of third-party games through individual purchases or a subscription service offered through our GameHouse and Zylom websites, and through websites owned or managed by third parties. Consistent with our mobile offerings, we have historically introduced new games by offering a free trial before purchase on an individual-game basis or as part of one of our subscription services.

### ***Napster***

At December 31, 2019, we owned approximately 84% of the issued and outstanding stock of Napster. As described in more detail in Note 4. Acquisitions, on January 18, 2019 RealNetworks acquired a 42% stake in Napster from its former joint

venture partner, adding to the 42% that we had previously owned. The acquisition resulted in our recording of goodwill and definite-lived intangible assets, which we assess for impairment each quarter and would be negatively impacted if Napster's business were to continue to decline or if it were to suffer significant financial distress.

The Napster segment provides music products and services that enable consumers to have access to digital music content from a variety of devices. The Napster unlimited subscription service offers unlimited access to a catalog of tens of millions of music tracks by way of on-demand streaming and conditional downloads. Napster currently offers music services worldwide and generates revenue primarily through subscriptions sold directly to consumers, through distribution partners, or through various music platform services under co-branded arrangements. Napster generates a significant portion of revenue from sales to a few partners.

See Note 20. Segment Information, in this 10-K for additional details on our segments and geographic concentrations.

### **Customers**

Our customers include consumers and businesses located throughout the world. Sales to customers outside the U.S., primarily in Europe and Asia, were 52% and 48% of our revenue during the years ended December 31, 2019 and 2018, respectively. See Note 20. Segment Information, for details on geographic concentrations and see Note 6. Allowance for Doubtful Accounts Receivable and Sales Returns, for details on customer revenue concentrations.

### **Research and Development**

We devote a substantial portion of our resources to developing new products, enhancing existing products, expanding and improving our fundamental technology, and strengthening our technological expertise in all our businesses.

### **Sales, Marketing and Distribution**

Our marketing programs are aimed at increasing brand awareness of our products and services and stimulating demand. We use a variety of methods to market our products and services, including paid search advertising, affiliate marketing programs, electronic and other online media, and email offers to qualified potential and existing customers, and providing product specific information through our websites. We also cross-market products and services offered by some of our businesses through the RealPlayer and Games marketing and distribution channels. We have subsidiaries and offices in several countries that market and sell our products outside the U.S.

Our products and services are marketed through direct and indirect channels. We use public relations, trade shows, events and speaking opportunities to market our products and services. We also use a variety of online channels, including social media, to promote and sell our products and services directly.

In our Consumer Media business, we market and sell our various RealPlayer services directly through our own websites such as Real.com, as well as indirectly through third party distribution partners. We also employ a sales team in China which works with distribution partners on marketing our codec technologies.

Our Mobile Services sales, marketing and business development team works closely with many of our enterprise, infrastructure, wireless, broadband and media customers to identify new business opportunities for our entertainment applications, services and systems. Through ongoing communications with the product and marketing divisions of our customers, we tailor our SaaS offerings to their strategic needs and the needs of their subscribers.

In our Games business, we market directly from our GameHouse and Zylom websites and through third-party distribution channels, such as application storefronts, search engines, online portals, and content publishers.

Napster's services are marketed directly from the Napster website and through third-party distribution channels. Napster also employs a sales team which works with distribution partners on marketing platform services.

### **Customer Support**

Customer support is integral to the provision of nearly all of our consumer products and services. Consumers who purchase and use our consumer software products and services can get assistance primarily via the Internet or email, depending on the product or service. For most of our consumer products, we contract with third-party outsource support vendors to provide the primary staffing for our first-tier customer support globally. We also provide various support service options for our business customers and for software developers using our software products and associated services. Support service options include online support services and on-site support personnel covering technical and business-related support topics.

### **Competition**

The market for software and services for digital media delivery over the Internet and wireless networks is intensely competitive. Many of our current and potential competitors have longer operating histories, greater name recognition or brand awareness, more employees or significantly greater resources than we do.

In our Consumer Media segment, our codec technology faces competition from other next-generation video codecs, and many of our competitors have come together in patent pools to market and license a shared codec solution that competes with our own codecs. This coalition of multiple companies, which include some of the largest global technology companies, benefits from a significant inherent market penetration and, thus, a substantial competitive advantage over us. In addition, our RealPlayer media player continues to face competition from alternative streaming media playback applications that have obtained very broad market penetration.

In our Mobile Services segment, our SaaS business competes with a large and diverse number of domestic and international companies, and each of our SaaS offerings tends to face competitors specific to that product or service. Our SaaS business continues to experience significant competitive pricing pressure from carriers and the proliferation of smartphone applications and services, some of which do not depend on our carrier customers for distribution to consumers. Many of our SaaS services require a high degree of integration with carrier or service provider networks and thus require a high degree of operational expertise. Our ability to enhance services with new features as the digital entertainment market evolves is critical to our competitive position, as is our knowledge of the consumer environment to which these services are targeted. Also within our Mobile Services segment, our newly launched computer vision SAFR platform competes with a wide variety of companies, as small startups and well established, heavily resourced global companies continue to develop technologies and launch products in the facial recognition market.

Our Games business competes with a variety of distributors and publishers of casual games for PC and mobile platforms. Our in-house game development studios compete with other developers and publishers of mobile games based on our ability to create high quality games that resonate with consumers, and our ability to secure broad distribution.

Napster competes with a variety of on-demand music streaming services and many of Napster's current and potential future competitors enjoy competitive advantages, such as substantially greater name recognition, market penetration, and marketing budgets, as well as significantly greater financial, technical and other resources.

### **Intellectual Property**

As of December 31, 2019, we had 28 U.S. patents, 12 patents in other countries and more than 74 pending patent applications worldwide relating to various aspects of our technology. We regularly analyze our patent portfolio and prepare additional patent applications on current and anticipated features of our technology in various jurisdictions across the world, or sell or abandon patents or applications that are no longer relevant or valuable to our operations.

In addition to our patent portfolio, we have assembled, over time, an international portfolio of trademarks and service marks that covers certain of our products and services. We also have applications pending for additional trademarks and service marks in jurisdictions around the world, and have several unregistered trademarks. Many of our marks begin with the word "Real" (such as RealPlayer). We are aware of other companies that use "Real" in their marks alone or in combination with other words, and we do not expect to be able to prevent all third-party uses of the word "Real" for all goods and services.

Our ability to compete across our businesses partly depends on the superiority, uniqueness and value of the technology that we both develop and license from third parties. To protect our proprietary rights, we rely on a combination of patent, trademark, copyright and trade secret laws, confidentiality agreements with our employees and third parties, and protective contractual provisions. These efforts to protect our intellectual property rights may not be effective in preventing misappropriation of our technology, or may not prevent the development and design by others of products or technologies similar to or competitive with those we develop.

### **Employees**

At December 31, 2019, we had approximately 453 employees, of which 189 were based in the Americas, 87 were based in Asia, and 177 were based in Europe. The number of our employees represented by unions is not significant.

### **Position on Charitable Responsibility**

The Company's intention has been in periods of sustained profitability, we will donate 5% of our net income to charitable organizations, resulting in a reduction in our net income for those periods. The non-profit RealNetworks Foundation, established in 2001, manages our charitable giving efforts primarily through direct grants to nonprofit organizations and by supporting our employees' philanthropic efforts by matching their donations of time and money to charitable organizations.

### **Available Information**

Our corporate Internet address is [www.realnworks.com](http://www.realnworks.com). We make available free of charge on [www.investor.realnworks.com](http://www.investor.realnworks.com) our annual reports on Form 10-K, quarterly reports on Form 10-Q and current reports on Form 8-K, and amendments to these reports, as soon as reasonably practicable after we electronically file such material with, or furnish it to, the Securities and Exchange Commission (SEC). However, the information found on our corporate website is not part of this or any other report.

## Item 1A. Risk Factors

*You should carefully consider the risks described below together with all of the other information included in this Form 10-K. The risks and uncertainties described below are not the only ones facing our company. Additional risks and uncertainties not presently known to us or that we presently deem less significant may also impair our business operations. If any of the following risks actually occurs, our business, financial condition or operating results, and the trading price of our common stock, could be materially harmed.*

***Our growth initiatives could take longer than planned, be unsuccessful, or deplete our cash resources, any of which would have a material adverse effect on the performance of our businesses and financial results, and could cause us to pursue additional debt or other funding sources.***

In recent years, we have developed new products and technologies, and funded initiatives, intended to create growth in our businesses, while simultaneously taking steps to reduce costs and increase profitability. These growth initiatives, several of which have been unsuccessful over recent years, have impacted all segments of our organization, requiring us to allocate limited resources among our diverse business units. Our financial sustainability is largely dependent on the success of our growth initiatives, and there are many risks to that success, some of which are internal to our company, including our ability to develop and monetize our products and services, and some of which are externally driven and outside of our control, such as the potential impact of macroeconomic pressures and global pandemics. In particular, we expect that progress with our growth initiatives will be negatively impacted by various reactions to the recent global outbreak of the coronavirus that causes COVID-19, such as travel restrictions, community lockdowns, tightening of corporate budgets, reduction in consumer confidence, and significant instability in financial markets. We cannot predict the duration or severity of these reactions or impacts to our business and, if prolonged, our cash reserves may prove insufficient, requiring us to pursue additional debt or other funding sources.

Given the ambitious and significant nature of our growth initiatives, there is substantial risk that we may be unsuccessful in implementing our plans in a timely manner, our cash reserves may be depleted or insufficient to fully implement our plans, our growth initiatives may not gain adequate momentum, or the combination of our growth initiatives and cost reductions may not prove to be profitable. In any such case, our business would suffer, and our operational and financial results would be negatively impacted to a significant degree.

In August 2019, RealNetworks and Napster entered into a loan agreement with a third-party financial institution. Under the terms of that agreement, the bank extended a revolving line of credit not to exceed \$10.0 million in the aggregate. The loan agreement contains customary covenants, including financial covenants, minimum EBITDA levels, and maintaining an unrestricted cash balance of \$3.5 million. We have not had a debt facility in place in our recent past, therefore the entry into this facility introduces new risks to the company, including the risk that constraints around covenants may lead to less flexibility in operational decision making, the risk of default and various implications thereof, and the potential increase in liabilities on our balance sheet in the event that we draw down the line of credit.

The inability to obtain additional debt, whether through draws on our current line of credit or through a new debt facility, or the raising of funds through other means, could negatively impact our going concern assessment or our governance structure in the future. The occurrence of these or any of the risks described above would impair our financial results and stock price.

***Our 84% equity interest in Napster could result in material negative implications to our financial condition and stock price.***

From March 31, 2010, when we completed the restructuring of our digital audio music service joint venture, Rhapsody America LLC, now doing business under the Napster brand, until January 18, 2019, we did not have a majority voting interest in Napster. During that period, we accounted for Napster using the equity method of accounting and disclosed only strategic, business and financial information regarding Napster in our financial statements and disclosures, in accordance with accounting principles generally accepted in the United States, or GAAP. Historically, Napster generated significant accounting losses and, applying the equity method of accounting, we recognized our share of such losses on our investment. As we had no implicit or explicit commitment to provide future financial support to Napster, we did not record any further share of Napster losses that would reduce our carrying value of Napster below zero.

On January 18, 2019, we acquired an additional 42% of the outstanding equity of Rhapsody International, Inc., which we refer to as Napster as noted above, from a third party in a distressed sale resulting in our ownership of an aggregate of 84% of Napster's outstanding stock. See Note 4. Acquisitions, for additional information. We also now have the right to nominate directors constituting a majority of the Napster board of directors, however, Napster will continue to operate as an independent business with its own board of directors, strategy, and leadership team. Accordingly, although we have no legal or constructive obligation to fund Napster losses and it is our intention to have Napster continue to operate as an independent company, RealNetworks has in the past extended loans to Napster and may do so in the future.

Due to our majority voting interest and the consolidation of Napster's results and financial position with ours, Napster's current liabilities are included in RealNetworks' consolidated balance sheet, including accrued but unbilled music royalties related to past services, the ultimate payment of which is uncertain. These liabilities, although not a legal or constructive obligation of RealNetworks, result in consolidated working capital being negative, which causes management to consider whether liquidity risks exist. While we believe that these liabilities are separate obligations of Napster and RealNetworks assumes no responsibility for these liabilities, in the remote event that any such liquidity issues become significant or are deemed material to our consolidated financial statements, there could be material negative implications to our financial condition and the trading price of our stock.

As discussed in Note 4. Acquisitions, under the acquisition method of accounting, the purchase price is allocated to the assets acquired and the liabilities assumed based on their estimated fair values. The estimated fair values of the assets and liabilities, as well as the contingent consideration and noncontrolling interests, all involve the application of judgments and estimates, including but not limited to, estimation of expected future cash flows and related discount rates. In the fourth quarter of 2019, we finalized and recorded purchase price allocation adjustments that reflect new information obtained during the measurement period about facts and circumstances that existed at the date of the acquisition. These adjustments did not have a material effect on current or prior period consolidated financial statements.

Also due to the acquisition of the controlling interest in Napster, beginning with the first quarter of 2019 we consolidate Napster's financial results into the RealNetworks financial statements. Accordingly, we must receive Napster's quarterly financial statements and related information in a timely manner in order to prepare our quarterly and annual consolidated financial statements and disclosures in our quarterly reports on Form 10-Q and annual reports on Form 10-K. Any failure in receiving Napster's financial statements and related information in a timely and materially accurate manner could cause our reports to be filed in an untimely and/or inaccurate manner, which would preclude us from utilizing certain registration statements and could negatively impact our stock price. See Note 4. Acquisitions, for further information related to Napster.

***We need to successfully monetize our new products and services in order to sustain and grow our businesses, and manage our constrained cash resources.***

In order to sustain our current level of business and to implement our growth initiatives, we must successfully monetize our new products and services, including through existing and new relationships with distribution partners. Our digital media products and services must be attractive and useful to distribution partners and end users. The successful acceptance and monetization of these products and services, therefore, is subject to unpredictable and volatile factors beyond our control, including end-user preferences, competing products and services, the rapid pace of change in the market, the effectiveness of our distribution channels, and significant global crises. Any failure by us to timely and accurately anticipate consumers' changing needs and preferences, emerging technological trends and data privacy norms, or changes in the competitive or regulatory landscape for our products and services could result in a failure to monetize our new products or the loss of market opportunities, both of which we have experienced at various times in our past.

Moreover, in order to grow our new businesses, we must make long-term investments, develop or obtain appropriate intellectual property and commit significant resources before knowing whether the products and services that we are developing or have introduced will meet the demands of the relevant market. As we have experienced, we may not realize a sufficient return, or may experience losses, on these investments, thereby further straining our limited cash resources and negatively affecting our ability to pursue other needed growth or strategic opportunities.

Sustaining and growing our businesses, and managing our constrained cash resources, are subject to these risks inherent in developing, distributing and monetizing our new products and services. Our failure to manage these risks could further impair our operations and financial results to a material degree, and could cause an unsustainable depletion of our cash resources.

Furthermore, our products and services have been in the past and may be in the future subject to legal challenge. Responding to any such claims may require us to enter into royalty and licensing agreements on unfavorable terms, require us to stop distributing or selling, or to redesign our products or services, or to pay damages, any of which could constrain our growth plans and cash resources.

***Our businesses, including in connection with our growth initiatives, face substantial competitive challenges that may impair our success, thus negatively impacting our future growth.***

Our digital media products and services, including legacy and products/services central to our growth initiatives, face a wide variety of competitors, many of which have longer operating histories, greater name or brand recognition, deeper and more expansive market penetration, more employees, and significantly greater resources than we do. In addition, current and potential competitors may include relatively new businesses that develop or use innovative technologies, products or features that could disrupt the market for technologies, products or features we currently or are seeking to develop and market. In attempting to compete with any or all of these competitors, we may experience, as we have in the past, some or all of the following consequences, any of which would adversely affect our operating results and the trading price of our stock:

- reduced prices or margins;
- loss of current and potential customers, or partners and potential partners who distribute our products and services or who provide content that we distribute to our customers;
- changes to our products, services, technologies, licenses or business practices or strategies;
- lengthened sales cycles;
- inability to meet demands for more rapid sales or development cycles;
- industry-wide changes in content distribution to customers or in trends in consumer consumption of digital media products and services;
- pressure to prematurely release products or product enhancements; or
- degradation in our stature or reputation in the market.

Our Consumer Media technologies for media playback and production (RealPlayer, RealMedia VB and RealMedia HD) compete with alternative media playback technologies and audio and video content formats that have obtained broad market penetration. RealMedia VB and RealMedia HD are codecs, technology that enables compression and decompression of the media content in a (usually proprietary) format. We license our codec technology primarily to computer, smartphone and other mobile device manufacturers, and also to other partners that can support our efforts to build a strong ecosystem, like content providers and integrated circuit developers. To compete effectively, codec technologies must appeal to, and be adopted for use by, a wide range of parties: producers and providers of media content, consumers of media content, and device manufacturers who pre-load codec technologies onto their devices. Our ability to sustain or grow this business, which has recently experienced some downward pressure, is dependent on the successful promotion and adoption of our codec technologies to a wide and diverse target market, which is a complex and highly uncertain undertaking. If we are unable to compete successfully, our Consumer Media business could decline as it has in the recent past or on a more accelerated basis.

The market for our Mobile Services business is highly competitive and continues to rapidly evolve. Our SaaS services face competition from a proliferation of applications and services, many of which carriers can deploy or offer to their subscribers, or which consumers can acquire independently of their carrier. We expect pricing pressure in this business to continue to materially impact our operating results in this business. We also compete with a wide variety of companies, as small startups and well established, heavily resourced global companies continue to develop technologies and launch products in the facial recognition market. The success of this newly launched business is highly dependent on our ability to differentiate our product offering within this competitive environment.

The branded services in our Games business compete with other developers, aggregators and distributors of mobile, online, and downloadable games. Our competitors vary in size and capabilities, some of which have high volume distribution channels and greater financial resources than we do; while others may be smaller and more able to quickly or efficiently adjust to market conditions. We also face significant price competition in the casual games market, and some of our competitors may be able to offer games for free, or reduce prices more aggressively. We expect competition to continue to intensify in this market. Our games development studios compete primarily with other developers of mobile, online, and downloadable games, and must continue to develop popular and high-quality game titles. Our Games business must also continue to execute on opportunities to expand the play of our games on a variety of non-PC platforms, including mobile, in order to maintain our competitive position and to grow the business. Moreover, continued growth in our Games business is in part dependent on the availability of funds to invest in marketing, which availability cannot be assured.

***The distribution and license of our technology products and services are governed by contracts with third parties, the terms of which subject us to significant risks that could negatively impact our revenue, expenses and assumption of liability related to such contracts.***

In our Consumer Media and Mobile Services segments, we distribute and license most of our technology products and services pursuant to contracts with third parties, such as mobile carriers and their partners, online service providers, and OEMs and device manufacturers, many of whom may have stronger negotiating leverage due to their size and reach. These contracts govern the calculation of revenue generated and expenses incurred, how we recognize revenue and expenses in our financial statements, and the allocation of risk and liabilities arising from the product or service or distribution thereof. Terms impacting revenue, over which we may have limited if any control, may involve revenue sharing arrangements, end user pricing, usage levels, and exclusivity, all of which significantly affect the level of revenue that we may realize from the relationship.

Moreover, contract terms around marketing and promotion of our products and other expense allocation could result in us bearing higher expenses or achieving weaker performance than we had anticipated from the relationship.

In addition, although our contracts with third parties are typically for a fixed duration, they could be terminated early; and they may be renegotiated on less favorable terms or may not be renewed at all by the other party. We must, therefore, seek additional contracts with third parties on an ongoing basis to sustain and grow our business. We expect to face continuing and increased competition for the technology products and services we provide, and there is no assurance that the parties with which we currently have contracts will continue or extend current contracts on the same or more favorable terms, or that we will obtain alternative or additional contracts for our technology products and services. As we have recently experienced in our China business, the further loss of existing contracts, the failure to enter new contracts, or the deterioration of customer creditworthiness or the terms in our contracts with third parties could materially harm our operating results, financial condition, and cash flow.

Nearly all of our contracts in which we provide to another party services or rights to use our technology include some form of obligation by us to indemnify the other party for certain liabilities and losses incurred by them, including liabilities resulting from third party claims for damages that arise out of the use of our technology. These indemnification terms provide us with certain procedural safeguards, including the right to control the defense of the indemnified party. We have in the past incurred costs to defend and settle such claims. Claims against which we may be obligated to defend others pursuant to our contracts could in the future result in payments that could materially harm our business and financial results.

***Our operating results are difficult to predict and may fluctuate, which may contribute to continued weakness in our stock price, which could, in turn, jeopardize our ability to comply with Nasdaq's continued listing requirements threatening the continued listing of our common stock.***

The trading price for our common stock has been steadily declining. In addition, as a result of the rapidly changing markets in which we compete, and restructuring, impairment and other one-time events specific to us, our operating results may fluctuate or continue to decline from period to period, which may contribute to continued weakness or volatility of our stock price. Moreover, the general difficulty in forecasting our operating results and identifying meaningful performance metrics, especially when factoring in our growth initiatives, could result in actual results that differ materially from expected results, again causing continued weakness and volatility in our stock price. Compounding these internal factors, external factors such as the significant recent instability in global financial markets caused in part by a global pandemic, will impact our operating results and stock price, potentially driving our stock price to record lows.

The difficulty in forecasting our operating results may also cause over or under investment in certain growth initiatives, as such investment is often planned based on expected financial results, thus causing more severe fluctuations in operating results and, likely, further volatility in our stock price.

Further, because our common stock is listed on the Nasdaq Global Market, we must meet Nasdaq's continued listing requirements, in particular, financial requirements that include maintaining a minimum bid price of at least \$1.00. Although we are currently in compliance with all applicable continued listing requirements and have received no contradictory notification from Nasdaq, the trading price of our common stock has recently closed at a price below the required minimum. Further dramatic declines in the stock market have recently and may continue to cause declines in the price of our common stock. We regularly monitor our compliance with Nasdaq's continued listing requirements, and, as necessary, our Board will consider the implementation of various measures intended to support continued compliance.

***Any impairment to our goodwill and definite-lived assets could result in a material charge to our earnings.***

In accordance with GAAP, we test goodwill for possible impairment on an annual basis or more frequently in the event of certain indications of possible impairment. We review definite-lived assets for impairment whenever events or changes in circumstances indicate the carrying amount of such assets may not be recoverable. These events or circumstances could include a significant change in the business climate, including a significant sustained decline in a reporting unit's fair value, changes in our operating plans and forecasts, legal factors, operating performance indicators, competition, sale or disposition of a significant portion of our business, a significant sustained decline in our market capitalization and other factors. If we were to determine that an impairment had occurred, we would be required to record an impairment charge, which could have a material negative, and unanticipated, impact on our financial results. We have recorded goodwill and definite-lived intangibles for the acquisition of Napster that totaled \$69.2 million. See Note 4. Acquisitions, for further information related to Napster. The total carrying value of our goodwill and definite-lived intangible assets as of December 31, 2019 was \$81.7 million. Continued significant financial distress at Napster would likely have negative implications in our assessment of goodwill and definite-lived intangible assets on RealNetworks' balance sheet.

***Continued loss of revenue from our subscription services is likely to cause further harm to our operating results.***

Our operating results have been and will continue to be adversely impacted by the loss of subscription revenue related to our more traditional products and services. Subscribers cancel their subscriptions to our services for many reasons, including a perception that they do not use the services sufficiently or that the service does not provide enough value, a lack of attractive or exclusive content generally or as compared with competitive service offerings, or because customer service issues are not satisfactorily resolved. Revenue from our SuperPass subscription service, for example, has continued to decline over several periods, due to changes in consumer preferences and changes on our part to focus on other products and services we offer, and we expect this trend to continue.

***Given our declining revenue and operating losses, compounded by the coronavirus pandemic and related impacts to global financial markets, management has concluded that substantial doubt exists concerning our ability to continue as a going concern.***

As further discussed in Part II, Item 8, “Note 1—Description of Business and Summary of Significant Accounting Policies” to our Consolidated Financial Statements in this Annual Report on Form 10-K, due to our history of declining revenue and operating losses, as well as our near-term expectations of net negative cash flows from operating activities, compounded by the coronavirus pandemic and severe impacts to global financial markets, management has concluded that substantial doubt is deemed to exist about the company’s ability to continue as a going concern through the next 12 months. Our financial statements do not include any adjustment relating to the recoverability and classification of recorded asset amounts or the amounts and classification of liabilities that might be necessary should we be unable to continue as a going concern. Our ability to continue as a going concern will require us to improve cash flow by implementing some combination of the following: reduce operating expenses; improve working capital; defer certain obligations where we believe we have the legal basis to do so; draw upon our line of credit; sell businesses, product lines or assets; effectuate strategic alliances; or obtain outside investment. Further, we must successfully complete the process currently underway with our lender of negotiating customary covenants for 2020. Our limited cash resources and our potential inability to continue as a going concern may materially adversely affect our share price, inhibit our ability to obtain outside investment or strategic alliances.

***Government regulation of the Internet, facial recognition technology, and other related technologies is evolving, and unfavorable developments could have an adverse effect on our operating results.***

We are subject to regulations and laws specific to the marketing, sale and delivery of goods and services. These laws and regulations, which continue to evolve, cover taxation, user privacy, data collection and protection, copyrights, electronic contracts, sales procedures, automatic subscription renewals, credit card processing procedures, consumer protections, digital games distribution, broadband Internet access and content restrictions. We cannot guarantee that we have been or will be fully compliant in every jurisdiction, as it is not entirely clear how existing laws and regulations governing issues such as privacy, taxation and consumer protection apply or will be enforced with respect to the products and services we sell. Moreover, as Internet commerce continues to evolve, increasing regulation and/or enforcement efforts by federal, state and foreign agencies and the prospects for private litigation claims related to our data collection, privacy policies or other e-commerce practices become more likely. In addition, the adoption of any laws or regulations or the imposition of other legal requirements that adversely affect our ability to market, sell, and deliver our products and services could decrease our ability to offer or customer demand for our service offerings, resulting in lower revenue. For example, the European Union’s General Data Protection Regulation (GDPR), effective in May 2018, created a variety of new compliance obligations, with significant penalties for noncompliance. Moreover, in the U.S., certain states have and more states may impose stricter privacy laws that may impact accepted business practices. We cannot provide assurance that the changes that we have adopted to our business practices will be compliant or that new compliance frameworks such as this will not have a negative impact on our financial results.

In addition, through the operation of our SAFR product, we are subject to regulations and laws generally and specifically applicable to the provision of facial recognition technology. New laws and regulations are under discussion and those that exist are untested, thus we cannot guarantee that we have been or will be fully compliant in every jurisdiction. Moreover, the voluntary development of norms, standards, and best practices by companies providing facial recognition and similar technology could require modifications to our technology or practices that may be costly or incompatible with our financial model.

Future regulations, or changes in laws and regulations or their existing interpretations or applications, could require us to further change our business practices, raise compliance costs or other costs of doing business and result in additional historical or future liabilities for us, resulting in adverse impacts on our business and our operating results.

As a consumer-facing business, we receive complaints from our customers regarding our consumer marketing efforts and our customer service practices. Some of these customers may also complain to government agencies, and from time to time, those agencies have made inquiries to us about these practices. In addition, we may receive complaints or inquiries directly from governmental agencies that have not been prompted by consumers. We cannot provide assurance that governmental

agencies will not bring future claims, as they have on occasion in the past, regarding our marketing, or consumer services or other practices.

***We face financial and operational risks associated with doing business in non-U.S. jurisdictions and operating a global business, that have in the past and could in the future have a material adverse impact on our business, financial condition and results of operations.***

A material portion of our revenue is derived from sales outside of the U.S. and most of our employees are located outside of the U.S. Consequently, our business and operations depend significantly on global and national economic conditions and on applicable trade regulations and tariffs. For example, our business in China could be negatively affected by an actual or perceived lack of stability or consistency in U.S.-China trade policy. The growth of our business is also dependent in part on successfully managing our international operations. Our non-U.S. sales, purchases and operations are subject to risks inherent in conducting business abroad, many of which are outside our control, including the following:

- periodic local or geographic economic downturns and unstable political conditions;
- price and currency exchange controls;
- fluctuation in the relative values of currencies;
- difficulty in repatriating money, whether as a result of tax laws or otherwise;
- compliance with current and changing tax laws, and the coordination of compliance with U.S. tax laws and the laws of any of the jurisdictions in which we do business;
- difficulties protecting intellectual property;
- compliance with labor laws and other laws governing employees;
- local labor disputes;
- changes in trading policies, regulatory requirements, tariffs and other barriers, or the termination or renegotiation of existing trade agreements;
- impact of changes in immigration or other policies impacting our ability to attract, hire, and retain key talent;
- potential implications resulting from the outbreak of disease on a global scale or localized in countries in which we do business or have employees; and
- difficulties in managing a global enterprise, including staffing, collecting accounts receivable, and managing suppliers, distributors and representatives.

Because consumers may consider the purchase of our digital entertainment products and services to be a discretionary expenditure, their decision whether to purchase our products and services may be influenced by macroeconomic factors that affect consumer spending such as unemployment, access to credit, negative financial news, and declines in income. In addition, mobile telecommunication carriers and other business partners may reduce their business or advertising spending with us or for our products and services they distribute to users in the face of adverse macroeconomic conditions, such as financial market volatility, government austerity programs, tight credit, and declines in asset values. We have in the past recorded material asset impairment charges due in part to weakness in the global economy, and we may need to record additional impairments to our assets in future periods in the event of renewed weakness and uncertainty in the global or a relevant national economy. Accordingly, any significant weakness in the national and/or global economy could materially impact our business, financial condition and results of operations in a negative manner.

Our international operations involve risks inherent in doing business globally, including difficulties in managing operations due to distance, language, cultural differences, local economic conditions, outbreak of diseases, different or conflicting laws and regulations, taxes, and exchange rate fluctuations. The functional currency of our foreign subsidiaries is typically the local currency of the country in which each subsidiary operates. We translate our subsidiaries' revenues into U.S. dollars in our financial statements, and continued volatility in foreign exchange rates, particularly if the U.S. dollar strengthens against the euro, may result in lower reported revenue or net assets in future periods. If we do not effectively manage any of the risks inherent in running our international businesses, our operating results and financial condition could be harmed. As another example, the recent outbreak of the novel coronavirus that causes COVID-19 has resulted in travel and work restrictions within China and globally, and may significantly disrupt our ability to produce and sell products. We are monitoring the impacts of the pandemic to our business, as well as rapidly evolving expectations regarding its severity and duration. We are unable to predict the full effects of this pandemic on our operations and financial results.

Our business is conducted in accordance with existing international trade relationships, and trade laws and regulations. Changes in geopolitical relationships and laws or policies governing the terms of foreign trade, such as the recent rise in protectionist politics and economic nationalism, could create uncertainty regarding our ability to operate and conduct commercial relationships in affected jurisdictions, which could have a material adverse effect on our business and financial results. Additionally, our global operations may also be adversely affected by political events, domestic or international terrorist events and hostilities or complications due to natural or human-caused disasters. These uncertainties could have a material adverse effect on the continuity of our business and our results of operations and financial condition.

***Difficulty recruiting and retaining key personnel could significantly impair our operations or jeopardize our ability to meet our growth objectives.***

Our success depends substantially on the contributions and abilities of certain key personnel, and we cannot provide assurance that we will be able to retain them in the near term or recruit them in the future. Executive-level turnover, as we have experienced in the past and could experience in the future, could impact our ability to retain key personnel. Also, qualified individuals are in high demand and competition for such qualified personnel in our industry, particularly engineering talent, is extremely intense, and we may incur significant costs to attract or retain them. Changes in immigration or other policies in the U.S. or other jurisdictions that make it more difficult to hire and retain key talent, or to assign individuals to any of our locations as needed to meet business needs, could adversely affect our ability to attract key talent or deploy individuals as needed, and thereby adversely affect our business and financial results. Further, repeated restructuring of our businesses and related cost-reduction efforts, as well as declines in our stock price, have caused instability in our workforce that makes it more difficult to retain and recruit key personnel. Given these factors, there can be no assurance that we will be able to attract and retain the key personnel necessary to sustain our business or support future growth.

These risks also apply to our material subsidiaries, most notably Napster, which has experienced a high level of turnover in recent periods.

***Acquisitions and divestitures involve costs and risks that could harm our business and impair our ability to realize potential benefits from these transactions.***

As part of our business strategy, we have acquired and sold technologies and businesses in the past and expect that we will continue to do so in the future. The failure to adequately manage transaction costs and address the financial, legal and operational risks raised by acquisitions and divestitures of technology and businesses could harm our business and prevent us from realizing the benefits of these transactions. In addition, we may identify and acquire target companies, but those companies may not be complementary to our current operations and may not leverage our existing infrastructure or operational experience, which may increase the risks associated with completing acquisitions.

For example, our January 18, 2019 acquisition of a controlling interest in Napster represents a significant acquisition for RealNetworks. We incurred significant transaction-related costs to effectuate the acquisition, which were recorded throughout fiscal year 2019, and we expect to record some additional costs in the first quarter of 2020. Furthermore, although Napster will continue to operate independently and its business will not be integrated into our businesses, we still face risks related to the acquisition such as the consolidation of Napster's financial results into our financial statements.

Transaction-related costs and financial risks related to completed and potential future purchase or sale transactions may harm our financial position, reported operating results, or stock price. Previous acquisitions have resulted in significant expenses, including amortization of purchased technology, amortization of acquired identifiable intangible assets and the incurrence of charges for the impairment of goodwill and other intangible assets, which are reflected in our operating expenses. New acquisitions and any potential additional future impairment of the value of purchased assets, including goodwill, could have a material negative impact on our future operating results. In compliance with GAAP, we evaluate these assets for impairment at least annually. Factors that may be considered a change in circumstances, indicating that our goodwill or definite-lived assets may not be recoverable, include reduced future revenue and cash flow estimates due to changes in our forecasts, and unfavorable changes to valuation multiples and discount rates due to changes in the market. If we were to conclude that any of these assets were impaired, we would have to recognize an impairment charge that could materially impact our financial results. With regard to Napster, the goodwill that we recorded in connection with the January 2019 acquisition could be deemed impaired in the event that Napster's cash position further deteriorates.

Purchase and sale transactions also involve operational risks that could harm our existing operations or prevent realization of anticipated benefits from a transaction. These operational risks include:

- difficulties and expenses in assimilating the operations, products, technology, information systems, and/or personnel of the acquired company;
- retaining key management or employees of the acquired company;
- entrance into unfamiliar markets, industry segments, or types of businesses;
- operating, managing and integrating acquired businesses in remote locations or in countries in which we have little or no prior experience;
- diversion of management time and other resources from existing operations;
- impairment of relationships with employees, affiliates, advertisers or content providers of our business or acquired business;
- assumption of known and unknown liabilities of the acquired company, including intellectual property claims; and
- potential impacts to our system of internal controls and disclosure controls and procedures.

***We may be unable to adequately protect our proprietary rights or leverage our technology assets, and may face risks associated with third-party claims relating to intellectual property rights associated with our products and services.***

Our ability to compete across our businesses partly depends on the superiority, uniqueness and value of our technology, including both internally developed technology and technology licensed from third parties. To protect our proprietary rights, we rely on a combination of patent, trademark, copyright and trade secret laws, confidentiality agreements with our employees and third parties, and protective contractual provisions. Our efforts to protect our intellectual property rights may not assure our ownership rights in our intellectual property, protect or enhance the competitive position of our products, services and technology, or effectively prevent misappropriation of our technology.

From time to time, we receive claims and inquiries from third parties alleging that our technology used in our business may infringe the third parties' proprietary rights. These claims, even if not meritorious, could force us to make significant investments of time, attention and money in defense, and give rise to monetary damages, penalties or injunctive relief against us. We may be forced to litigate, to enforce or defend our patents, trademarks or other intellectual property rights, or to determine the validity and scope of other parties' proprietary rights in intellectual property. To resolve or avoid such disputes, we may also be forced to enter into royalty or licensing agreements on unfavorable terms or redesign our product features, services and technology to avoid actual or claimed infringement or misappropriation of technology. Any such dispute would likely be costly and distract our management, and the outcome of any such dispute (such as additional licensing arrangements or redesign efforts) could fail to improve our business prospects or otherwise harm our business or financial results.

Nearly all of our contracts by which we provide to another party services or rights to use our technology include some form of obligation by us to indemnify the other party for certain liabilities and losses incurred by them, including liabilities resulting from third party claims for damages that arise out of the use of our technology. Also, in 2012 we sold most of our patents, including patents that covered streaming media, to Intel Corporation, in a contract by which we agreed to indemnify Intel Corporation for certain third-party infringement claims against these patents up to the purchase price we received in the sale. Claims against which we may be obligated to defend others pursuant to our contracts expose us to the same risks and adverse consequences described above regarding claims we may receive directly alleging that our trademarks or technology used in our business may infringe a third party's proprietary rights.

Disputes regarding the validity and scope of patents or the ownership of technologies and rights associated with streaming media, digital distribution, and online businesses are common and likely to arise in the future. We also routinely receive challenges to our trademarks and other proprietary intellectual property that we are using in our business activities. We are likely to continue to receive claims of third parties against us, alleging contract breaches, infringement of copyrights or patents, trademark rights, trade secret rights or other proprietary rights, or alleging unfair competition or violations of privacy rights.

***Our business and operating results will suffer and we may be subject to market risk and legal liability if our systems or networks fail, become unavailable, unsecured or perform poorly so that current or potential users do not have adequate access to our products, services and websites.***

Our ability to provide our products and services to our customers and operate our business depends on the continued operation and security of our information systems and networks and those of our service providers. A significant or repeated reduction in the performance, security or availability of our information systems and network infrastructure or that of our service providers could harm our ability to conduct our business, and harm our reputation and ability to attract and retain users, customers, advertisers and content providers. Many of our products are interactive Internet applications that by their very nature require communication between a client and server to operate.

We sell many of our products and services through online sales transactions directly with consumers, and their credit card information is collected and stored by our payment processors. The systems of our third party service providers may not prevent future improper access or disclosure of credit card information or personally identifiable information. We have an extensive privacy policy concerning the collection, use and disclosure of user data involved in interactions between our client, third party payment providers, and server products. A security breach that leads to disclosure of consumer account information, or any failure by us to comply with our posted privacy policy or existing or new privacy legislation, could harm our reputation, impact the market for our products and services, or subject us to litigation. We have on occasion experienced system errors and failures that caused interruption in availability of products or content or an increase in response time. Problems with our systems and networks, or the third party systems and networks that we utilize, could result from a failure to adequately maintain and enhance these systems and networks, natural disasters and similar events, power failures, intentional actions to disrupt systems and networks and many other causes. Many of our services do not currently have fully redundant systems or a formal disaster recovery plan, and we may not have adequate business interruption insurance to compensate us for losses that may occur from a system outage.

***Changes in regulations applicable to the Internet and e-commerce that increase the taxes on the services we provide could materially harm our business and operating results.***

As Internet commerce continues to evolve, increasing taxation by state, local or foreign tax authorities becomes more likely. For example, taxation of electronically delivered products and services or other charges imposed by government

agencies may also be imposed. We collect transactional taxes and we believe we are compliant and current in all jurisdictions where we have a collection obligation for transaction taxes. Any regulation imposing greater taxes or other fees for products and services could result in a decline in the sale of products and services and the viability of those products and services, harming our business and operating results. A successful assertion by one or more states or foreign tax authorities that we should collect and remit sales or other taxes on the sale of our products or services could result in substantial liability for past sales.

In those countries where we have a tax obligation, we collect and remit value added tax, or VAT, on sales of “electronically supplied services” provided to European Union residents. The collection and remittance of VAT subjects us to additional currency fluctuation risks.

***Changes in accounting standards and subjective assumptions, estimates, and judgments by management related to complex accounting matters could significantly affect our financial results or financial condition.***

We prepare our financial statements in conformity with GAAP. These accounting principles are subject to interpretation or changes by the Financial Accounting Standards Board, or FASB, and the SEC, and new accounting pronouncements and varying interpretations of accounting standards and practices have occurred in the past and are expected to occur in the future. Moreover, our financial statements require the application of judgments and estimates regarding a wide range of matters that are relevant to our business, such as revenue recognition, asset impairment and fair value determinations, the acquisition method of accounting and its related estimated fair value amounts, stock-based compensation, music publisher and royalty accruals, and intangible asset valuations. Changes in accounting standards or practices, or in our judgments and estimates underlying accounting standards and practices, could harm our operating results and/or financial condition. An example of a new accounting pronouncement is the new lease accounting guidance. As discussed in Note 2 and Note 17 to the accompanying notes to the consolidated financial statements, this new guidance requires us to record lease assets and lease liabilities on the balance sheet, which previously were off-balance sheet obligations subject to disclosure but not recognition. Changes to existing accounting rules or to our judgments and estimates underlying those rules could materially impact our reported operating results and financial condition.

***We may be subject to additional income tax assessments and changes in applicable tax regulations could adversely affect our financial results.***

We are subject to income taxes in the U.S. and numerous foreign jurisdictions. Significant judgment is required in determining our worldwide provision for income taxes, income taxes payable, and net deferred tax assets. In the ordinary course of business, there are many transactions and calculations where the ultimate tax determination is uncertain. Although we believe our tax estimates are reasonable, the final determination of tax audits and any related litigation could be materially different than that which is reflected in our historical financial statements. An audit or litigation can result in significant additional income taxes payable in the U.S. or foreign jurisdictions which could have a material adverse effect on our financial condition and results of operations.

***Our Chairman of the Board and Chief Executive Officer beneficially owns 38.5% of our common stock, which gives him significant control over certain major decisions on which our shareholders may vote or which may discourage an acquisition of us.***

Robert Glaser, our Chairman of the Board and Chief Executive Officer, beneficially owns 38.5% of our common stock. As a result, Mr. Glaser and his affiliates will have significant influence to:

- elect or defeat the election of our directors;
- amend or prevent amendment of our articles of incorporation or bylaws;
- effect or prevent a merger, sale of assets or other corporate transaction; and
- control the outcome of any other matter submitted to the shareholders for vote.

Furthermore, on February 10, 2020, we entered into a Series B Preferred Stock Purchase Agreement with Mr. Glaser pursuant to which Mr. Glaser invested approximately \$10.0 million in RealNetworks in exchange for the issuance to him of approximately 8 million shares of our Series B Preferred Stock, par value \$0.001 per share. The rights, preferences, limitations, and powers of the Series B Preferred Stock are set forth in and governed by the designation of rights and preferences of Series B Preferred Stock filed with the Secretary of State of the State of Washington. Those rights, preferences, limitations, and powers include the right to proportional adjustment and the right to any dividends or distributions declared with regard to our common stock, but the Series B Preferred Stock has no voting or consent rights, has no liquidation preference, has no preferred dividend, and has limitations on transferability. Each share of Series B Preferred Stock is convertible into one share of our common stock, however no conversion is permitted in the event that it would cause Mr. Glaser’s beneficial ownership of our common stock to exceed the 38.5% threshold set forth in our shareholder rights plan dated November 30, 2018.

The stock ownership of Mr. Glaser may discourage a potential acquirer from making a tender offer or otherwise attempting to obtain control of RealNetworks, which in turn could reduce our stock price or prevent our shareholders from realizing a premium over our stock price.

***Provisions of our charter documents, shareholder rights plan, and Washington law could discourage our acquisition by a third party.***

Our articles of incorporation provide for a strategic transactions committee of the board of directors. Without the prior approval of this committee, and subject to certain limited exceptions, the board of directors does not have the authority to:

- adopt a plan of merger;
- authorize the sale, lease, exchange or mortgage of assets representing more than 50% of the book value of our assets prior to the transaction or on which our long-term business strategy is substantially dependent;
- authorize our voluntary dissolution; or
- take any action that has the effect of any of the above.

Mr. Glaser has special rights under our articles of incorporation to appoint or remove members of the strategic transactions committee at his discretion that could make it more difficult for RealNetworks to be sold or to complete another change of control transaction without Mr. Glaser's consent. RealNetworks has also entered into an agreement providing Mr. Glaser with certain contractual rights relating to the enforcement of our charter documents and Mr. Glaser's roles and authority within RealNetworks. These rights and his role as Chairman of the Board of Directors, together with Mr. Glaser's significant beneficial ownership, create unique potential for concentrated influence of Mr. Glaser over potentially material transactions involving RealNetworks and decisions regarding the future strategy and leadership of RealNetworks.

We have adopted a shareholder rights plan, which was amended and restated in December 2008, amended in April 2016 and February 2018, and again amended and restated in November 2018. The plan provides that shares of our common stock have associated preferred stock purchase rights, the exercise of which would make the acquisition of RealNetworks by a third party more expensive to that party, having the effect of discouraging third parties from acquiring RealNetworks without the approval of our board of directors, which has the power to redeem these rights and prevent their exercise.

Washington law imposes restrictions on some transactions between a corporation and certain significant shareholders. The foregoing provisions of our charter documents, shareholder rights plan, our agreement with Mr. Glaser, and Washington law, as well as our charter provisions that provide for a classified board of directors and the availability of "blank check" preferred stock, could have the effect of making it more difficult or more expensive for a third party to acquire, or of discouraging a third party from attempting to acquire, control of us. These provisions may therefore have the effect of limiting the price that investors might be willing to pay in the future for our common stock.

*Our January 2019 acquisition of a majority stake in Napster subjects our consolidated financial condition to new risks and uncertainties, including the following:*

***Napster's financial results and growth are subject to risks involving revenue concentration, strategic focus, and market competition.***

In recent years, Napster's business has shifted from a predominant reliance on a direct to consumer subscription model to delivering its music streaming content to users through business partners. With this shift in strategy, Napster's revenue has become concentrated among fewer partners, its sales cycle has become longer and more complex, and its competitive landscape has shifted. All of these factors contribute to risks and uncertainties that could impair the implementation of Napster's growth strategy thus causing declines in Napster's revenue and gross margin. Any such declines would negatively impact our consolidated financial results.

As Napster's direct to consumer subscription base declines due to intense competition in the music streaming market, its growth has become dependent on successful implementation of its platform-as-a-service strategy. Reliance on fewer key partnerships brings risk to Napster's revenue base, and developing relationships with distribution partners requires a significant investment of time and resources, with partnerships taking longer to execute than anticipated and terms becoming increasingly complex as negotiations continue. The result is a higher degree of risk in Napster's revenue base, compressed margins, and more uncertainty in its strategy.

***Napster's access to content and dependence on third-party licenses cause substantial risk and uncertainty to its business and could, therefore, harm our financial results.***

Napster's business relies on its ability to access content in a cost-efficient and dependable manner. To secure the rights necessary to stream music to its users, Napster must obtain licenses from record labels, aggregators, artists, publishers, performing rights organizations, collecting societies, and other copyrights owners and their agents. These rights holders, to the extent that Napster is able to identify them, possess different levels of bargaining power, require payment by Napster of varying royalty rates, and may or may not continue to make licenses available to Napster. Uncertainty with regard to, and any significant changes in, royalty rates, content availability, or Napster's ability to identify and negotiate with these rights holders could have a material adverse effect on Napster's revenue, profitability, and ability to provide its services. This, in turn, could harm our financial condition and stock price.

Related to Napster’s ability to access the content necessary to provide its streaming services is its dependence on third-party licenses, including the major record labels that hold the rights to stream a significant number of sound recordings. Specifically, three major labels dominate the market, and the loss of access to content controlled by any one of these labels would materially limit Napster’s offering, which would likely result in the loss of users, through both consumer subscriptions and business partnerships. Any such loss could materially impact Napster’s revenue and cause negative implications to our consolidated financial results.

***The various complexities involved in Napster’s music royalty accrual could negatively impact our financial results.***

As is common in the music streaming industry, Napster’s ability to determine and appropriately accrue music royalty liabilities involves a significant degree of risk and uncertainty. This accrual requires, among other things, identification of rights holders, application of statutory and contractual royalty rates, contractual terms such as advances and minimum guarantees, estimation of market share, user information and geographies, and a significant degree of judgment. Also, in certain jurisdictions, rights holders may have several years to claim royalties for musical compositions, in respect of which ownership has not already been claimed. While Napster bases its estimates on contractual rates, historical experience and on various other assumptions that management believes to be reasonable, actual results may differ materially from these estimates under different assumptions or conditions. The complexity, subjectivity, and variability around Napster’s royalty accrual could result in actual royalty costs exceeding amounts accrued, negatively impacting Napster’s profitability and our financial results.

Also common in the industry are royalty audits, lawsuits filed by rights holders, and other third-party assertions related to use of content on our platform. Napster has been the target of these types of actions in the past and expects to continue to be in the future. These matters create uncertainty, are costly, and can require a significant amount of management’s attention. Moreover, negotiations and disclosures related to these types of matters and disputes can cause damage to key business relationships, which could materially harm Napster’s business and prospects, thus impairing our consolidated financial results.

Underlying the complexity and risk involved in Napster’s ability to determine its music royalty liabilities, is the reliability of its systems of internal control and disclosure controls and procedures. We cannot provide assurance that these systems are or will continue to be effective. Although a subsidiary of ours, Napster has not historically been subject to public reporting requirements or the level of visibility and scrutiny that accompanies public reporting. In the event that Napster’s system of internal controls, particularly relating to its music royalty accrual, is found to be ineffective, it would likely have significant implications to Napster’s financial results and, therefore, to our consolidated financial results, and could be implicated in our required testing of internal controls pursuant to the Sarbanes-Oxley Act of 2002.

**Item 1B. *Unresolved Staff Comments***

None.

**Item 2. *Properties***

Our corporate and administrative headquarters and certain research and development and sales and marketing personnel are located at our facility in Seattle, Washington.

We lease properties primarily in the following locations that are utilized by all of our business segments, unless otherwise noted below, to house our research and development, sales and marketing, and general and administrative personnel:

<u>Location</u>	<u>Area leased (sq. feet)</u>	<u>Lease expiration</u>
Seattle, Washington (1)	73,000	August 2024, with an option to renew for two five-year periods
Seattle, Washington (2)	24,000	March 2021, with an option to renew for a five-year period
Eindhoven, Netherlands (3)	23,000	June 2022

- (1) This facility is utilized only by headquarters. As of December 31, 2019, we have reduced our use of the facility by 63%. The space which we no longer occupy is currently under sublease for all or a portion of the remaining lease term. For further information, please see Note 12. Lease Exit and Related Charges in this 10-K.
- (2) This facility is utilized only by our Napster segment. As of December 31, 2019, Napster has reduced its use of the facility by 50%. The space which Napster no longer occupies is currently under sublease for all of the remaining lease term.
- (3) This facility is utilized only by our Games segment.

In addition, we lease smaller facilities in the U.S. and foreign countries, some of which support the operations of all of our business segments while others are dedicated to a specific business segment. We believe that our properties are in good condition, adequate and suitable for the conduct of our business. For additional information regarding our obligations under leases, see Note 17. Leases, in this 10-K.

**Item 3.            *Legal Proceedings***

See Note 18. Commitments and Contingencies, in this 10-K.

**Item 4.            *Mine Safety Disclosures***

Not applicable.

## PART II.

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

Our common stock is traded on The NASDAQ Stock Market under the symbol RNWK.

As of January 31, 2020, there were approximately 169 holders of record of our common stock. Most shares of our common stock are held by brokers and other institutions on behalf of shareholders.

The declaration and payment of any future dividends, as well as the amount thereof, are subject to the discretion of our board of directors and will depend upon our results of operations, financial condition, capital levels, cash requirements, future prospects and other factors deemed relevant by our board of directors. Accordingly, there can be no assurance that we will declare and pay any dividends in the future. No cash dividends were paid in 2019 or 2018.

**Item 6. Selected Financial Data**

The following selected consolidated financial data should be read in conjunction with “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and the Consolidated Financial Statements and Notes to Consolidated Financial Statements included elsewhere in this report.

	Years Ended December 31,				
	2019	2018	2017	2016	2015
	(In thousands, except per share data)				
<b>Consolidated Statements of Operations Data:</b>					
Net revenue	\$ 172,113	\$ 69,510	\$ 78,718	\$ 81,479	\$ 92,448
Cost of revenue	103,127	17,727	23,164	27,548	39,520
Gross profit	68,986	51,783	55,554	53,931	52,928
Operating expenses:					
Research and development	34,848	30,789	29,710	29,923	43,626
Sales and marketing	32,778	21,140	22,953	31,608	48,231
General and administrative	31,305	20,706	20,996	27,415	24,549
Restructuring and other charges	2,498	1,873	2,526	1,489	5,279
Lease exit and related charges	—	(454)	—	2,239	2,501
Total operating expenses	101,429	74,054	76,185	92,674	124,186
Operating income (loss)	(32,443)	(22,271)	(20,631)	(38,743)	(71,258)
Other income (expense)	12,253	(516)	439	1,746	(13,494)
Income (loss) from continuing operations before income taxes	(20,190)	(22,787)	(20,192)	(36,997)	(84,752)
Income tax expense (benefit)	1,068	2,202	(2,778)	776	(1,290)
Net income (loss) from continuing operations	(21,258)	(24,989)	(17,414)	(37,773)	(83,462)
Net income (loss) from discontinued operations, net of tax	—	—	1,109	1,223	1,615
Net income (loss) including noncontrolling interests	(21,258)	(24,989)	(16,305)	(36,550)	(81,847)
Net income (loss) attributable to noncontrolling interests	(1,257)	—	—	—	—
Net income (loss) attributable to RealNetworks	\$ (20,001)	\$ (24,989)	\$ (16,305)	\$ (36,550)	\$ (81,847)
Net income (loss) per share - diluted:					
Continuing operations	(0.53)	(0.66)	(0.47)	(1.02)	(2.31)
Discontinued operations	—	—	0.03	0.03	0.05
Net income (loss) per share - diluted	\$ (0.53)	\$ (0.66)	\$ (0.44)	\$ (0.99)	\$ (2.26)
Shares used to compute diluted net income (loss) per share	37,994	37,582	37,163	36,781	36,165

	As of December 31,				
	2019	2018	2017	2016	2015
	(In thousands)				
<b>Consolidated Balance Sheets Data:</b>					
Cash, cash equivalents, and short-term investments	\$ 16,805	\$ 35,585	\$ 59,975	\$ 77,052	\$ 99,129
Working capital	(41,601)	33,481	55,157	66,304	91,373
Total assets	159,754	80,319	121,496	130,437	161,343
Total shareholders’ equity	38,775	56,840	79,173	88,581	120,683

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

**Overview**

RealNetworks invented the streaming media category in 1995 and continues to build on its foundation of digital media expertise and innovation, creating a new generation of products and services to enhance and secure our daily lives. We manage our business and report revenue and operating income (loss) in four segments: (1) Consumer Media (2) Mobile Services, (3) Games, and (4) Napster.

Within our Consumer Media segment, revenue is primarily derived from the software licensing of our video compression, or codec, technology, principally our prior-generation codec RealMedia Variable Bitrate, or RMVB, but also including some early revenue from sales of our latest technology, RealMedia High Definition, or RMHD. We also generate revenue from the sale of our PC-based RealPlayer products, including RealPlayer Plus and related products. These products and services are delivered directly to consumers and through partners, such as OEMs and mobile device manufacturers.

Our Mobile Services business generates revenue primarily from the sale of subscription services, which include our intercarrier messaging service and ringback tones, as well as through software licenses for the integration of our RealTimes platform and certain system implementations. We generate a significant portion of our revenue from sales within our Mobile Services business to a few mobile carriers. Our Mobile Services segment also includes our computer vision platform, SAFR, which includes facial recognition technology that leverages artificial intelligence-based machine learning. To date, our SAFR business has not generated a significant level of revenue.

Our Games business generates revenue primarily through the development, publishing, and distribution of casual games under the GameHouse and Zylom brands. Games are offered via mobile devices, digital downloads, and subscription play. We derive revenue from player purchases of in-game virtual goods within our free-to-play games and from advertising on games sites. In addition, we derive revenue from the sale of individual games and subscription offerings.

As described in Note 4. Acquisitions, RealNetworks acquired an additional 42% interest in Napster on January 18, 2019 (the "Napster Acquisition") resulting in our having a majority voting interest, owning 84% of Napster's outstanding equity. We consolidate Napster's financial results into our financial statements for fiscal periods following the closing of the acquisition, and Napster is reported as a separate segment in RealNetworks financial statements and related disclosures following the acquisition. The acquisition resulted in our recording of goodwill and definite-lived intangible assets, which we assess for impairment each quarter and which would be negatively impacted if Napster's business were to continue to decline or if it were to suffer significant financial distress.

The Napster segment provides music products and services that enable consumers to have access to digital music content from a variety of devices. The Napster unlimited subscription service offers unlimited access to a catalog of tens of millions of music tracks by way of on-demand streaming and conditional downloads. Napster currently offers music services worldwide and generates revenue primarily through subscriptions sold directly to consumers, through distribution partners, or through various music platform services under co-branded arrangements. Napster generates a significant portion of revenue from sales to a few partners.

RealNetworks allocates to its Consumer Media, Mobile Services, and Games reportable segments certain corporate expenses which are directly attributable to supporting these businesses, including but not limited to a portion of finance, IT, legal, human resources and headquarters facilities. Remaining expenses, which are not directly attributable to supporting these businesses, are reported as corporate items. These corporate items also can include restructuring charges and stock compensation expense. As stated in Note 4. Acquisitions, Napster is operating as an independent company and their corporate expenses, including restructuring charges, are all included in Napster's segment results, and RealNetworks does not allocate any expenses to the Napster segment.

In 2019, our consolidated revenue increased by \$102.6 million compared with 2018, due mostly to the Napster Acquisition on January 18, 2019 and the resulting consolidation of their results from the acquisition date forward. Napster's 2019 revenues from the acquisition date forward were \$106.3 million. In 2019, our Games segment revenue increased \$3.8 million, which was offset by decreases of \$5.0 million in Consumer Media revenue and \$2.5 million in Mobile Services revenue. See below for further information regarding fluctuations by segment.

Operating expenses increased by \$27.4 million in 2019 compared with 2018 again due primarily to the consolidation of Napster's results from the acquisition date forward. Napster's operating expenses for the fiscal year of 2019 totaled \$25.8

million which included \$0.2 million of acquisition costs. Operating expenses in 2019 also included an additional \$1.3 million of professional fees associated with the acquisition of Napster.

As of December 31, 2019, we had \$16.8 million in unrestricted cash and cash equivalents compared to \$35.6 million as of December 31, 2018. The 2019 decrease in cash and cash equivalents from December 31, 2018 was primarily due to our ongoing cash flows used in operating activities, Napster's net repayment of debt of \$4.7 million, and the \$3.5 million cash required to be restricted under our Loan and Security Agreement, which we refer to as the Loan Agreement. These decreases were partially offset by the January 2019 Napster Acquisition, which added \$9.9 million of cash, and the drawdown of \$3.9 million from the revolving line of credit we entered into in August 2019.

See Note 22 Subsequent Event for information on the additional funding of approximately \$10.0 million received by RealNetworks on February 10, 2020.

Consolidated results of operations were as follows (dollars in thousands):

	2019	2018	2019-2018 Change	% Change
Total revenue	\$ 172,113	\$ 69,510	\$ 102,603	148 %
Cost of revenue	103,127	17,727	85,400	482 %
Gross profit	68,986	51,783	17,203	33 %
Gross margin	40 %	74 %	(34)%	
Total operating expenses	101,429	74,054	27,375	37 %
Operating income (loss)	\$ (32,443)	\$ (22,271)	\$ (10,172)	(46) %

#### *2019 compared with 2018*

In 2019, our consolidated revenue increased by \$102.6 million, or 148%. The increase in revenue was predominantly due to the Napster Acquisition on January 18, 2019, and the consolidation of its results from the acquisition date forward. Napster's 2019 revenues from the acquisition date forward were \$106.3 million. In 2019, our Games segment revenue increased \$3.8 million, offset by decreases of \$5.0 million in Consumer Media revenue and \$2.5 million in Mobile Services revenue. See below for further information regarding fluctuations by segment. Gross margin decreased to 40% from 74%, driven by the lower margin of the Napster segment.

Operating expenses increased by \$27.4 million in 2019 compared with 2018 primarily due to the consolidation of Napster's results from the acquisition date forward. Napster's operating expenses for the fiscal year of 2019 totaled \$25.8 million, including \$0.2 million of acquisition-related costs. Operating expenses within Corporate in 2019 included an additional \$1.3 million of acquisition-related costs and \$1.0 million of change in fair value of the Napster contingent consideration liability.

### **Segment Operating Results**

#### **Consumer Media**

Consumer Media segment results of operations were as follows (dollars in thousands):

	2019	2018	2019-2018 Change	% Change
Total revenue	\$ 13,170	\$ 18,168	\$ (4,998)	(28) %
Cost of revenue	3,031	3,858	(827)	(21) %
Gross profit	10,139	14,310	(4,171)	(29) %
Gross margin	77 %	79 %	(2)%	
Total operating expenses	11,186	14,419	(3,233)	(22) %
Operating income (loss)	\$ (1,047)	\$ (109)	\$ (938)	NM

### 2019 compared with 2018

Total Consumer Media revenue decreased by \$5.0 million, or 28% as compared to the prior year, due primarily to decreased software license revenues of \$3.4 million, as well as decreases in our subscription service revenues of \$0.8 million and lower product sales, advertising and other revenues of \$0.8 million.

#### Software License

For our software license revenues, the \$3.4 million decrease was primarily related to declining shipments by our distribution partners of products embedded with our codec technology and the timing of contract renewals with our distribution partners. The bulk of these licenses for our codec technology are with companies based in China and, in the near term, it is possible we may see continued pressure in pricing and renewals, and potential further declines in sales. In addition, it is unclear whether or how the recent outbreak of coronavirus COVID-19 and its effect on Chinese companies will impact our codec business.

#### Subscription Services

For our subscription services revenues, the decrease of \$0.8 million was primarily due to further declines in our legacy subscription products, which we expect to continue.

Cost of revenue decreased by \$0.8 million, or 21%. This was primarily due to reductions in salaries and benefits of \$0.5 million, and reductions in bandwidth and license royalty costs of \$0.3 million.

Operating expenses decreased by \$3.2 million, or 22%, compared to the prior year, primarily due to lower salaries and benefits, from headcount reductions, and professional services fees of \$2.8 million as well as lower marketing expenses of \$0.3 million.

### Mobile Services

Mobile Services segment results of operations were as follows (dollars in thousands):

	2019	2018	2019-2018 Change	% Change
Total revenue	\$ 27,143	\$ 29,670	\$ (2,527)	(9) %
Cost of revenue	7,500	8,623	(1,123)	(13) %
Gross profit	19,643	21,047	(1,404)	(7) %
Gross margin	72 %	71 %	1 %	
Total operating expenses	29,340	28,066	1,274	5 %
Operating income (loss)	\$ (9,697)	\$ (7,019)	\$ (2,678)	(38) %

### 2019 compared with 2018

Mobile Services revenue decreased by \$2.5 million, or 9%, and was primarily driven by a decrease of \$2.8 million in subscription services revenue, offset by an increase of \$0.3 million in software license revenue.

#### Software license

For our software license revenues, the \$0.3 million increase was primarily the result of revenue from sales of our recently introduced SAFR product, which recognized negligible revenue in the prior year. At this time, we believe that there is risk that the effects of the recent outbreak of coronavirus COVID-19 on global mobility and corporate investment could negatively impact growth expectations and sales prospects for our SAFR business.

#### Subscription service

For our subscription services, the \$2.8 million decrease was driven by fewer subscribers to our ringback tones causing a decrease in revenue of \$3.5 million and a revenue decrease of \$0.4 million related to professional services fees. These decreases were offset by an increase in revenue from our intercarrier messaging platform business of \$1.1 million.

Cost of revenue decreased by \$1.1 million or 13% as compared to the prior year, due primarily to reductions in salaries and benefits of \$0.6 million related to headcount reductions and infrastructure costs of \$0.4 million.

Operating expenses increased by \$1.3 million or 5% primarily due to increased salaries and benefits related to increased investment in SAFR, partially offset by savings in our ringback tones business.

### Games

Games segment results of operations were as follows (dollars in thousands):

	2019	2018	2019-2018 Change	% Change
Total revenue	\$ 25,489	\$ 21,672	\$ 3,817	18 %
Cost of revenue	6,975	6,123	852	14 %
Gross profit	18,514	15,549	2,965	19 %
Gross margin	73 %	72 %	1 %	
Total operating expenses	20,220	20,324	(104)	(1) %
Operating income (loss)	\$ (1,706)	\$ (4,775)	\$ 3,069	64 %

#### **2019 compared with 2018**

Games revenue increased by \$3.8 million, or 18% as compared to the prior year primarily due to increases of \$1.2 million in product sales revenues, \$1.6 million in advertising and other revenues and \$1.0 million in our subscription services revenues, described more fully below. Our Games segment continues to shift its focus toward free-to-play games that offer in-game purchases of virtual goods, the revenue from which is included within product sales, and away from premium mobile games that require a one-time purchase.

##### *Subscription Services*

Our subscription sales increased \$1.0 million as a result of new subscription offerings for our Original Stories games.

##### *Product sales*

Our product sales increased \$1.2 million as a result of higher in-game purchases of \$4.6 million compared to the prior-year period, offset by lower sales of games of \$3.4 million as we continue to shift toward free-to-play games that offer in-game purchases of virtual goods and away from premium mobile games that require a one-time purchase.

##### *Advertising and other*

Our advertising and other revenues increased \$1.6 million as compared to the prior-year period primarily as a result of offering more in-game advertising within our free-to-play and other mobile games.

Cost of revenue increased by \$0.9 million, or 14%, due to higher app store fees of \$1.2 million, partially offset by lower publisher license and service royalties.

Operating expenses decreased by \$0.1 million, primarily due to lower salaries, benefits, professional services fees and infrastructure expenses, offset by higher marketing fees of \$1.4 million.

#### **Napster**

Napster segment results of operations were as follows (in thousands):

	2019	2018	2019-2018 Change
Total revenue	\$ 106,311	\$ —	\$ 106,311
Cost of revenue	85,901	—	85,901
Gross profit	20,410	—	20,410
Gross margin	19 %	— %	19 %
Total operating expenses	25,789	—	25,789
Operating income (loss)	\$ (5,379)	\$ —	\$ (5,379)

#### **2019 compared with 2018**

As described in Note 4. Acquisitions, we acquired control and began consolidating Napster effective January 18, 2019. Our consolidated results include Napster from the acquisition date forward.

Napster's revenues relate to subscription services and include \$55.4 million of direct-to-consumer revenues and \$50.9 million of revenues resulting from services sold through distribution partners in the year ended December 31, 2019.

Cost of revenues primarily consist of content royalties related to music label and publishing rights for the domestic and international music streaming services. These costs can vary materially from period to period due to the significant judgments, assumptions, and estimates of the amounts to be paid. Napster's cost of revenues for the year ended December 31, 2019 included \$1.5 million of amortization expense related to intangible assets acquired.

Operating expenses primarily include salaries, benefits, and professional services fees. In the year ended December 31, 2019, Napster's operating expenses included \$2.8 million of amortization expense related to intangible assets acquired and \$0.5 million of restructuring charges.

### Corporate

Corporate segment results of operations were as follows (dollars in thousands):

	2019	2018	2019-2018 Change	% Change
Cost of revenue	\$ (280)	\$ (877)	\$ 597	(68) %
Total operating expenses	14,894	11,245	3,649	32 %
Operating income (loss)	\$ (14,614)	\$ (10,368)	\$ (4,246)	(41) %

#### 2019 compared with 2018

Cost of revenue increased by \$0.6 million compared to the prior year due to the reversal in 2018 of certain aged royalty liabilities relating to our legacy music business.

Operating expenses increased by \$3.6 million, or 32%. The increase was primarily due to professional fees driven by \$1.3 million of costs associated with our acquisition of Napster and higher salaries and benefits of \$1.2 million. The overall increase was also impacted by \$1.0 million related to the change in fair value of the Napster contingent consideration liability.

### Consolidated Operating Expenses

Our operating expenses consist primarily of salaries and related personnel costs including stock-based compensation, consulting fees associated with product development, sales commissions, amortization of certain intangible assets capitalized in our acquisitions, professional service fees, advertising costs, restructuring charges, and lease exit costs. Operating expenses were as follows (dollars in thousands):

	2019	2018	2019-2018 Change	% Change
Research and development	\$ 34,848	\$ 30,789	\$ 4,059	13 %
Sales and marketing	32,778	21,140	11,638	55 %
General and administrative	31,305	20,706	10,599	51 %
Restructuring and other charges	2,498	1,873	625	33 %
Lease exit and related charges	—	(454)	454	NM
Total consolidated operating expenses	\$ 101,429	\$ 74,054	\$ 27,375	37 %

Research and development expenses increased by \$4.1 million, or 13%, in the year ended 2019 as compared to 2018 primarily due to the Napster Acquisition on January 18, 2019, and the consolidation of their results from the acquisition date forward. Napster's research and development expenses for the year ended December 31, 2019 totaled \$7.0 million. This increase was offset by a decrease in salaries, benefits and professional services fees of \$2.9 million related to our other segments.

Sales and marketing expenses increased by \$11.6 million, or 55%, in the year ended 2019, compared with 2018. The increase was primarily due to the Napster Acquisition, as discussed above. Napster's sales and marketing expenses for the year ended December 31, 2019 totaled \$9.8 million. The overall increase in sales and marketing expenses was also impacted by \$1.0 million increase in salaries and benefits and \$1.1 million in marketing expenses primarily due to increased efforts towards free-to-play games. These increases were offset by a \$0.3 million decrease in infrastructure expense.

General and administrative expenses increased by \$10.6 million, or 51%, in the year ended 2019, compared with 2018. The increase was primarily due to the Napster Acquisition as discussed above. Napster's general and administrative expenses for the year ended December 31, 2019 totaled \$8.5 million, which includes \$0.2 million of acquisition-related costs. We also incurred additional expenses of \$1.3 million in 2019 for costs associated with the Napster Acquisition and recorded the change in fair value of the Napster contingent consideration liability of \$1.0 million as an expense.

Restructuring and other charges and Lease exit and related charges consist of costs associated with the ongoing reorganization of our business operations and our ongoing expense re-alignment efforts. For additional details on these charges see Note 11. Restructuring Charges and Note 12. Lease Exit and Related Charges.

### Other Income (Expenses)

Other income (expenses), net was as follows (dollars in thousands):

	2019	2018	2019-2018 Change	% Change
Interest expense	\$ (636)	\$ —	\$ (636)	NM
Interest income	131	344	(213)	(62)%
Gain (loss) on equity investments, net	12,338	—	12,338	NM
Equity in net loss of Napster	—	(757)	757	NM
Other income (expense), net	420	(103)	523	NM
Total other income (expense), net	<u>\$ 12,253</u>	<u>\$ (516)</u>	<u>\$ 12,769</u>	NM

Interest expense relates to RealNetworks and Napster's notes payable and long-term debt, as described in detail in Note 10. Notes Payable and Long-term Debt.

Total other income (expense), net, for the year ended December 31, 2019 includes \$12.3 million related to RealNetworks' gain on consolidation of Napster, as described in more detail in Note 4. Acquisitions.

### Income Taxes

During the years ended December 31, 2019 and 2018, we recognized income tax expense of \$1.1 million and \$2.2 million, respectively, related to U.S. and foreign income taxes.

The income tax expense for the year ended December 31, 2019 was largely the result of foreign withholding taxes and income taxes in foreign jurisdictions. The income tax expense for the year ended December 31, 2018 was largely the result of foreign withholding taxes, income taxes in foreign jurisdictions, and income tax expense for the accrued tax associated with future repatriations of foreign earnings that are no longer considered to be indefinitely reinvested.

We assess the likelihood that our deferred tax assets will be recovered based upon our consideration of many factors, including the current economic climate, our expectations of future taxable income, our ability to project such income, and the appreciation of our investments and other assets. We maintain a partial valuation allowance of \$160.8 million for our deferred tax assets due to uncertainty regarding their realization as of December 31, 2019. The net increase in the valuation allowance since December 31, 2018 of \$23.5 million was the result of an increase in current year deferred tax assets, mainly related to the acquisition of Napster, for which the Company maintains a valuation allowance.

We generate income in a number of foreign jurisdictions, some of which have higher tax rates and some of which have lower tax rates relative to the U.S. federal statutory rate. Changes to the blend of income between jurisdictions with higher or lower effective tax rates than the U.S. federal statutory rate could affect our effective tax rate. For the year ended December 31, 2019, decreases in tax expense from income generated in foreign jurisdictions with lower tax rates in comparison to the U.S. federal statutory rate were offset by increases in tax expense from income generated in foreign jurisdictions having comparable, or higher tax rates in comparison to the U.S. federal statutory rate.

As of December 31, 2019 and 2018, RealNetworks had \$5.0 million and \$0.4 million in uncertain tax positions, respectively. The increase in uncertain tax positions is primarily the result of the Napster Acquisition, for which unrecognized tax positions were recorded relating to federal research and development tax credit carryforward risks, as well as transfer pricing risks in certain foreign jurisdictions. The total amount of unrecognized tax benefits that would affect our effective tax rate if recognized, is \$1.3 million as of December 31, 2019. Notwithstanding current year accruals for existing positions, we do not anticipate that the total amount of unrecognized tax benefits will significantly change within the next twelve months.

We file numerous consolidated and separate income tax returns in the U.S. including federal, state and local, as well as foreign jurisdictions. With few exceptions, we are no longer subject to U.S. federal income tax examinations for tax years before 2013 or state, local, or foreign income tax examinations for years before 1993. We are currently under audit by various states and foreign jurisdictions for certain tax years subsequent to 1993.

### Liquidity and Capital Resources

The following summarizes working capital, cash, cash equivalents, short-term investments, and restricted cash and investments (in thousands):

	December 31,	
	2019	2018
Working capital	\$ (41,601)	\$ 33,481
Cash, cash equivalents, and short-term investments	16,805	35,585
Restricted cash equivalents	5,374	1,630

The 2019 decrease in working capital from December 31, 2018 was predominantly due to the consolidation of Napster, which has a negative working capital due in part to its accrued music royalties, which totaled \$54.2 million at December 31, 2019.

Cash and cash equivalents, and short-term investments decreased from December 31, 2018 due to our ongoing negative cash flow from operating activities, which totaled \$25.3 million in the year of 2019, Napster's net repayment of debt of \$4.7 million, and amounts required to be restricted, as discussed below. These decreases were partially offset by proceeds from borrowing on our revolving credit facility of \$3.9 million and our January 2019 Napster Acquisition, which added \$9.9 million of net cash and cash equivalents. In the near term, we expect to see continued net negative cash flow from operating activities.

The increase in restricted cash equivalents is due to the restricted amounts required by the Loan Agreement we entered into in August 2019. See Note 5. Fair Value Measurements for additional details.

The following summarizes cash flow activity (in thousands):

	<b>Years Ended December 31,</b>	
	<b>2019</b>	<b>2018</b>
Cash provided by (used in) operating activities	\$ (25,370)	\$ (19,221)
Cash provided by (used in) investing activities	11,081	3,798
Cash provided by (used in) financing activities	(623)	(62)

Cash used in operating activities consisted of net income (loss) including noncontrolling interests adjusted for certain non-cash items such as depreciation and amortization, stock-based compensation, gain on equity investment, fair value adjustments to contingent consideration liability and the effect of changes in certain operating assets and liabilities.

Cash used in operating activities was \$6.1 million higher in the year ended December 31, 2019 as compared to 2018. Cash used in operations was higher primarily due to our higher operating loss recorded for year 2019 compared to the prior year.

For the year ended December 31, 2019, cash provided by investing activities of \$11.1 million was primarily due to our Napster Acquisition on January 18, 2019. Our initial cash consideration paid at closing of \$0.2 million was offset by the cash, cash equivalents and restricted cash on Napster's balance sheet at that date. As fully described below, we are obligated to make further cash payments relating to the acquisition. The increase was offset in part by fixed asset purchases of \$1.2 million.

For the year ended December 31, 2018, cash provided by investing activities of \$3.8 million was due to sales and maturities of short-term investments totaling \$8.8 million. The sales and maturities were offset by our purchase of a Netherlands-based game development studio in the second quarter of 2018 for net cash consideration of \$4.2 million and by purchases of equipment, software and leasehold improvements of \$0.8 million.

Financing activities for the year ended December 31, 2019 used cash totaling \$0.6 million. This cash outflow was primarily due to Napster's net repayment of debt of \$4.7 million, partially offset by proceeds from borrowing on our revolving credit facility of \$3.9 million. See Note 10. Notes Payable and Long-term Debt for additional details.

Financing activities for the year ended December 31, 2018 used cash totaling \$0.1 million which was from \$0.3 million for tax payments from shares withheld upon vesting of restricted stock offset in part by proceeds received from the issuance of common stock of \$0.2 million.

While we currently have no planned significant capital expenditures for 2020 other than those in the ordinary course of business, we do have contractual commitments for future payments related to office leases. See Note 17. Leases for additional details.

As discussed in Note 4. Acquisitions, we acquired a controlling interest in Napster on January 18, 2019. We paid initial cash consideration of \$0.2 million in the first quarter of 2019 and have accrued an additional \$0.8 million as a current liability as of December 31, 2019. We also have recognized a liability for the estimated fair value of contingent consideration related to the acquisition. As discussed in Note 4. Acquisitions, this fair value amount was estimated using multiple scenarios for each tranche of contingent consideration, probability weighting each scenario, and discounting to arrive at an estimated fair value. This fair value calculation is directly impacted by the total estimated enterprise value of Napster. The contingent consideration will be adjusted quarterly to fair value through earnings, and as of December 31, 2019 the estimated fair value of the contingent consideration was \$12.6 million, with \$2.8 million recognized as a current liability and \$9.8 million as a long-term liability. Any future amounts RealNetworks pays for contingent consideration could vary materially from the estimated amounts we have accrued as of December 31, 2019. See Note 4. Acquisitions for additional details.

In August 2019, RealNetworks and Napster entered into the Loan Agreement with a third-party financial institution. Under the terms of the Agreement, which are further described in Note 10. Notes Payable and Long-term Debt, the bank extended a two-year revolving line of credit not to exceed \$10.0 million in the aggregate. As of December 31, 2019, \$3.9

million had been drawn on the revolving line of credit, and any further advances will be used for working capital and general corporate purposes.

In 2019, Mr. Glaser directly invested \$0.8 million in one of our subsidiaries in exchange for shares of preferred stock of that entity. The subsidiary is developing a platform that transforms the experience of viewing video entertainment into a social, connected playground. As of December 31, 2019, RealNetworks owned approximately 82% of the subsidiary's outstanding equity, and we consolidate its financial results into our financial statements. The financial results of the subsidiary are reported in our Consumer Media segment.

On February 10, 2020, we entered into a Series B Preferred Stock Purchase Agreement with Mr. Glaser, pursuant to which Mr. Glaser invested approximately \$10.0 million in RealNetworks in exchange for the issuance to him of 8,064,516 shares of Series B Preferred Stock. The Series B Preferred Stock is non-voting and is convertible into common stock on a one-to-one basis, provided, however, that no conversion is permitted in the event that such conversion would cause Mr. Glaser's beneficial ownership of our common stock to exceed the 38.5% threshold set forth in our Second Amended and Restated Shareholder Rights Plan dated November 30, 2018. The Series B Preferred Stock has no liquidation preference and no preferred dividend.

We have evaluated our current liquidity position in light of our history of declining revenue and operating losses as well as our near-term expectations of net negative cash flows from operating activities. While we currently believe existing unrestricted cash balances, including the \$10.0 million in cash proceeds from our recent sale of Series B Preferred Stock, along with current availability on our revolving line of credit will be sufficient to allow us to meet our obligations for the next 12 months, our assessment is subject to inherent risks and uncertainties. Moreover, our operating forecast is partly dependent on factors that are outside of our control. Compounding these risks, uncertainties, and other factors are the potential effects of the recent coronavirus pandemic and related impacts on global commerce and financial markets. Further, we must successfully complete the process currently underway with our lender of negotiating customary covenants for 2020. These conditions, when evaluated within the guidance of ASC 205-40, raise substantial doubt about our ability to meet our obligations over the ensuing 12 months and, therefore, to continue as a going concern.

We have active plans to mitigate these conditions. Specifically, we plan to reduce negative cash flow through operating expense reductions, as well as through the deferral of certain obligations where we believe that we have the legal basis to do so. In addition, we are evaluating various strategic opportunities, which may include selling certain businesses or product lines, soliciting external investment into certain of our businesses, or seeking other strategic partnerships. Our plans are subject to inherent risks and uncertainties, which are accentuated by the effects of the current pandemic and related financial crisis. Accordingly, there can be no assurance that our plans can be effectively implemented and, therefore, that the conditions can be effectively mitigated.

Napster will also require outside funding in order to meet its anticipated cash needs over the next 12 months. RealNetworks has no contractual or implied legal obligation to provide funding or other financial support to Napster, and any funding to Napster under the Loan Agreement must be effectuated by RealNetworks. Significant financial distress at Napster could have negative implications in our assessment of goodwill and long-lived assets on RealNetworks' balance sheet.

In the future, we may seek to raise additional funds through public or private equity financing or through other sources. Such sources of funding may or may not be available to us on commercially reasonable terms. The sale of additional equity securities could result in dilution to our shareholders. In addition, in the future, we may enter into cash or stock acquisition transactions or other strategic transactions that could reduce cash available to fund our operations or result in dilution to shareholders.

Our cash equivalents consist of money market funds.

We conduct our operations primarily in four functional currencies: the U.S. dollar, Brazilian real, the euro and the Chinese yuan. We currently do not actively hedge our foreign currency exposures and are therefore subject to the risk of exchange rate fluctuations. We are exposed to foreign exchange rate fluctuations as the financial results of foreign subsidiaries are translated into U.S. dollars in consolidation. Our exposure to foreign exchange rate fluctuations also arises from intercompany payables and receivables to and from our foreign subsidiaries.

As of December 31, 2019, approximately \$11.4 million of the \$16.8 million of cash and cash equivalents are held by our foreign subsidiaries outside the U.S. We have reevaluated our historical assertion that undistributed foreign earnings were indefinitely reinvested and for which deferred taxes were not provided. As a result of the enactment of the Tax Act and as of December 31, 2019, we are no longer indefinitely reinvesting substantially all of the Company's foreign earnings outside of the U.S. As a result of this change, we have recorded deferred taxes of \$0.9 million as of December 31, 2019 to reflect local country and foreign withholding taxes associated with a future repatriation of such foreign earnings.

### **Contractual Obligations**

We have contractual obligations for Long-term debt and for Long-term lease liabilities, both of which are recorded on our balance sheet. For details on the maturity of Long-term debt please refer to Note 10. Notes Payable and Long-term Debt and for future minimum lease payments please refer to Note 17. Leases. Please also refer to Note 18. Commitments and Contingencies. For income tax liabilities for uncertain tax positions, we cannot make a reasonably reliable estimate of the amount and period of any related future payments. As of December 31, 2019, we had \$5.0 million of gross unrecognized tax benefits for uncertain tax positions.

#### **Off-Balance Sheet Arrangements**

We do not maintain accruals associated with certain guarantees, as discussed in Note 19. Guarantees; those guarantee obligations constitute off-balance sheet arrangements.

As disclosed in Note 17. Leases, we adopted the new accounting requirement for leases on January 1, 2019 and thus our operating lease obligations are now recorded on our consolidated balance sheet, rather than disclosed as off-balance sheet items.

#### **Critical Accounting Policies and Estimates**

The preparation of our financial statements requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reported period. Our critical accounting policies and estimates are as follows:

- Revenue recognition;
- Music royalties;
- Valuation of definite-lived assets and goodwill; and
- Accounting for income taxes.

*Revenue Recognition.* We recognize revenue from contracts with customers as control of the promised good or service is transferred. Please refer to Note 3. Revenue Recognition for further details regarding our recognition policies.

*Music Royalties.* Napster estimates the amounts of royalties payable to music publishers or other rights-holders in relation to the use of music content on Napster's music services (both domestic and international). Material differences in these estimates and the actual amounts ultimately determined to be payable may impact the amount and timing of expense in future periods. Napster's license agreements with rights-holders for the content used on its music service are often complex, and the determination of royalty accruals can involve significant judgments, assumptions, and estimates of the amounts to be paid. The variables involved in determining royalty payments or accruals may include the applicable revenue, the type of content used, the country it is used in, the number of plays, the number of subscribers, the rights granted to trial or promotional users, and identification of the appropriate license holder, among other variables. In addition, some rights-holders have allowed the use of their content prior to finalizing the applicable license agreement. In these circumstances, royalties are accrued based on Napster's best estimate of the expected amount.

In certain jurisdictions, rights-holders may have several years to claim royalties for musical compositions, in respect of which ownership has not already been claimed. While Napster bases its estimates on contractual rates, historical experience and on various other assumptions that management believes to be reasonable, actual results may differ materially from these estimates under different assumptions or conditions.

Many of Napster's content license agreements give the rights-holders the right to audit Napster's royalty payments. Given the complexity of the licensing arrangements, any such audit could result in disputes over whether Napster has correctly reported and paid the proper royalties. If such a dispute were to occur, Napster could be required to pay additional royalties, and the amounts involved could be material.

Napster may occasionally be involved in legal actions or other third-party assertions related to use of content on its platform. These actions might be costly and could adversely impact Napster's financial position, results of operations, or cash flows. Napster records a liability when it is probable that a loss has been incurred and the amount can be reasonably estimated. Determining whether a loss is probable and estimable requires management to use significant judgment. Given the uncertainties associated with any litigation, the actual outcome can be different than Napster's estimates and could adversely affect its results of operations, financial position, and cash flows.

*Valuation of Definite-Lived Assets and Goodwill.* Assets acquired and liabilities assumed in a business acquisition are measured at fair value under the purchase accounting method and any goodwill is recognized as the excess of the total purchase price over the fair value of assets acquired and liabilities assumed. The fair value estimates are based upon estimates and assumptions relating to future revenues, cash flows, operating expenses and costs of capital. These estimates and assumptions are complex and subject to a significant degree of judgment with respect to certain factors including, but not limited to, the cash flows of long-term operating plans and risk-commensurate discount rates and cost of capital. In addition, the size, scope, and complexity of an acquisition will affect the time it takes to obtain the necessary information to record the acquired assets and

liabilities at fair value. It may take up to one year to finalize the initial fair value estimates used in the preliminary purchase accounting. Accordingly, it is reasonably likely that our initial estimates will be subsequently revised, which could affect carrying amounts of goodwill, intangibles, noncontrolling interests, contingent consideration, and potentially other assets and liabilities in our financial statements.

Our definite-lived assets consist primarily of amortizable intangible assets acquired in business combinations, property, plant and equipment, and right-of-use operating lease assets. Definite-lived assets are amortized on a straight line basis over their estimated useful lives. We review definite-lived assets for impairment whenever events or changes in circumstances indicate the carrying amount of such assets may not be recoverable. Recoverability of these assets is measured by comparison of their carrying amount to future undiscounted cash flows the assets are expected to generate. If definite-lived assets are considered to be impaired, the impairment to be recognized equals the amount by which the carrying value of the assets exceeds their fair market value.

We test goodwill for impairment on an annual basis, in our fourth quarter, or more frequently if circumstances indicate reporting unit carrying values may exceed their fair values. As part of this test, we first perform a qualitative assessment to determine if the fair value of a reporting unit is more likely than not less than the reporting unit's carrying amount including goodwill. If this assessment indicates it is more likely than not, we then compare the carrying value of the reporting unit to the estimated fair value of the reporting unit. If the carrying value of the reporting unit exceeds the estimated fair value, we then calculate the implied estimated fair value of goodwill for the reporting unit and compare it to the carrying amount of goodwill for the reporting unit. If the carrying amount of goodwill exceeds the implied estimated fair value, an impairment charge to current operations is recorded to reduce the carrying value to implied estimated value.

The impairment analysis of definite-lived assets and goodwill is based upon estimates and assumptions relating to our future revenue, cash flows, operating expenses, costs of capital and capital purchases. These estimates and assumptions are complex and subject to a significant degree of judgment with respect to certain factors including, but not limited to, the cash flows of our long-term operating plans, market and interest rate risk, and risk-commensurate discount rates and cost of capital. Significant or sustained declines in future revenue or cash flows, or adverse changes in our business climate, among other factors, and their resulting impact on the estimates and assumptions relating to the value of our definite-lived and goodwill assets could result in the need to perform an impairment analysis in future periods which could result in a significant impairment. While we believe our estimates and assumptions are reasonable, due to their complexity and subjectivity, these estimates and assumptions could vary from period to period. Changes in these estimates and assumptions could materially affect the estimate of future cash flows and related fair values of these assets and result in significant impairments, which could have a material adverse effect on our financial condition or results of operations. For further discussion, please see the risk factor entitled, "Any impairment to our goodwill and definite-lived assets could result in a material charge to our earnings" under Item 1A Risk Factors.

*Accounting for Income Taxes.* We use the asset and liability method of accounting for income taxes. Under this method, income tax expense is recognized for the amount of taxes payable or refundable for the current year. In addition, deferred income tax expense and deferred tax assets and liabilities are recognized for the expected future tax consequences of temporary differences between the financial reporting and tax basis of assets and liabilities and for operating losses and tax credit carryforwards. Deferred tax assets and liabilities and operating loss and tax credit carryforwards are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences and operating loss and tax credit carryforwards are expected to be recovered or settled. We must make assumptions, judgments and estimates to determine the current and deferred provision for income taxes, deferred tax assets and liabilities and any valuation allowance to be recorded against deferred tax assets. Our judgments, assumptions, and estimates relative to the current provision for income tax take into account current tax laws, our interpretation of current tax laws and possible outcomes of future audits conducted by foreign and domestic tax authorities. Changes in tax law or our interpretation of tax laws and future tax audits could materially impact the amounts provided for income taxes in our consolidated financial statements.

Each reporting period we must periodically assess the likelihood that our deferred tax assets will be recovered from future sources of taxable income, and to the extent that recovery is not more likely than not, a valuation allowance must be established. The establishment of a valuation allowance and increases to such an allowance result in either increases to income tax expense or reduction of income tax benefit in the statement of operations and comprehensive income. In certain instances, changes in the valuation allowance may be allocated directly to the related components of shareholders' equity on the consolidated balance sheet. Factors we consider in making such an assessment include, but are not limited to, past performance and our expectation of future taxable income, macroeconomic conditions and issues facing our industry, existing contracts, our ability to project future results and any appreciation of our investments and other assets.

As of December 31, 2019, approximately \$11.4 million of the \$16.8 million of cash and cash equivalents are held by our foreign subsidiaries outside the U.S. We have reevaluated our historical assertion that undistributed foreign earnings were indefinitely reinvested and for which deferred taxes were not provided. As a result of the enactment of the Tax Act and as of

December 31, 2019, we are no longer indefinitely reinvesting substantially all of the Company's foreign earnings outside of the U.S. As a result of this change, we have recorded deferred taxes of \$0.9 million as of December 31, 2019 to reflect local country and foreign withholding taxes associated with a future repatriation of such foreign earnings.

### **Recently Issued Accounting Standards**

See Note 2. Recent Accounting Pronouncements.

#### **Item 7A. *Quantitative and Qualitative Disclosures About Market Risk***

The following discussion about our market risk involves forward-looking statements. All statements that do not relate to matters of historical fact should be considered forward-looking statements. Actual results could differ materially from those projected in any forward-looking statements.

*Interest Rate Risk.* Our exposure to interest rate risk from changes in market interest rates relates primarily to RealNetworks and Napster's long-term debt and notes payable. RealNetworks and Napster's borrowing arrangements have floating rate interest payments and thus have a degree of interest rate risk, if interest rates increase. Based on the outstanding long-term debt and notes payable as of December 31, 2019, a hypothetical 10% increase/decrease in interest rates would not increase/decrease our annual interest expense or cash flows by more than a nominal amount.

*Foreign Currency Risk.* We conduct business internationally in several currencies and thus are exposed to adverse movements in foreign currency exchange rates.

Our exposure to foreign exchange rate fluctuations arise in part from: (1) translation of the financial results of foreign subsidiaries into U.S. dollars in consolidation; (2) the remeasurement of non-functional currency assets, liabilities and intercompany balances into U.S. dollars for financial reporting purposes; and (3) non-U.S. dollar denominated sales to foreign customers.

Our foreign currency risk management program reduces, but does not entirely eliminate, the impact of currency exchange rate movements.

We have cash balances denominated in foreign currencies which are subject to foreign currency fluctuation risk. The majority of our foreign currency denominated cash is held in Brazilian real, euros, Chinese yuan and Japanese yen. A hypothetical 10% increase or decrease in those currencies relative to the U.S. dollar as of December 31, 2019 would not result in a material impact on our financial position, results of operations or cash flows.



**REALNETWORKS, INC. AND SUBSIDIARIES**  
**CONSOLIDATED BALANCE SHEETS**  
(In thousands, except per share data)

	December 31, 2019	December 31, 2018
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$ 16,805	\$ 35,561
Short-term investments	—	24
Trade accounts receivable, net of allowances	29,507	11,751
Deferred costs, current portion	823	331
Prepaid expenses and other current assets	7,445	5,911
Total current assets	54,580	53,578
Equipment, software, and leasehold improvements, at cost:		
Equipment and software	32,167	37,458
Leasehold improvements	3,311	3,292
Total equipment, software, and leasehold improvements	35,478	40,750
Less accumulated depreciation and amortization	32,657	37,996
Net equipment, software, and leasehold improvements	2,821	2,754
Operating lease assets	11,592	—
Restricted cash equivalents	5,374	1,630
Other assets	1,891	3,997
Deferred costs, non-current portion	1,021	528
Deferred tax assets, net	761	851
Other intangible assets, net	19,286	26
Goodwill	62,428	16,955
Total assets	\$ 159,754	\$ 80,319
<b>LIABILITIES AND SHAREHOLDERS' EQUITY</b>		
Current liabilities:		
Accounts payable	\$ 4,927	\$ 3,910
Accrued royalties, fulfillment and other current liabilities	77,303	11,312
Commitment to Napster	—	2,750
Deferred revenue, current portion	6,620	2,125
Notes payable	7,331	—
Total current liabilities	96,181	20,097
Deferred revenue, non-current portion	96	268
Deferred rent	—	986
Deferred tax liabilities, net	1,172	1,168
Long-term lease liabilities	8,466	—
Long-term debt	3,900	—
Other long-term liabilities	11,666	960
Total liabilities	121,481	23,479
Commitments and contingencies		
Shareholders' equity:		
Preferred stock, \$0.001 par value, no shares issued and outstanding:		
Series A: authorized 200 shares	—	—
Undesignated series: authorized 59,800 shares	—	—
Common stock, \$0.001 par value authorized 250,000 shares; issued and outstanding 38,227 shares in 2019 and 37,728 shares in 2018	38	37
Additional paid-in capital	644,070	641,930
Accumulated other comprehensive loss	(61,323)	(61,118)
Retained deficit	(544,010)	(524,009)
Total shareholders' equity	38,775	56,840
Noncontrolling interests	(502)	—
Total equity	38,273	56,840
Total liabilities and equity	\$ 159,754	\$ 80,319



**REALNETWORKS, INC. AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE INCOME (LOSS)**  
(In thousands, except per share data)

	Years Ended December 31,	
	2019	2018
Net revenue	\$ 172,113	\$ 69,510
Cost of revenue	103,127	17,727
Gross profit	68,986	51,783
Operating expenses:		
Research and development	34,848	30,789
Sales and marketing	32,778	21,140
General and administrative	31,305	20,706
Restructuring and other charges	2,498	1,873
Lease exit and related charges	—	(454)
Total operating expenses	101,429	74,054
Operating loss	(32,443)	(22,271)
Other income (expenses):		
Interest expense	(636)	—
Interest income	131	344
Gain (loss) on equity investment, net	12,338	—
Equity in net loss of Napster investment	—	(757)
Other income (expense), net	420	(103)
Total other income (expenses), net	12,253	(516)
Income (loss) before income taxes	(20,190)	(22,787)
Income tax expense	1,068	2,202
Net income (loss) including noncontrolling interests	(21,258)	(24,989)
Net income (loss) attributable to noncontrolling interests	(1,257)	—
Net income (loss) attributable to RealNetworks	\$ (20,001)	\$ (24,989)
Net income (loss) per share attributable to RealNetworks- Basic	\$ (0.53)	\$ (0.66)
Net income (loss) per share attributable to RealNetworks- Diluted	\$ (0.53)	\$ (0.66)
Shares used to compute basic net income (loss) per share	37,994	37,582
Shares used to compute diluted net income (loss) per share	37,994	37,582
Comprehensive income (loss):		
Unrealized investment holding gains (losses), net of reclassification adjustments	\$ —	\$ 17
Foreign currency translation adjustments, net of reclassification adjustments	(205)	(1,588)
Total other comprehensive income (loss)	(205)	(1,571)
Net income (loss) including noncontrolling interests	(21,258)	(24,989)
Comprehensive income (loss) including noncontrolling interests	(21,463)	(26,560)
Comprehensive income (loss) attributable to noncontrolling interests	(1,257)	—
Comprehensive income (loss) attributable to RealNetworks	\$ (20,206)	\$ (26,560)

See accompanying notes to consolidated financial statements.

**REALNETWORKS, INC. AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENTS OF CASH FLOWS**  
(In thousands)

	Years Ended December 31,	
	2019	2018
Cash flows from operating activities:		
Net income (loss) including noncontrolling interests	\$ (21,258)	\$ (24,989)
Adjustments to reconcile net income (loss) including noncontrolling interests to net cash used in operating activities:		
Depreciation and amortization	5,834	2,135
Stock-based compensation	2,881	2,508
Equity in net loss of Napster	—	757
Lease exit and related charges	—	(454)
Deferred income taxes, net	(30)	1,170
(Gain) loss on equity investment, net	(12,338)	—
Foreign currency (gain) loss	(310)	—
Fair value adjustments to contingent consideration liability	1,000	—
Mark to market adjustment of warrants	—	124
Net change in certain operating assets and liabilities:		
Trade accounts receivable	3,089	17,971
Prepaid expenses, operating lease and other assets	5,083	(377)
Accounts payable	243	(15,125)
Accrued, lease and other liabilities	(9,564)	(2,941)
Net cash provided by (used in) operating activities	(25,370)	(19,221)
Cash flows from investing activities:		
Purchases of equipment, software, and leasehold improvements	(1,192)	(765)
Proceeds from sales and maturities of short-term investments	24	8,755
Acquisitions, net of cash acquired	12,249	(4,192)
Net cash provided by (used in) investing activities	11,081	3,798
Cash flows from financing activities:		
Proceeds from issuance of common stock (stock options and stock purchase plan)	199	199
Tax payments from shares withheld upon vesting of restricted stock	(309)	(261)
Proceeds from notes payable and revolving credit facility	41,201	—
Repayments of notes payable and revolving credit facility	(41,992)	—
Payment of financing fees	(622)	—
Other financing activities	900	—
Net cash provided by (used in) financing activities	(623)	(62)
Effect of exchange rate changes on cash, cash equivalents and restricted cash	(100)	(920)
Net increase (decrease) in cash, cash equivalents and restricted cash	(15,012)	(16,405)
Cash, cash equivalents, and restricted cash, beginning of year	37,191	53,596
Cash, cash equivalents, and restricted cash, end of year	\$ 22,179	\$ 37,191

**REALNETWORKS, INC. AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENTS OF CASH FLOWS - Continued**  
**(In thousands)**

**Supplemental disclosure of cash flow information:**

Cash received from income tax refunds	\$	2,256	\$	308
Cash paid for income taxes	\$	1,195	\$	1,198
Cash paid for interest expense	\$	412	\$	—
Non-cash investing activities:				
Increase (decrease) in accrued purchases of equipment, software, and leasehold improvements	\$	(83)	\$	10

See accompanying notes to consolidated financial statements.

**REALNETWORKS, INC. AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY**  
(In thousands)

	Common Stock		Additional Paid-In Capital	Accumulated Other Comprehensive Income (Loss)	Retained Earnings (Deficit)	Total Shareholders' Equity	Non- controlling Interests	Total Equity
	Shares	Amount						
<b>Balances, December 31, 2017</b>	37,341	\$ 37	\$ 638,727	\$ (59,547)	\$ (500,044)	\$ 79,173	\$ —	\$ 79,173
Cumulative effect of revenue recognition accounting change	—	—	—	—	1,024	1,024	—	1,024
Common stock issued for exercise of stock options, employee stock purchase plan, and vesting of restricted shares, net of tax payments from shares withheld upon vesting of restricted stock	387	—	(62)	—	—	(62)	—	(62)
Share of Napster equity transactions	—	—	757	—	—	757	—	757
Stock-based compensation	—	—	2,508	—	—	2,508	—	2,508
Other comprehensive income (loss)	—	—	—	(1,571)	—	(1,571)	—	(1,571)
Net income (loss)	—	—	—	—	(24,989)	(24,989)	—	(24,989)
<b>Balances, December 31, 2018</b>	37,728	\$ 37	\$ 641,930	\$ (61,118)	\$ (524,009)	\$ 56,840	\$ —	\$ 56,840
Common stock issued for exercise of stock options, employee stock purchase plan, and vesting of restricted shares, net of tax payments from shares withheld upon vesting of restricted stock	499	1	(110)	—	—	(109)	—	(109)
Napster acquisition	—	—	(1,346)	—	—	(1,346)	570	(776)
Stock-based compensation	—	—	2,881	—	—	2,881	—	2,881
Other comprehensive income (loss)	—	—	—	(205)	—	(205)	—	(205)
Net income (loss)	—	—	—	—	(20,001)	(20,001)	(1,257)	(21,258)
Other equity transactions <sup>(1)</sup>	—	—	715	—	—	715	185	900
<b>Balances, December 31, 2019</b>	38,227	\$ 38	\$ 644,070	\$ (61,323)	\$ (544,010)	\$ 38,775	\$ (502)	\$ 38,273

<sup>(1)</sup> In 2019, Mr. Glaser directly invested \$0.8 million in one of our subsidiaries in exchange for shares of preferred stock of that entity. See Note 21. Related Party Transactions for additional details.

See accompanying notes to consolidated financial statements.

**REALNETWORKS, INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**  
**Years ended December 31, 2019 and 2018**

**Note 1. Description of Business and Summary of Significant Accounting Policies**

*Description of Business.* RealNetworks, Inc. and subsidiaries is a leading global provider of network-delivered digital media applications and services that make it easy to manage, play and share digital media. The Company develops and markets software products and services that enable the creation, distribution and consumption of digital media, including audio and video, features GameHouse Original Stories, a unique IP portfolio of free-to-play mobile casual games, and continues to invest in our platform for facial recognition and computer vision for live video, SAFR, which enables new applications for security, convenience, and analytics. We acquired the Napster music business on January 18, 2019, which offers a comprehensive set of digital music products and services designed to provide consumers with broad access to digital music. For more information on Napster, see Note 4. Acquisitions.

Inherent in our business are various risks and uncertainties, including a limited history of certain of our product and service offerings. RealNetworks' success will depend on the acceptance of our technology, products and services and the ability to generate related revenue and cash flow.

In this Annual Report on Form 10-K for the year ended December 31, 2019 (10-K), RealNetworks, Inc. and subsidiaries is referred to as "RealNetworks", the "Company", "we", "us", or "our".

*Basis of Presentation.* The consolidated financial statements include the accounts of the Company and its subsidiaries in which it has a more than 50% voting interest. Noncontrolling interests primarily represent third-party ownership in the equity of Napster and are reflected separately in the Company's financial statements. Intercompany balances and transactions have been eliminated in consolidation.

The consolidated financial statements reflect all adjustments, consisting only of normal, recurring adjustments that, in the opinion of management, are necessary for a fair presentation of the results of operations for the periods presented. Operating results for the year ended December 31, 2019 are not necessarily indicative of the results that may be expected for any subsequent periods.

*Liquidity and Capital Resources.* Our unrestricted cash and cash equivalents balance at December 31, 2019 was \$16.8 million and our operating loss for the fiscal year ended December 31, 2019 was \$32.4 million. We have evaluated our current liquidity position in light of our history of declining revenue and operating losses as well as our near-term expectations of net negative cash flows from operating activities. While we currently believe existing unrestricted cash balances, including the \$10.0 million in cash proceeds from our recent sale of Series B Preferred Stock, along with current availability on our revolving line of credit will be sufficient to allow us to meet our obligations for the next 12 months, our assessment is subject to inherent risks and uncertainties. Moreover, our operating forecast is partly dependent on factors that are outside of our control. Compounding these risks, uncertainties, and other factors are the potential effects of the recent coronavirus pandemic and related impacts on global commerce and financial markets. Further, we must successfully complete the process currently underway with our lender of negotiating customary covenants for 2020. These conditions, when evaluated within the guidance of ASC 205-40, raise substantial doubt about our ability to meet our obligations over the 12 months from the date of this filing and, therefore, to continue as a going concern. Our financial statements do not include any adjustment relating to the recoverability and classification of recorded asset amounts or the amounts and classification of liabilities that might be necessary should we be unable to continue as a going concern.

We have active plans to mitigate these conditions. Specifically, we plan to reduce negative cash flow through operating expense reductions, as well as through the deferral of certain obligations where we believe that we have the legal basis to do so. In addition, we are evaluating various strategic opportunities, which may include selling certain businesses or product lines, soliciting external investment into certain of our businesses, or seeking other strategic partnerships. Our plans are subject to inherent risks and uncertainties, which become significantly magnified when the effects of the current pandemic and related financial crisis are included in the assessment. Accordingly, there can be no assurance that our plans can be effectively implemented and, therefore, that the conditions can be effectively mitigated.

*Use of Estimates.* The preparation of financial statements in conformity with accounting principles generally accepted in the U.S. (GAAP) requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

*Cash and Cash Equivalents and Short-Term Investments.* We consider all short-term investments with a remaining contractual maturity at date of purchase of three months or less to be cash equivalents.

*Trade Accounts Receivable.* Trade accounts receivable consist of amounts due from customers and do not bear interest. The allowance for doubtful accounts and sales returns is our estimate of the amount of probable credit losses and returns in our

existing accounts receivable. We determine the allowances based on analysis of historical bad debts, customer concentrations, changes in customer credit-worthiness, return history and current economic trends. We review the allowances for doubtful accounts and sales returns quarterly. Past due balances over 90 days and specified other balances are reviewed individually for collectability. All other balances are reviewed on an aggregate basis. Account balances are written off against the allowance after all reasonable means of collection have been exhausted and the potential for recovery is considered remote. We do not have any off-balance sheet credit exposure related to our customers.

*Concentration of Credit Risk.* Financial instruments that potentially expose the Company to concentrations of credit risk consist primarily of cash and cash equivalents and accounts receivable. We derive a portion of our revenue from a large number of individual consumers spread globally. We also derive revenue from several large customers. If the financial condition or results of operations of any one of the large customers deteriorates substantially, our operating results could be adversely affected. To reduce credit risk, management performs ongoing credit evaluations of the financial condition of significant customers. We do not generally require collateral and we maintain an allowance for estimated credit losses on customer accounts when considered necessary.

*Depreciation and Amortization.* Depreciation of equipment and software, as well as amortization of leasehold improvements is computed using the straight-line method over the lesser of the estimated useful lives of the assets or the related lease term. The useful life of equipment and software is generally three to five years.

Depreciation and amortization expense of these assets during the years ended December 31, 2019 and 2018 was \$1.5 million and \$1.7 million, respectively.

*Equity Method Investment.* We use the equity method in circumstances where we have the ability to exert significant influence, but not control, over an investee or joint venture. We initially record our investment based on a fair value analysis of the investment. We record our percentage interest in the investee's recorded income or loss and changes in the investee's capital under this method, which will increase or decrease the reported value of our investment.

We evaluate impairment of an investment accounted for under the equity method if events and circumstances warrant. An impairment charge would be recorded if a decline in the fair value of an equity investment below its carrying amount were determined to be other than temporary. In determining if a decline is other than temporary, we consider factors such as the length of time and extent to which the fair value of the investment has been less than the carrying amount of the investee or joint venture, the near-term and longer-term operating and financial prospects of the investee or joint venture and our intent and ability to hold the investment for a period of time sufficient to allow for any anticipated recovery.

*Deferred Costs.* We defer certain costs on projects for service revenues and system sales. Deferred costs consist primarily of direct and incremental costs to customize and install systems, as defined in individual customer contracts, including costs to acquire hardware and software from third parties and payroll and related costs for employees and other third parties. Deferred costs are capitalized during the implementation period.

We recognize such costs as a component of cost of revenue, the timing of which is dependent upon the revenue recognition policy by contract. At each balance sheet date, we review deferred costs to ensure they are ultimately recoverable. Any anticipated losses on uncompleted contracts are recognized when evidence indicates the estimated total cost of a contract exceeds its estimated total revenue or if actual deferred costs exceed estimated contractual revenue. Assessing the recoverability of deferred costs is based on significant assumptions and estimates, including future revenue and cost of sales. Significant or sustained decreases in revenue or increases in cost of sales in future periods could result in impairments of deferred project costs and prepaid royalty advances. We cannot accurately predict the amount and timing of any such impairments. Should deferred project costs or prepaid royalty advances become impaired, we would record the appropriate charge, which could have a material adverse effect on our financial condition and results of operations.

*Definite-Lived Tangible and Intangible Assets.* Definite-lived tangible assets include equipment, software and leasehold improvements and are carried at cost less accumulated depreciation and amortization. Definite-lived intangible assets consist primarily of the fair value of trade name and trademarks, customer and partner agreements and contracts, and developed technology acquired in business combinations and are amortized over their estimated useful lives.

We review these assets for impairment whenever events or changes in circumstances indicate the carrying amount of such assets may not be recoverable. If the carrying amount of an asset group is not recoverable, an impairment loss is recognized if the carrying amount of the asset group exceeds its estimated fair value, which is generally determined as the present value of estimated future cash flows to a market participant. Our impairment analysis is based on significant assumptions of future results, including operating and cash flow projections. Significant or sustained declines in future revenue or cash flows, or adverse changes in our business climate, among other factors, could result in the need to record an impairment charge in future periods.

*Goodwill.* We test goodwill for impairment on an annual basis, in our fourth quarter, or more frequently if circumstances indicate reporting unit carrying values may exceed their fair values. Circumstances that may indicate a reporting unit's carrying value exceeds its fair value include, but are not limited to: poor economic performance relative to historical or projected future operating results; significant negative industry, economic or company specific trends; changes in the manner of our use of the assets or the plans for our business; and loss of key personnel.

When evaluating goodwill for impairment, based upon our annual test or due to changes in circumstances described above, we first perform a qualitative assessment to determine if the fair value of a reporting unit is more likely than not less than the reporting unit's carrying amount including goodwill. If this assessment indicates it is more likely than not, we then compare the carrying value of the reporting unit to the estimated fair value of the reporting unit. If the carrying value of the reporting unit exceeds the estimated fair value, we then calculate the implied estimated fair value of goodwill for the reporting unit and compare it to the carrying amount of goodwill for the reporting unit. If the carrying amount of goodwill exceeds the implied estimated fair value, an impairment charge to current operations is recorded to reduce the carrying value to implied estimated value. Significant judgment is required in determining the reporting units and assessing fair value of the reporting units.

*Fair Value.* Fair value is the price that would be received from selling an asset or paid in transferring a liability in an orderly transaction between market participants at the measurement date. Our fair value measurements consider the principal or most advantageous market in which we would transact and the market-based risk measurements or assumptions that market participants would use in pricing the asset or liability, such as inherent risk, transfer restrictions and credit risk.

Fair values are determined based on three levels of inputs:

- Level 1: Quoted prices in active markets for identical assets or liabilities
- Level 2: Directly or indirectly observed inputs for the asset or liability, including quoted prices for similar assets or liabilities in active markets and quoted prices for identical or similar assets or liabilities in markets that are not active
- Level 3: Significant unobservable inputs that reflect our own estimates of assumptions that market participants would use

*Research and Development.* Costs incurred in research and development are expensed as incurred. Software development costs are capitalized when a product's technological feasibility has been established through the date the product is available for general release to customers. Other than internal use software, we have not capitalized any software development costs, as technological feasibility is generally not established until a working model is completed, at which time substantially all development is complete.

*Revenue Recognition.* We recognize revenue from contracts with customers as control of the promised good or service is transferred. Please refer to Note 3. Revenue Recognition for further details regarding our recognition policies.

*Cost of Revenue in Napster Segment.* Napster estimates the amounts of royalties payable to certain music publishers or other rights-holders in relation to the use of music content on Napster's music services (both domestic and international). Material differences in these estimates and the actual amounts ultimately determined to be payable may impact the amount and timing of expense in future periods. Napster's license agreements with rights-holders for the content used on its music service are often complex, and the determination of royalty accruals can involve significant judgments, assumptions, and estimates of the amounts to be paid. The variables involved in determining royalty payments or accruals may include the applicable revenue, the type of content used, the country it is used in, the number of plays, the number of subscribers, the rights granted to trial or promotional users, and identification of the appropriate license holder, among other variables. In addition, some rights-holders have allowed the use of their content prior to finalizing the applicable license agreement. In these circumstances, royalties are accrued based on Napster's best estimate of the expected amount.

In certain jurisdictions, rights-holders may have several years to claim royalties for musical compositions, in respect of which ownership has not already been claimed. While Napster bases its estimates on contractual rates, historical experience and on various other assumptions that management believes to be reasonable, actual results may differ materially from these estimates under different assumptions or conditions.

Many of Napster's content license agreements give the rights-holders the right to audit Napster's royalty payments. Given the complexity of the licensing arrangements, any such audit could result in disputes over whether Napster has correctly reported and paid the proper royalties. If such a dispute were to occur, Napster could be required to pay additional royalties, and the amounts involved could be material.

Napster may occasionally be involved in legal actions or other third-party assertions related to use of content on its platform. These actions might be costly and could adversely impact Napster's financial position, results of operations, or cash flows. Napster records a liability when it is probable that a loss has been incurred and the amount can be reasonably estimated.

Determining whether a loss is probable and estimable requires management to use significant judgment. Given the uncertainties associated with any litigation, the actual outcome can be different than Napster's estimates and could adversely affect its results of operations, financial position, and cash flows.

Related to Napster's accrued music royalties are amounts that are advanced to certain music publishers for royalty amounts that have been agreed as being owed, but for which the underlying rights holder have not yet been specifically matched. When these amounts are ultimately matched and invoiced to Napster, the prepaid royalty amount and the related accrued royalty liability are offset on the consolidated balance sheets. Please refer to Note 9. Accrued and Other Current Liabilities for further details.

*Advertising Expenses.* We expense the cost of advertising and promoting our products as incurred. These costs are included in sales and marketing expense and totaled \$8.8 million in 2019 and \$4.3 million in 2018.

*Foreign Currency.* The functional currency of the Company's foreign subsidiaries is generally the currency of the country in which the subsidiary operates. Assets and liabilities of foreign operations are translated into U.S. dollars using rates of exchange in effect at the end of the reporting period. The net gain or loss resulting from translation is shown as translation adjustment and included in Accumulated Other Comprehensive Income (AOCI) in shareholders' equity. Income and expense accounts are translated into U.S. dollars using average rates of exchange. Gains and losses from foreign currency transactions are included in the consolidated statements of operations.

*Accounting for Taxes Collected from Customers.* Our revenues are reported net of sales and other transaction taxes that are collected from customers and remitted to taxing authorities.

*Income Taxes.* We compute income taxes using the asset and liability method, under which deferred income taxes are provided for temporary differences between financial reporting basis and tax basis of our assets and liabilities and operating loss and tax credit carryforwards. We record a valuation allowance when it is more likely than not that some portion or all of the deferred tax assets will not be realized. The ultimate realization of the deferred tax assets depends on the ability to generate sufficient taxable income of the appropriate character in the appropriate taxing jurisdictions. Adjustments to the valuation allowance could be required in the future if we estimate that the amount of deferred tax assets to be realized is more or less than the net amount we have recorded. Any increase or decrease in the valuation allowance could have the effect of increasing or decreasing the income tax provision in the statement of operations.

Deferred tax assets and liabilities and operating loss and tax credit carryforwards are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences and operating loss and tax credit carryforwards are expected to be recovered or settled.

We file numerous consolidated and separate income tax returns in the U.S. including federal, state and local, as well as foreign jurisdictions. With few exceptions, we are no longer subject to U.S. federal income tax examinations for tax years before 2013 or state, local, or foreign income tax examinations for years before 1993. We are currently under audit by various states and foreign jurisdictions for certain tax years subsequent to 1993.

We recognize the tax benefit from an uncertain tax position only if it is more likely than not that the tax position will be sustained on examination by the taxing authorities, based on the technical merits of the position. The tax benefits recognized in the financial statements from such a position are measured based on the largest benefit that has a greater than 50% likelihood of being realized upon ultimate settlement. We recognize accrued interest and penalties related to uncertain tax positions as a component of income tax expense.

*Stock-Based Compensation.* Stock-based compensation cost is measured at the grant date based on the fair value of the award and is recognized as expense over the requisite service period, which is the vesting period. We use the Black-Scholes option-pricing model or other appropriate valuation models such as Monte Carlo simulation to determine the fair value of stock-based option awards. The fair value of restricted stock awards is based on the closing market price of our common stock on the grant date of the award. Generally, we recognize the compensation cost for awards on a straight-line basis for the entire award, over the applicable vesting period. For performance-based awards, expense is recognized when it is probable the performance goal will be achieved, however if the likelihood becomes improbable, that expense is reversed. For market-based stock options, fair value is measured at the grant date using the Monte Carlo simulation model, and we recognize compensation cost for these awards on a straight-line basis over the requisite service period for each separately vesting portion of the awards. For our employee stock purchase plan, compensation expense is measured based on the discount the employee is entitled to upon purchase.

The valuation models for stock-based option awards require various judgmental assumptions including volatility in our common stock price and expected option life. If any of the assumptions used in the valuation models change significantly, stock-based compensation expense for new awards may differ materially in the future from the amounts recorded in the

consolidated statements of operations. For all awards, we also estimate forfeitures at the time of grant and revise those estimates in subsequent periods if actual forfeitures differ from those estimates.

*Net Income Per Share.* Basic net income (loss) per share (EPS) is computed by dividing net income (loss) by the weighted average number of common shares outstanding during the period. Diluted EPS is computed by dividing net income (loss) by the weighted average number of common and dilutive potential common shares outstanding during the period.

## **Note 2. Recent Accounting Pronouncements**

### ***Recently adopted accounting pronouncements***

In February 2016, the Financial Accounting Standards Board (FASB) issued new guidance related to the accounting for leases. A major change in the new guidance is that lessees are now required to present right-of-use assets and lease liabilities on the balance sheet. Enhanced disclosures are also required to give financial statement users the ability to assess the amount, timing and uncertainty of cash flows arising from leases. We adopted the new guidance effective January 1, 2019 and elected to apply the new guidance at the beginning of the year of adoption, rather than applying the new guidance retrospectively to each prior reporting period presented. In addition, we elected the package of practical expedients permitted under the transition guidance within the new standard, which among other things, allowed us to carry forward historical lease classification. We have finalized our assessment of the impacts resulting from the new standard, including the impact on our internal controls. As a result of our evaluation, we have modified certain accounting policies and practices and existing controls. Adoption of the standard resulted in the recognition of \$12.5 million of operating lease assets and \$14.6 million of current and long-term operating lease liabilities as of January 1, 2019. The difference between the operating lease assets and lease liabilities recorded upon adoption relates to previously accrued deferred rent and lease exit and related charges included on our balance sheet as of December 31, 2018. Lease exit and related charges previously recorded pertain to the reduction in use of RealNetworks' office space and included estimates of sublease income expected to be received. The new guidance did not materially impact our consolidated statement of operations in 2019 and did not cause revision to previously recorded estimates for lease exit charges. See Note 17. Leases for additional information about the new accounting standard.

In June 2018, the FASB issued new guidance related to the measurement and classification for share-based awards to non-employees. The new guidance essentially aligns the measurement and classification for these awards with that for share-based awards to employees. We adopted the new guidance effective January 1, 2019, with no material impact on our consolidated financial statements and related disclosures.

### ***Recently issued accounting pronouncements not yet adopted***

In January 2017, the FASB issued new guidance simplifying the test for goodwill impairment. The new guidance eliminates Step 2 from the goodwill impairment test, instead requiring an entity to recognize a goodwill impairment charge for the amount by which the reporting unit's carrying amount exceeds the reporting unit's fair value. This guidance is effective for interim and annual goodwill impairment tests in fiscal years beginning after December 15, 2022, with early adoption permitted. We do not currently expect the adoption to have a material impact on our consolidated financial statements and related disclosures.

In June 2016, the FASB issued new guidance amending existing guidance for the accounting of credit losses on financial instruments. Under the new guidance, the valuation allowance for credit losses is expected to be incurred over the financial asset's contractual term. We reviewed the new credit loss standard and determined that it applies to our accounts receivable, which are typically of short duration and for which we have not historically experienced significant credit losses. This guidance is effective for us in fiscal years beginning after December 15, 2022 with a cumulative effect of adoption recorded as an adjustment to retained earnings. We are in the process of evaluating the effect that this new guidance will have on our consolidated financial statements and related disclosures.

### Note 3. Revenue Recognition

#### *Adoption of New Revenue Standard*

On January 1, 2018 we adopted the new revenue recognition standard by applying the modified retrospective approach to those contracts which were not completed as of January 1, 2018. Under the modified retrospective approach, we recorded a net decrease to opening retained deficit of \$1.0 million as of January 1, 2018.

#### *Performance Obligations*

We generate all of our revenue through contracts with customers. Revenue is either recognized over time as the service is provided, or at a point in time when the product is transferred to the customer, depending on the contract type. Our performance obligations typically have an original duration of one year or less.

Our software licensing revenue stream generates revenue through the on-premises licensing of our codec technologies and integrated RealTimes platform. We recognize revenue upfront at the point in time when the software is made available to the customer. In cases where a sale or usage-based royalty is promised in exchange for a license of our codec technologies, revenue is recognized as the subsequent usage occurs for the contractual amount owed by the customer for that usage, as is allowed under the licensing of intellectual property section of Topic 606. Software licensing in our Mobile Services segment is invoiced on a monthly basis either based on usage of the respective product, or on a fixed fee basis. Our Consumer Media licensing is invoiced either quarterly or annually based on the usage of the respective product, or on a fixed fee basis. For each of these, the timing of payment generally does not vary significantly from the timing of invoice, however, certain of our long-term Consumer Media licensing contracts have extended payment schedules which may exceed one year.

Our subscription services revenue stream allows customers to use hosted software over the respective contract period without taking possession of the technology. The stream is primarily comprised of our intercarrier messaging service, ringback tones, PC-based and mobile games subscriptions, our RealPlayer and SuperPass services, and the Napster music streaming service. Revenues related to subscription service products are recognized ratably over the contract period, or as we have the right to invoice as a practical expedient when that amount corresponds directly with the value to the customer of our performance completed to date. Consumer subscription products are paid in advance, typically on a monthly or quarterly basis. Subscription services offered to businesses are invoiced on a monthly basis, generally based upon the amount of usage for the previous month, and the timing of payment generally does not vary significantly from the timing of invoice.

Our product sales revenue stream includes purchases of in-game virtual goods, mobile and wholesale games, as well as our RealPlayer product. Proceeds from sales of in-game virtual goods are initially recorded in deferred revenue and are recognized as revenues over 30 days, our estimate of the time period that end users benefit from these purchases and our related performance obligation is satisfied. Retail purchases are recognized and paid for at the point in time the product is made available to the end user. For games which are sold through third-party application storefronts, we evaluate the transaction for gross or net revenue recognition. As we typically are the primary obligor in our third-party transactions, we recognize revenues gross of any app store fees. We then receive monthly payments from the respective app store for all purchases within the respective month.

Other revenues consist primarily of advertising and the distribution of third-party products, which are recognized and paid on a cost per impression or cost per download basis.

#### *Disaggregation of Revenue*

The following table presents our disaggregated revenue by source and segment (in thousands):

Business Line	Year ended December 31, 2019			
	Consumer Media	Mobile Services	Games	Napster
Software License	\$ 6,522	\$ 3,101	\$ —	\$ —
Subscription Services	4,148	24,042	12,121	106,311
Product Sales	825	—	9,823	—
Advertising and Other	1,675	—	3,545	—
Total	<u>\$ 13,170</u>	<u>\$ 27,143</u>	<u>\$ 25,489</u>	<u>\$ 106,311</u>

Business Line	Year ended December 31, 2018			
	Consumer Media	Mobile Services	Games	Napster
Software License	\$ 9,940	\$ 2,838	\$ —	\$ —
Subscription Services	4,895	26,832	11,141	—
Product Sales	1,177	—	8,647	—
Advertising and Other	2,156	—	1,884	—
Total	\$ 18,168	\$ 29,670	\$ 21,672	\$ —

The following table presents our disaggregated revenue by sales channel (in thousands):

Sales Channel	Year ended December 31, 2019			
	Consumer Media	Mobile Services	Games	Napster
Business to Business	\$ 8,199	\$ 26,691	\$ 4,710	\$ 50,895
Direct to Consumer	4,971	452	20,779	55,416
Total	\$ 13,170	\$ 27,143	\$ 25,489	\$ 106,311

Sales Channel	Year ended December 31, 2018			
	Consumer Media	Mobile Services	Games	Napster
Business to Business	\$ 12,096	\$ 29,081	\$ 3,225	\$ —
Direct to Consumer	6,072	589	18,447	—
Total	\$ 18,168	\$ 29,670	\$ 21,672	\$ —

#### **Contract Balances**

The timing of revenue recognition may differ from the timing of invoicing to our customers. We record accounts receivable when the right to consideration becomes unconditional, except for the passage of time. For certain contracts, payment schedules may exceed one year; for those contracts we recognize a long-term receivable. As of December 31, 2019 and 2018 our balance of long-term accounts receivable was \$0.3 million and \$0.7 million, respectively, and is included in other long-term assets on our consolidated balance sheets. The decrease in this balance from December 31, 2018 to December 31, 2019 is primarily due to the timing of expected cash receipts. During the year ended December 31, 2019, we recorded no impairments to our contract assets.

We record deferred revenue when cash payments are received in advance of our completion of the underlying performance obligation. As of December 31, 2019 we had a deferred revenue balance of \$6.7 million, an increase of \$4.3 million from December 31, 2018, primarily due to Napster deferred revenue.

#### **Significant Estimates**

For certain of our contracts, we recognize revenues using the sales- and usage-based exception as defined in the licensing guidance of Topic 606. For these contracts, we typically receive reporting of actual usage a quarter in arrears, and as such, we are required to estimate the current quarter's usage. To make these estimates, we utilize historical reporting information, as well as industry trends and interim reporting to quantify total quarterly usage. As actual usage information is received, we record a true-up in the following quarter to reflect any variance from our estimate. In the year ended December 31, 2019, we did not record any material true-ups to our consolidated financial statements.

#### **Practical Expedients**

For those contracts for which we recognize revenue at the amount to which we have the right to invoice for service performed, we do not disclose the value of any unsatisfied performance obligations. We also do not disclose the remaining unsatisfied performance obligations which have an original duration of one year or less. Additionally, we immediately expense sales commissions when incurred as the amortization period would have been less than one year. These costs are recorded within sales and marketing expense.

#### **Note 4. Acquisitions**

##### ***Napster***

On January 18, 2019, RealNetworks acquired an additional 42% interest in Rhapsody International, Inc. (doing business as Napster) bringing our aggregate ownership to 84% of Napster's outstanding equity, thus giving RealNetworks a majority voting interest. Napster's music streaming service provides users with broad access to digital music, offering on-demand streaming and conditional downloads through unlimited access to a catalog of millions of music tracks. Napster offers music services worldwide and generates revenue primarily through subscriptions to its music services either directly to consumers or through distribution partners.

Initially formed in 2007 and branded then as Rhapsody, Napster began as a joint venture between RealNetworks and MTV Networks, a division of Viacom International, Inc. Prior to the acquisition of the additional 42% interest in Napster, we accounted for our investment using the equity method of accounting.

Following the January 2019 Napster Acquisition, RealNetworks has the right to nominate directors constituting a majority of the Napster board of directors, however, Napster will continue to operate as an independent business with its own board of directors, strategy and leadership team. We are consolidating Napster's financial results into our financial statements for fiscal periods following the closing of the acquisition, and Napster is reported as a separate segment in RealNetworks' consolidated financial statements. Napster, however, remains a distinct legal entity and RealNetworks assumes no ownership or control over the assets or liabilities of Napster.

We have recorded 100% of the estimated fair value of the assets acquired and liabilities assumed as of January 18, 2019 based on the results of an independent valuation. The 16% of Napster that we do not own is accounted for as a noncontrolling interest in our consolidated financial statements, and as part of this consolidation, the carrying value of our previous 42% equity method investment was remeasured to fair value on the acquisition date. The remeasurement to fair value of the historical 42% ownership interest resulted in the recognition of a \$2.7 million gain at the time of acquisition, which is a component of the overall gain recognized as a part of this transaction. Our consolidated balance sheet reflects Napster's working capital deficit, which results in a consolidated working capital deficit. RealNetworks does not have any contractual or implied obligation to provide funding or other financial support to Napster, or to guarantee or provide other such support related to Napster's third party borrowing or Napster's other obligations on our consolidated balance sheet, except as discussed in Note 18. Commitments and Contingencies.

The terms of the transaction included initial cash consideration of \$1.0 million and additional contingent consideration. Initial cash consideration of \$0.2 million was paid at closing and the remainder of the initial cash consideration is included in accrued royalties, fulfillment and other current liabilities and will be paid when due with existing cash balances. With regards to contingent consideration, over the five years following the acquisition, RealNetworks will pay the lesser of the following:

- (a) an additional \$14.0 million to seller, or
- (b) if RealNetworks sells the interest to a third party for less than \$15.0 million, the actual amount received by RealNetworks, minus the \$1.0 million initial payment.

In the event that RealNetworks sells such equity interest for consideration in excess of \$15.0 million, RealNetworks will pay seller additional consideration, dependent on the sale price, which shall in no event exceed an additional \$25.0 million. In order for seller to receive the full \$40.0 million, the proceeds from the sale of Napster received by RealNetworks for the 42% equity interest acquired would have to exceed \$60.0 million. These contingent consideration amounts were part of the total consideration at estimated fair value, as described in more detail below.

The following table summarizes the final allocation of the total consideration to the estimated fair values of the assets acquired and liabilities assumed as of January 18, 2019 (in thousands):

Consideration, at estimated fair value:	
Cash	\$ 1,000
Contingent consideration	11,600
RealNetworks' preexisting 42% equity interest in Napster	2,700
Effective settlement of Napster debt and warrants, held by RealNetworks	6,408
Total consideration	<u>\$ 21,708</u>
Assets acquired and liabilities assumed, at estimated fair value:	
Cash and cash equivalents	\$ 10,127
Accounts receivable	20,915
Prepaid expenses and other current assets	2,421
Restricted cash	2,322
Equipment, software and leasehold improvements	474
Operating lease assets	2,400
Other long-term assets	77
Deferred tax assets, net	5,932
Intangible assets	23,700
Goodwill	45,520
Total assets acquired	<u>113,888</u>
Accounts payable	786
Accrued royalties and fulfillment	59,036
Accrued and other current liabilities	7,032
Deferred revenue, current portion	3,526
Notes payable	12,211
Deferred tax liabilities, net	6,208
Long-term lease liabilities	1,190
Other long-term liabilities	1,621
Total liabilities assumed	<u>91,610</u>
Total net assets acquired	<u>22,278</u>
Noncontrolling interests	570
Net assets acquired	<u>\$ 21,708</u>

Under the acquisition method of accounting, the purchase price is allocated to the assets acquired and the liabilities assumed based on their estimated fair values. In the fourth quarter of 2019, we recorded purchase price allocation adjustments that reflect new information obtained during the measurement period about facts and circumstances that existed at the date of the acquisition. These adjustments did not have a material effect on current or prior period consolidated financial statements and are primarily associated with the estimated fair values of acquired prepaid royalties, accrued royalties, and accrued taxes, with a corresponding net reduction of \$3.0 million to goodwill. Adjustments to acquired prepaid royalties and accrued royalties also include the matching and invoicing of music royalties owed as of the opening balance sheet, as discussed in Note 9. Accrued and Other Current Liabilities.

Acquired intangible assets have a total weighted average useful life of approximately 8 years, are being amortized using the straight line method, and are comprised of the following (in thousands):

Intangible category	Estimated fair value	Method used to calculate fair value	Estimated remaining useful life
Trade name and trademarks	\$ 6,800	Relief-from-royalty	15 years
Developed technology	5,900	Excess earnings	4 years
Customer relationships	5,900	Cost-to-replace	3 years
Partner relationships	5,100	Distributor method	8 years
Total	\$ 23,700		

The estimated fair value amounts for each of these intangibles were determined using a fair value measurement categorized within Level 3 of the fair value hierarchy.

The fair value of the trade name and trademarks intangible asset was estimated using the income approach, utilizing the relief from royalty method, which values the assets by estimating the savings achieved by ownership of trade name and trademarks when compared with the cost of licensing them from an independent owner.

The fair value of developed technology was estimated using the income approach, utilizing the excess earnings method. Under this method, cash flows attributable to the asset are estimated by deducting economic costs, including operating expenses and contributory asset charges, from revenue expected to be generated by the asset.

The fair value of customer relationships was estimated using a cost-to-replace approach, whereby the number of subscribers and the cost to acquire subscribers are key estimates utilized in the valuation.

The fair value of partner relationships was estimated using the income approach, which uses market-based distributor data to value underlying distributor relationships. Revenue, earnings, and cash flow estimates associated with these underlying distributor relationships are key estimates in determining the fair value of the partner relationships intangibles.

The fair value of deferred revenue was estimated using the income approach, utilizing a cost to fulfill analysis by estimating the direct and indirect costs related to supporting remaining obligations plus an assumed operating margin.

The fair value of our preexisting 42% equity method investment was remeasured to an estimated fair value of \$2.7 million, which resulted in a pretax gain of \$2.7 million, as our existing carrying value was zero. This gain, as well as the settlement of preexisting relationships and other purchase accounting adjustments discussed below, comprise the total gain of \$12.3 million recognized in Other income (expenses) in the Consolidated statement of operations in 2019.

The fair value of our preexisting equity method investment was calculated using an average of the income and market approach to arrive at estimated total enterprise value. The income approach fair value measurement was based on significant inputs that are not observable in the market and thus represents a fair value measurement categorized within Level 3 of the fair value hierarchy. Key assumptions used in estimating future cash flows included projected revenue growth and operating expenses, as well as the selection of an appropriate discount rate. Estimates of revenue growth and operating expenses were based on internal projections and considered the historical performance of Napster's business. The discount rate applied was based on Napster's weighted-average cost of capital and included a small-company risk premium. The market approach fair value measurement was based on a market comparable methodology. At the time of acquisition, we used a group of comparable companies and selected an appropriate EBITDA multiple to apply to Napster's projected 2020 and 2021 EBITDA. Assumptions in both the income and market approaches were significant to the overall valuation of Napster and changes to these assumptions could have materially impacted the fair values of assets acquired and liabilities assumed, noncontrolling interests, total consideration, and gain on consolidation.

The fair value of the contingent consideration was estimated using multiple scenarios for each tranche of contingent consideration and then probability weighting each scenario and discounting them to estimated fair value of \$11.6 million at the time of acquisition. This fair value calculation was directly impacted by the estimated total enterprise value described above. The contingent consideration will be adjusted quarterly to fair value through earnings. Of the total amount of \$11.6 million, we accrued \$2.6 million and \$9.0 million in Accrued royalties, fulfillment and other current liabilities, and Other long-term liabilities, respectively, as of March 31, 2019. See Note 5. Fair Value Measurements for details on the adjustment to this liability.

The effective settlement of Napster's debt and warrants totaling \$6.4 million represents the estimated fair value of debt and warrants held between RealNetworks and Napster as of the acquisition date. The estimated fair value was derived from the estimated total enterprise value described above. The resulting net gain of \$5.5 million was included in Other income (expenses) in the Consolidated statement of operations in 2019.

As discussed in Note 18. Commitments and Contingencies, the preexisting \$2.8 million guarantee related to Napster's outstanding indebtedness on their revolving credit facility was eliminated upon the consolidation of Napster. This resulted in RealNetworks recording a gain of \$2.8 million at the time of acquisition, which was included in Other income (expenses) in the Consolidated statement of operations in 2019. RealNetworks has not been required to pay any portion of this commitment, and, as discussed in Note 10. Notes Payable and Long-term Debt, Napster fully repaid this loan balance on April 30, 2019, thus releasing RealNetworks' previous guaranty.

Prior to our acquisition of Napster, we accounted for our investment under the equity method of accounting and recorded Napster's foreign currency translation adjustments in our equity. As part of the acquisition method of accounting, we released these amounts and recorded a gain of \$1.3 million at the time of acquisition, which is included in Other income (expenses) in the Consolidated statement of operations in 2019.

We recorded the fair value of noncontrolling interests on the acquisition date, estimated at \$0.6 million, using the estimated total enterprise value described above.

We also recorded goodwill of \$45.5 million, representing the intangible assets that do not qualify for separate recognition for accounting purposes, including the expected growth in Napster's business to business model and the assembled workforce. The goodwill is reported in the Napster segment and is not deductible for income tax purposes. Future performance of the Napster business will factor into our goodwill impairment analysis.

We began consolidating Napster's results of operations and cash flows into our consolidated financial statements after January 18, 2019. For the year ended December 31, 2019, Napster's revenue and net loss including noncontrolling interests in our consolidated statements of operations was \$106.3 million and \$6.4 million, respectively.

The following table provides the supplemental pro forma revenue and net results of the combined entity had the acquisition date of Napster been the first day of our first quarter of 2018 rather than during our first quarter of 2019 (in thousands):

	<b>Year Ended - Pro Forma (Unaudited)</b>	
	<b>December 31,</b>	
	<b>2019</b>	<b>2018</b>
Net revenue	\$ 178,732	\$ 214,687
Net income (loss) attributable to RealNetworks <sup>(1)</sup>	(29,152)	(9,422)

<sup>(1)</sup> The pro forma net earnings attributable to RealNetworks for the year ended December 31, 2018 include the acquisition related gain of \$12.3 million and \$1.5 million of transaction costs. The amounts in the supplemental pro forma earnings for the periods presented above fully eliminate intercompany transactions and conform Napster's accounting policies to RealNetworks'. These pro forma results also reflect amortization of acquisition-related intangibles and fair value adjustments to deferred revenue and contingent consideration.

The unaudited pro forma amounts are based upon the historical financial statements of RealNetworks and Napster and were prepared using the acquisition method of accounting and are not necessarily indicative of results for any current or future period.

For the year ended December 31, 2019, we incurred approximately \$1.5 million in acquisition-related costs, including regulatory, legal, and other advisory fees, which we have recorded within general and administrative expenses.

### **Games**

On April 16, 2018, in order to acquire a full workforce, we purchased 100% of the shares of a small, privately-held Netherlands-based game development studio for net cash consideration of \$4.2 million.

**Note 5. Fair Value Measurements**

***Items Measured at Fair Value on a Recurring Basis***

The following tables present information about our financial assets that have been measured at fair value on a recurring basis as of December 31, 2019 and 2018, and indicates the fair value hierarchy of the valuation inputs utilized to determine fair value (in thousands).

	Fair Value Measurements as of December 31, 2019				Amortized Cost as of December 31, 2019
	Level 1	Level 2	Level 3	Total	
<b>Cash and cash equivalents:</b>					
Cash	\$ 14,887	\$ —	\$ —	\$ 14,887	\$ 14,887
Money market funds	1,918	—	—	1,918	1,918
Total cash and cash equivalents	16,805	—	—	16,805	16,805
Restricted cash equivalents	3,500	1,874	—	5,374	5,374
Total assets	\$ 20,305	\$ 1,874	\$ —	\$ 22,179	\$ 22,179
<b>Accrued royalties, fulfillment and other current liabilities</b>					
Napster acquisition contingent consideration	\$ —	\$ —	\$ 2,800	\$ 2,800	N/A
<b>Other long-term liabilities</b>					
Napster acquisition contingent consideration	—	—	9,800	9,800	N/A
Total liabilities	\$ —	\$ —	\$ 12,600	\$ 12,600	N/A

	Fair Value Measurements as of December 31, 2018				Amortized Cost as of December 31, 2018
	Level 1	Level 2	Level 3	Total	
<b>Cash and cash equivalents:</b>					
Cash	\$ 22,853	\$ —	\$ —	\$ 22,853	\$ 22,853
Money market funds	12,708	—	—	12,708	12,708
Total cash and cash equivalents	35,561	—	—	35,561	35,561
<b>Short-term investments:</b>					
Corporate notes and bonds	—	24	—	24	24
Total short-term investments	—	24	—	24	24
Restricted cash equivalents	—	1,630	—	1,630	1,630
Warrant issued by Napster (included in Other assets)	—	—	865	865	—
Total assets	\$ 35,561	\$ 1,654	\$ 865	\$ 38,080	\$ 37,215

Restricted cash equivalents as of December 31, 2019 and 2018 relate to cash pledged as collateral against letters of credit in connection with lease agreements and, as of December 31, 2019, our Loan Agreement requires us to maintain a minimum balance of \$3.5 million unrestricted cash at the bank. See Note 10. Notes Payable and Long-term Debt for additional details.

Accrued royalties, fulfillment and other current liabilities and Other long-term liabilities as of December 31, 2019 include the estimated fair value of the contingent consideration for the Napster acquisition, which was determined using a fair value measurement categorized within Level 3 of the fair value hierarchy. As discussed in Note 4. Acquisitions, this liability is adjusted quarterly to fair value through earnings. During the fiscal year ended December 31, 2019, we recorded the change in fair value of the contingent consideration of \$1.0 million as an increase to the total liability on the consolidated balance sheet and as general and administrative expense on the consolidated statement of operations.

**Items Measured at Fair Value on a Non-recurring Basis**

Certain of our assets and liabilities are measured at estimated fair value on a non-recurring basis, using Level 3 inputs. These instruments are subject to fair value adjustments only in certain circumstances (for example, when there is evidence of impairment). We did not record any impairments on those assets required to be measured at fair value on a non-recurring basis in 2019 or 2018.

See Note 12. Lease Exit and Related Charges, for a discussion of the losses related to reductions in the use of RealNetworks' office space, which were recorded at the estimated fair value of remaining lease obligations, less expected sub-lease income.

**Note 6. Allowance for Doubtful Accounts Receivable and Sales Returns**

Activity in the allowance for doubtful accounts receivable (in thousands):

	Years ended December 31,	
	2019	2018
Balance, beginning of year	\$ 475	\$ 725
Assumed through acquisition of Napster	81	—
Addition (reduction) to allowance	24	(224)
Effects of foreign currency translation	(15)	(26)
Balance, end of year	\$ 565	\$ 475

Activity in the allowance for sales returns (in thousands):

	Years ended December 31,	
	2019	2018
Balance, beginning of year	\$ 85	\$ 212
Addition (reduction) to allowance	(32)	(126)
Amounts written off	(21)	—
Effects of foreign currency translation	—	(1)
Balance, end of year	\$ 32	\$ 85
Total, Allowance for Doubtful Accounts Receivable and Sales Returns	\$ 597	\$ 560

Three customers individually comprised more than 10% of trade accounts receivable at December 31, 2019, with the customers accounting for 31%, 11% and 10% each. Three customers individually comprised more than 10% of trade accounts receivable at December 31, 2018, with the customers accounting for 23%, 11% and 10% each.

One customer accounted for 14%, or \$23.8 million, of consolidated revenue during the year ended December 31, 2019, in the Napster segment.

One customer accounted for 11%, or \$7.7 million, of consolidated revenue during the year ended December 31, 2018, in our Mobile Services segment.

**Note 7. Other Intangible Assets**

Other intangible assets (in thousands):

	As of December 31,					
	2019			2018		
	Gross Amount	Accumulated Amortization	Net	Gross Amount	Accumulated Amortization	Net
Amortizing intangible assets:						
Customer relationships	\$ 41,198	\$ 32,764	\$ 8,434	\$ 30,993	\$ 30,993	\$ —
Developed technology	30,031	25,545	4,486	24,446	24,446	—
Patents, trademarks and tradenames	10,477	4,111	6,366	3,765	3,765	—
Service contracts	5,443	5,443	—	5,538	5,512	26
Total	\$ 87,149	\$ 67,863	\$ 19,286	\$ 64,742	\$ 64,716	\$ 26

In conjunction with our acquisition of Napster in the first quarter of 2019, we recorded \$23.7 million in intangibles. In conjunction with our acquisition of a Netherlands-based game development studio in the second quarter of 2018, we recorded \$0.1 million in intangibles. Refer to Note 4. Acquisitions for further details about the acquisitions.

Amortization expense related to other intangible assets during the years ended December 31, 2019 and 2018 was \$4.4 million and \$0.4 million, respectively.

Estimated future amortization of other intangible assets (in thousands):

2020	\$	4,516
2021		4,516
2022		2,631
2023		1,136
2024		1,075
Thereafter		5,412
<b>Total</b>	<b>\$</b>	<b>19,286</b>

No impairments of other intangible assets were recognized in 2019 or 2018.

#### Note 8. Goodwill

Changes in goodwill (in thousands):

	December 31,	
	2019	2018
Balance, beginning of year		
Goodwill	\$ 327,608	\$ 323,713
Accumulated impairment losses	(310,653)	(310,653)
	16,955	13,060
Increases (decreases) due to current year acquisitions (disposals)	45,520	4,367
Effects of foreign currency translation	(47)	(472)
	45,473	3,895
Balance, end of year		
Goodwill	373,081	327,608
Accumulated impairment losses	(310,653)	(310,653)
	<u>\$ 62,428</u>	<u>\$ 16,955</u>

See Note 4. Acquisitions, for details on our acquisitions and the impact to goodwill.

Goodwill by segment (in thousands):

	December 31,	
	2019	2018
Consumer Media	\$ 580	\$ 580
Mobile Services	2,074	2,040
Games	14,254	14,335
Napster	45,520	—
<b>Total goodwill</b>	<u>\$ 62,428</u>	<u>\$ 16,955</u>

No impairments of goodwill were recorded in 2019 or 2018.

**Note 9. Accrued and Other Current Liabilities**

Accrued and other current liabilities (in thousands):

	<b>December 31, 2019</b>	<b>December 31, 2018</b>
Royalties and other fulfillment costs	\$ 55,750	\$ 1,989
Employee compensation, commissions and benefits	6,858	4,444
Sales, VAT and other taxes payable	2,547	785
Operating lease liabilities - current	4,805	—
Other	7,343	4,094
Total accrued royalties, fulfillment and other current liabilities	<u>\$ 77,303</u>	<u>\$ 11,312</u>

Included in royalties and other fulfillment costs are Napster's accrued music royalties totaling \$54.2 million at December 31, 2019. Napster's agreements and arrangements with rights holders for the content used in its business are complex and the determination of royalty accruals involves significant judgments, assumptions, and estimates of the amounts to be paid.

The variables involved in determining royalty accruals include unmatched royalty accruals, revenue to be recognized, the type of content used and the country it is used in, outstanding royalty audits, and identification of appropriate license holders, among other variables. In addition, some rights holders have allowed the use of their content while negotiations of the terms and conditions are ongoing. In certain jurisdictions, rights holders have several years to claim royalties for musical composition.

While Napster bases its estimates on historical experience and on various assumptions that management believes to be reasonable under the circumstances, actual results may differ materially from these estimates in the event of modified assumptions or conditions.

Related to Napster's accrued music royalties are amounts that are advanced to certain music publishers for royalty amounts that have been agreed as being owed, but for which the underlying rights holder have not yet been specifically matched. These prepaid royalty amounts totaling \$2.0 million at December 31, 2019 are included in Prepaid expenses and other current assets on the consolidated balance sheets. When these amounts are ultimately matched and invoiced to Napster, the prepaid royalty amount and the related accrued royalty liability are offset on the consolidated balance sheets.

**Note 10. Notes Payable and Long-term Debt**

In August 2019, RealNetworks and Napster entered into a Loan and Security Agreement (Loan Agreement) with a third-party financial institution. Under the terms of the Loan Agreement, the bank extended a revolving line of credit not to exceed \$10 million in the aggregate. Available advances on the revolving line of credit, which will be used for working capital and general corporate purposes, are based on a borrowing base that comprises accounts receivable and direct to consumer deposits. Borrowings under the Loan Agreement are secured by a first priority security interest in the assets of RealNetworks and Napster. Advances bear interest at a rate equal to one-half of one percent point (0.5%) above the greater of the prime rate or 5.5%, with monthly payments of interest only and principal due at the end of the two-year term. The Loan Agreement contains customary covenants, including financial covenants, minimum EBITDA levels, and maintaining a minimum balance of \$3.5 million unrestricted cash at the bank. We are in the process of negotiating the customary covenants for 2020, and we do not expect the resulting revisions to have a material effect on the Loan Agreement.

As of December 31, 2019, RealNetworks had \$3.9 million outstanding debt from the revolving line of credit, which was loaned to Napster bearing interest and fees commensurate with our costs. See Note 21. Related Party Transactions for additional details.

We paid and capitalized \$0.6 million of financing fees to enter into the revolving line of credit, and the financing fees will be amortized over the term of the debt. The current and non-current unamortized fees were \$0.3 million and \$0.2 million at December 31, 2019, respectively, and are included in Deferred costs, current and non-current on our consolidated balance sheets.

In 2017, Napster entered into a Non-Recourse Purchase of Eligible Receivables Agreement (NRP Agreement) with an international bank (Purchaser) in which Napster will sell and assign on a continuing basis its eligible receivables to the Purchaser in return for 90% of the receivables upfront, up to a maximum amount of \$15.0 million in advances. The interest rate is 2.25% above the 1-month-EURIBOR with a minimum 0.0% rate applying to the 1-month-EURIBOR rate. As of December 31, 2019, Napster had \$7.3 million borrowings outstanding with an interest rate of 2.25%.

In 2015, Napster entered into a Loan and Security Agreement (Revolver LSA) with a bank. The available borrowing on the Revolver LSA was based upon Napster's accounts receivable and direct to consumer subscription deposits. The Revolver LSA had a maximum available balance of \$7.0 million. The Revolver LSA matured and the loan balance was paid in full on April 30, 2019. The Revolver LSA required Napster to maintain a balance of unrestricted cash at the bank of not less than \$1.5 million plus 5% of the total amount outstanding under the NRP Agreement. As the loan was paid off on April 30, 2019, this amount is no longer restricted.

**Note 11. Restructuring Charges**

Restructuring and other charges in 2019 and 2018 consist of costs associated with the ongoing reorganization of our business operations and expense realignment efforts, which primarily relate to severance costs due to workforce reductions. Included in employee separation costs was restructuring expense of \$0.5 million related to and reported in the Napster segment. Asset related and other costs primarily relate to the termination of certain contracts in the second quarter of 2019 as we continue to shift focus onto free-to-play games that offer in-game purchases of virtual goods and away from the premium mobile games that require a one-time purchase.

Restructuring charges are as follows (in thousands):

	Employee Separation Costs	Asset Related and Other Costs	Total
Costs incurred and charged to expense for the year ended December 31, 2019	\$ 1,770	\$ 728	\$ 2,498
Costs incurred and charged to expense for the year ended December 31, 2018	\$ 1,873	\$ —	\$ 1,873

Changes to the accrued restructuring liability (which is included in Accrued and other current liabilities) for 2019 and 2018 (in thousands):

	Employee Separation Costs	Asset Related and Other Costs	Total
Accrued liability as of December 31, 2017	\$ 244	\$ —	\$ 244
Costs incurred and charged to expense for the year ended December 31, 2018	1,873	—	1,873
Cash payments	(1,362)	—	(1,362)
Accrued liability as of December 31, 2018	755	—	755
Costs incurred and charged to expense for the year ended December 31, 2019, excluding noncash charges	1,770	174	1,944
Cash payments	(2,203)	—	(2,203)
Accrued liability as of December 31, 2019	<u>\$ 322</u>	<u>\$ 174</u>	<u>\$ 496</u>

**Note 12. Lease Exit and Related Charges**

As a result of the reduction in use of RealNetworks' office space, lease exit and related charges have been recognized representing rent and contractual operating expenses over the remaining life of the leases, including estimates of sublease income expected to be received. In the first quarter of 2018, we renegotiated the lease for our Seattle headquarters, reducing our total leased space by 15% and recorded a reduction to our lease loss accrual to reflect our reduced future obligations.

Changes to accrued lease exit and related charges are as follows (in thousands):

	Year Ended December 31, 2018
Accrued loss, beginning of year	\$ 2,058
Additions and adjustments to the lease loss accrual, including estimated sublease income	(454)
Less amounts paid, net of sublease income	(382)
Accrued loss, end of year	1,222
Less current portion (included in Accrued and other current liabilities)	(346)
Accrued loss, non-current portion (included in Other long term liabilities)	<u>\$ 876</u>

On January 1, 2019, we adopted the new lease standard, and previously accrued lease exit and related charges reduced our recorded operating lease assets at the time of adoption. See Note 2. Recent Accounting Pronouncements for additional information about the new accounting standard and impacts of adoption.

**Note 13. Shareholders' Equity**

*Accumulated Other Comprehensive Loss*

Changes in components of accumulated other comprehensive loss (in thousands):

	Years Ended December 31,	
	2019	2018
<b>Investments</b>		
Accumulated other comprehensive income (loss), beginning of period	\$ 19	\$ 2
Unrealized gains (losses), net of tax effects of \$0 and \$18	—	17
Net current period other comprehensive income (loss)	—	17
Accumulated other comprehensive income (loss) balance, end of period	\$ 19	\$ 19
<b>Foreign currency translation</b>		
Accumulated other comprehensive loss, beginning of period	\$ (61,137)	\$ (59,549)
Translation adjustments	(205)	(1,588)
Net current period other comprehensive income (loss)	(205)	(1,588)
Accumulated other comprehensive loss balance, end of period	\$ (61,342)	\$ (61,137)
Total accumulated other comprehensive loss, end of period	\$ (61,323)	\$ (61,118)

*Preferred Stock.* Each share of Series A preferred stock entitles the holder to one votes and dividends equal to one thousand times the aggregate per share amount of dividends declared on the common stock. There are no shares of Series A preferred stock outstanding.

See Note 22. Subsequent Event for information on the additional funding of approximately \$10.0 million received by RealNetworks in exchange for the issuance of Series B preferred stock on February 10, 2020.

Undesignated preferred stock will have rights and preferences that are determinable by the Board of Directors if and when determination of a new series of preferred stock has been established.

**Note 14. Employee Stock and Benefit Plans**

*Equity Compensation Plans.* Under our equity incentive plans, we may grant various types of equity awards to employees and Directors. We have granted time-vest and performance-vest stock options and time-vest and performance-vest restricted stock. Generally, options vest based on continuous employment, over a four-year period. The options generally expire seven years from the date of grant and are exercisable at the market value of the common stock at the grant date. Time-vest restricted stock awards generally vest based on continuous employment over a two or four-year period. Performance-based awards vest if the specified performance targets are met and the grantee remains employed over the required period. The performance targets for these awards are generally based on the achievement of company-specific financial results. For these performance-based awards, expense is recognized when it is probable the performance goal will be achieved. We have also issued market-based performance stock options to certain employees. These awards vest if the market condition is met and the grantee remains employed over the requisite service period.

We issue new shares of common stock upon exercise of stock options and the vesting of restricted stock. As of December 31, 2019, there were 2.0 million shares of common stock authorized for future equity awards. Each restricted stock unit granted reduces and each restricted stock unit forfeited or canceled increases the shares available for future grant by a factor of 1.6 shares. Each stock option granted reduces and each stock option forfeited or canceled increases the shares available for future grant by a factor of one share. We also have an employee stock purchase plan, under which 0.1 million shares of common stock are authorized for future issuance as of December 31, 2019.

Stock-based compensation expense recognized in our consolidated statements of operations includes amounts related to stock options, restricted stock, and employee stock purchase plans and was as follows (in thousands):

	Years Ended December 31,	
	2019	2018
Total stock-based compensation expense	\$ 2,881	\$ 2,508

The total stock-based compensation amounts disclosed above are recorded in the respective line items within operating expenses in the consolidated statement of operations. Included in the expense for 2019 and 2018 was stock compensation recorded for 2018 and 2017, respectively, incentive bonuses paid in fully vested restricted stock units, which were authorized and granted in the first quarter of 2019 and 2018, respectively. No stock-based compensation was capitalized as part of the cost of an asset as of December 31, 2019 or 2018. As of December 31, 2019, we had \$2.3 million of total unrecognized compensation cost, net of estimated forfeitures, related to stock awards. The unrecognized compensation cost is expected to be recognized over a weighted-average period of approximately 2.9 years.

As discussed in Note 1. Description of Business and Summary of Significant Accounting Policies, the valuation models for stock option awards require various highly judgmental assumptions. The assumption for the expected term of the options represents the estimated period of time until exercise and is based on historical experience of similar awards, including the contractual terms, vesting schedules, and expectations of future employee behavior. Expected stock price volatility is based on historical volatility of our common stock for the related expected term. The risk-free interest rate is based on the implied yield available on U.S. Treasury zero-coupon issues with a term equivalent to the expected term of the stock options. The dividend yield is estimated at zero because we do not currently anticipate paying dividends in the foreseeable future.

The fair value of options granted used the following weighted average assumptions:

	Years ended December 31,	
	2019	2018
Expected dividend yield	— %	— %
Risk-free interest rate	2.12 %	2.71 %
Expected term (years)	4.0	4.3
Volatility	41 %	35 %

Restricted stock unit and award activity was as follows (shares are in thousands):

	Number of Shares	Weighted Average Grant Date Fair Value Per Share	Total Grant Date Fair Value of Vested Awards (000's)
Nonvested shares, December 31, 2017	192	\$ 4.53	
Granted	943	2.56	
Vested	(402)	3.18	\$ 1,278
Forfeited/Canceled	(35)	4.69	
Nonvested shares, December 31, 2018	698	\$ 2.63	
Granted	701	2.54	
Vested	(499)	3.10	\$ 1,547
Forfeited/Canceled	(55)	3.33	
Nonvested shares, December 31, 2019	845	\$ 2.24	

At December 31, 2019 the aggregate intrinsic value of restricted stock awards was \$1.0 million and the weighted average remaining contractual term was approximately 1 year.

Stock option activity (shares are in thousands):

	Options Outstanding			
	Number of Shares	Weighted Average Exercise Price		
Outstanding, December 31, 2017	6,076	\$ 5.47		
Options granted at common stock price	2,339	3.17	\$	1.01
Options exercised	—	—		

Options cancelled	(1,087)		6.68	
Outstanding, December 31, 2018	7,328	\$	4.56	
Options granted at common stock price	988		2.33	\$ 0.81
Options exercised	—		—	
Options cancelled	(845)		4.67	
Outstanding, December 31, 2019	7,471	\$	4.25	
Exercisable, December 31, 2019	4,667	\$	4.92	
Vested and expected to vest, December 31, 2019	6,335	\$	4.44	

As of December 31, 2019, the weighted average remaining contractual life of the options was as follows: outstanding options 4.4 years; exercisable options 3.7 years; and vested and expected to vest options 4.2 years. As of December 31, 2019, there was no aggregate intrinsic value for our outstanding, exercisable or vested and expected to vest options.

The aggregate intrinsic value of stock options exercised in 2019 was zero, and for 2018 was insignificant.

*Employee Stock Purchase Plan.* Our Employee Stock Purchase Plan (ESPP) allows an eligible employee to purchase shares of our common stock at a price equal to 85 percent of the fair market value of the common stock at the end of the semi-annual offering periods, subject to certain limitations. Under the ESPP, 143,800 and 79,200 shares were purchased during the years ended December 31, 2019 and 2018, respectively.

*Retirement Savings Plan.* We have a salary deferral plan (401(k) Plan) that covers substantially all employees. Eligible employees may contribute a portion of their eligible compensation to the plan up to limits stated in the plan documents, not to exceed the dollar amounts set by applicable laws. We match a percentage of employee contributions up to certain limits. During the years ended December 31, 2019 and 2018, we contributed \$0.4 million and \$0.2 million, respectively, in matching contributions. We can terminate the matching contributions at our discretion. We have no other post-employment or post-retirement benefit plans.

#### Note 15. Income Taxes

Components of income (loss) before income taxes (in thousands):

	Years ended December 31,	
	2019	2018
United States operations	\$ (12,567)	\$ (16,144)
Foreign operations	(7,623)	(6,643)
Income (loss) before income taxes	\$ (20,190)	\$ (22,787)

Components of income tax expense (benefit) (in thousands):

	Years ended December 31,	
	2019	2018
Current:		
United States federal	\$ 454	\$ 612
State and local	98	53
Foreign	546	367
Total current	1,098	1,032
Deferred:		
United States federal	(54)	338
State and local	—	—
Foreign	24	832
Total deferred	(30)	1,170
Total income tax expense (benefit)	\$ 1,068	\$ 2,202

Income tax expense differs from “expected” income tax expense (computed by applying the U.S. federal income tax rate of 21% in 2019 and 2018) due to the following (in thousands):

	Years ended December 31,	
	2019	2018
United States federal tax expense (benefit) at statutory rate	\$ (4,240)	\$ (4,785)
State taxes, net of United States federal tax expense (benefit)	607	(694)
Change in valuation allowance	4,389	5,804
Non-deductible stock compensation	253	448
Impact of non-U.S. jurisdictional tax rate difference	(311)	(117)
Research and development tax credit	(125)	(12)
Increase (reversal) of unrecognized tax benefits	96	—
Basis difference in investment	—	159
Non-U.S. withholding tax	283	470
Change in indefinite reinvestment assertion	(72)	998
Other	188	(69)
Total income tax expense (benefit)	<u>\$ 1,068</u>	<u>\$ 2,202</u>

Net deferred tax assets, which are recorded at December 31, 2019 and December 31, 2018 using a 21% tax rate in the U.S. following the passage of the Tax Act, are comprised of the following (in thousands):

	December 31,	
	2019	2018
Deferred tax assets:		
United States federal net operating loss carryforwards	\$ 85,270	\$ 62,983
Deferred expenses	3,226	660
Research and development tax credit carryforwards	19,694	24,523
Right of use tax asset	2,696	—
Stock-based compensation	2,697	2,603
State net operating loss carryforwards	13,880	11,971
Foreign net operating loss carryforwards	34,079	31,254
Deferred revenue	900	67
Equipment, software, and leasehold improvements	2,922	2,642
Intangibles	6,216	13
Net unrealized gains and basis differences on investments	—	1,193
Other	455	839
Gross deferred tax assets	<u>172,035</u>	<u>138,748</u>
Less valuation allowance	160,783	137,246
Gross deferred tax assets, net of valuation allowance	<u>\$ 11,252</u>	<u>\$ 1,502</u>
Deferred tax liabilities:		
Other intangible assets	\$ (4,667)	\$ (155)
Right of use tax liability	(2,333)	—
Undistributed foreign earnings	(909)	(1,001)
Other	(838)	(663)
Net unrealized gains and basis differences on investments	(2,916)	—
Gross deferred tax liabilities	<u>(11,663)</u>	<u>(1,819)</u>
Net deferred tax assets (liabilities)	<u>\$ (411)</u>	<u>\$ (317)</u>

As of December 31, 2019, we maintained a valuation allowance of \$160.8 million for our deferred tax assets that we believe are not more likely than not to be realized. The net change in valuation allowance was a \$23.5 million increase and a \$0.1 million increase during the years ended December 31, 2019 and 2018, respectively. The net increase in the valuation

allowance since December 31, 2018 of \$23.5 million was the result of the acquisition of Napster and an increase in current year deferred tax assets for which the Company maintains a valuation allowance.

RealNetworks' U.S. federal net operating loss carryforwards totaled \$406.0 million and \$299.9 million at December 31, 2019 and 2018, respectively. The increase is mainly due to net operating loss carryforwards from the acquisition of Napster, in addition to the current year U.S. taxable loss. The remaining net operating loss carryforwards as of December 31, 2019 are from prior U.S. taxable losses and from acquired subsidiaries that are limited under Internal Revenue Code Section 382. These net operating loss carryforwards expire between 2024 and 2037.

Income tax receivables were \$1.8 million and \$3.6 million at December 31, 2019 and 2018. \$0.9 million of the \$1.8 million is refundable in 2020 and has been recorded in our current tax receivable. The remaining \$0.9 million remains in other long term assets.

RealNetworks' U.S. federal research and development tax credit carryforward totaled \$19.7 million and \$24.5 million at December 31, 2019 and 2018. The research and development credit carryforwards expire between 2020 and 2039.

As of December 31, 2018, the Company no longer intends to indefinitely reinvest substantially all of the Company's foreign earnings outside of the U.S. We have recorded deferred taxes of \$0.9 million and \$1.0 million as of December 31, 2019 and 2018, respectively, for local country and foreign withholding taxes associated with the repatriation of such foreign earnings.

As of December 31, 2019 and 2018, RealNetworks had \$5.0 million and \$0.4 million in uncertain tax positions, respectively. The increase in uncertain tax positions was primarily the result of the acquisition of Napster, for which unrecognized tax positions were recorded relating to federal research and development tax credit carryforward risks, as well as transfer pricing risks in certain foreign jurisdictions. Notwithstanding current year accruals for existing positions, we do not anticipate that the total amount of unrecognized tax benefits will significantly change within the next twelve months.

We recognize interest and penalties related to unrecognized tax benefits within the provision for income taxes. As of December 31, 2019, we have approximately \$0.6 million of accrued interest or penalties related to uncertain tax positions. There was no accrued interest or penalties related to uncertain tax positions as of December 31, 2018.

Reconciliation of the beginning and ending balances of the total amounts of unrecognized tax benefits (in thousands):

	Years ended December 31,	
	2019	2018
Balance, beginning of year	\$ 374	\$ 358
Increases related to prior year tax positions	4,125	8
Decreases related to prior year tax positions	(85)	—
Increases related to current year tax positions	606	8
Balance, end of year	\$ 5,020	\$ 374

#### Note 16. Earnings (Loss) Per Share

Basic and diluted net income (loss) per share (EPS) (in thousands, except per share data):

	Years ended December 31,	
	2019	2018
Net income (loss) attributable to RealNetworks	\$ (20,001)	\$ (24,989)
Weighted average common shares outstanding used to compute basic EPS	37,994	37,582
Dilutive effect of stock based awards	—	—
Weighted average common shares outstanding used to compute diluted EPS	37,994	37,582
Basic EPS from continuing operations attributable to RealNetworks	\$ (0.53)	\$ (0.66)
Diluted EPS from continuing operations attributable to RealNetworks	\$ (0.53)	\$ (0.66)

Approximately 7.7 million and 6.5 million shares of potentially issuable shares from stock awards were excluded from the calculation of diluted EPS for the years ended December 31, 2019 and 2018, respectively, because of their antidilutive effect.

**Note 17. Leases**

We have commitments for future payments related to office facilities leases. We determine if an arrangement is a lease at inception. Operating leases are included in Operating lease assets, Other current liabilities, and Long-term lease liabilities on our consolidated balance sheets effective as of January 1, 2019. Leases with an initial term of 12 months or less are not recorded on the balance sheet; we recognize lease expense for these leases on a straight-line basis over the lease term.

Operating lease assets and operating lease liabilities are recognized based on the present value of the future minimum lease payments over the lease term at commencement date. As our leases do not provide an implicit rate, we use our estimated incremental borrowing rate based on the information available in determining the present value of future payments. Operating lease assets also exclude lease incentives and initial direct costs incurred. Some of our leases include options to extend or terminate the lease. Our leases generally include one or more options to renew; however, the exercise of lease renewal options is at our sole discretion. For nearly all of our operating leases, upon adoption of the new guidance, we have not assumed any options to extend will be exercised as part of our calculation of the lease liability. Lease expense for minimum lease payments is recognized on a straight-line basis over the lease term.

We have operating leases for office space and data centers with remaining lease terms of 1 year to 5 years.

Details related to lease expense and supplemental cash flow were as follows (in thousands):

	<b>Year ended December 31, 2019</b>
Operating lease expense	\$ 5,600
Variable lease expense	877
Sublease income	(2,028)
Net lease expense	\$ 4,449
Operating cash outflows for lease liabilities	\$ 5,643

Details related to lease term and discount rate were as follows:

	<b>December 31, 2019</b>
Weighted-average remaining lease term (in years)	4 years
Weighted-average discount rate	5.14 %

Future minimum lease payments as of December 31, 2019 are as follows (in thousands):

	<b>Office Leases</b>
2020	\$ 5,057
2021	3,276
2022	2,426
2023	2,348
2024	1,634
Thereafter	—
Total minimum payments <sup>(a)</sup>	14,741
Less: Imputed interest	1,470
Present value of total minimum payments <sup>(b)</sup>	\$ 13,271

(a) Total minimum payments exclude executory costs, inclusive of insurance, maintenance, and taxes, of \$6.1 million; minimum payments also have not been reduced by sublease rentals of \$5.3 million due in the future under noncancelable subleases.

(b) \$8.5 million is included in Long-term lease liabilities and \$4.8 million is included in Accrued royalties, fulfillment, and other current liabilities on the consolidated balance sheets.

As of December 31, 2018, future minimum lease payments were \$15.9 million in the aggregate, which consisted of the following: \$3.7 million in 2019; \$3.0 million in 2020; \$2.7 million in 2021; \$2.4 million in 2022; \$2.3 million in 2023; and \$1.6 million thereafter. Total minimum payments excluded executory costs, inclusive of insurance, maintenance, and taxes, of \$6.2 million; minimum payments also have not been reduced by sublease rentals of \$6.0 million due in the future under noncancelable subleases.

Rent expense during the year ended December 31, 2018 was \$2.8 million.

**Note 18. Commitments and Contingencies**

We have been in the past and could become in the future subject to legal proceedings, governmental investigations, and claims in the ordinary course of business, including employment claims, contract-related claims, and claims of alleged infringement of third-party patents, trademarks, and other intellectual property rights. Such claims, even if not meritorious, could force us to expend significant financial and managerial resources. In addition, given the broad distribution of some of our consumer products, any individual claim related to those products could give rise to liabilities that may be material to us. In the event of a determination adverse to us, we may incur substantial monetary liability, and/or be required to change our business practices. Either of these could have a material adverse effect on our consolidated financial statements.

In 2017, we entered into an arrangement whereby we may be required to guarantee up to \$2.8 million of Napster's outstanding indebtedness on its revolving credit facility. At that time and as a result of the guaranty, RealNetworks recognized previously suspended Napster losses up to the full \$2.8 million guaranty in our consolidated statement of operations and as a Commitment to Napster in our consolidated balance sheets. Given the controlling interest RealNetworks acquired in Napster in the first quarter of 2019, we have eliminated the previously recorded guaranty from RealNetworks' balance sheet in consolidation. RealNetworks has not been required to pay any portion of this commitment, and, as discussed in Note 10. Notes Payable and Long-term Debt, Napster fully repaid this loan balance on April 30, 2019, thus releasing RealNetworks' previous guaranty.

In March 2016, Napster was notified of a putative consumer class action lawsuit relating to an alleged failure to pay so-called "mechanical royalties" on behalf of the plaintiffs and "other similarly-situated holders of mechanical rights in copyrighted musical works." On April 7, 2017, the plaintiffs and Napster agreed to settlement terms during a mediation session. The long form Settlement Agreement was executed effective on January 16, 2019. The damages payable under the Settlement Agreement will be calculated on a claims-made basis. In May 2019, public notice was posted about the settlement informing purported class members that they could make claims or object to the settlement, and the claims period ended on December 31, 2019. The preliminary results show that the claimed damages are not significant, and valid claims are expected to be paid by Napster in the second quarter of 2020.

**Note 19. Guarantees**

In the ordinary course of business, RealNetworks is subject to potential obligations for standard warranty and indemnification provisions that are contained within many of our customer license and service agreements. Our warranty provisions are consistent with those prevalent in our industry, and we do not have a history of incurring losses on warranties; therefore, we do not maintain accruals for warranty-related obligations. With regard to indemnification provisions, nearly all of our carrier contracts obligate us to indemnify our carrier customers for certain liabilities that may be incurred by them. We have received in the past, and may receive in the future, claims for indemnification from some of our carrier customers.

In the ordinary course of business, Napster enters into agreements with various content providers that guarantee a minimum amount of royalty payments in a given period. These minimum payments are generally based on targets and, based on our historical experience and expectations under relevant contracts, we anticipate that actual royalty accruals and payments will exceed minimum guarantees and, accordingly, we do not maintain accruals for these minimum guarantees.

In relation to certain patents and other technology assets we sold to Intel in the second quarter of 2012, we have specific obligations to indemnify Intel for breaches of the representations and warranties that we made and covenants that we agreed to in the asset purchase agreement for certain potential future intellectual property infringement claims brought by third parties against Intel. The amount of any potential liabilities related to our indemnification obligations to Intel will not be determined until a claim has been made, but we are obligated to indemnify Intel up to the amount of the gross purchase price that we received in the sale.

**Note 20. Segment Information**

We manage our business and report revenue and operating income (loss) in four segments: (1) Consumer Media, which includes licensing of our codec technology and our PC-based RealPlayer products, including RealPlayer Plus and related products; (2) Mobile Services, which includes our SaaS services and our integrated RealTimes® platform which is sold to mobile carriers; (3) Games, which includes all our games-related businesses, including sales of in-game virtual goods, mobile games and games licenses, games subscription services, and in-game advertising and advertising on games sites; and (4) Napster, which includes our on-demand music streaming and music services.

RealNetworks allocates to its Consumer Media, Mobile Services and Games reportable segments certain corporate expenses which are directly attributable to supporting these businesses, including but not limited to a portion of finance, legal, human resources and headquarters facilities. Remaining expenses, which are not directly attributable to supporting these businesses, are reported as corporate items. These corporate items also include restructuring charges and stock compensation charges. As stated in Note 4. Acquisitions, Napster is operating as an independent company and includes all their corporate expenses, including restructuring charges, in their segment results, and RealNetworks does not allocate any expenses to the Napster segment.

RealNetworks reports the four reportable segments based on factors such as how we manage our operations and how our Chief Operating Decision Maker (CODM) reviews results. The CODM reviews financial information presented on both a consolidated basis and on a business segment basis. The accounting policies used to derive segment results are the same as those described in Note 1. Description of Business and Summary of Significant Accounting Policies.

Segment results for the years ended December 31, 2019 and 2018 were as follows (in thousands):

**Consumer Media**

	2019	2018
Revenue	\$ 13,170	\$ 18,168
Cost of revenue	3,031	3,858
Gross profit	10,139	14,310
Operating expenses	11,186	14,419
Operating income (loss)	\$ (1,047)	\$ (109)

**Mobile Services**

	2019	2018
Revenue	\$ 27,143	\$ 29,670
Cost of revenue	7,500	8,623
Gross profit	19,643	21,047
Operating expenses	29,340	28,066
Operating income (loss)	\$ (9,697)	\$ (7,019)

**Games**

	2019	2018
Revenue	\$ 25,489	\$ 21,672
Cost of revenue	6,975	6,123
Gross profit	18,514	15,549
Operating expenses	20,220	20,324
Operating income (loss)	\$ (1,706)	\$ (4,775)

**Napster**

	<u>2019</u>	<u>2018</u>
Revenue	\$ 106,311	\$ —
Cost of revenue	85,901	—
Gross profit	20,410	—
Operating expenses	25,789	—
Operating income (loss)	<u>\$ (5,379)</u>	<u>\$ —</u>

**Corporate**

	<u>2019</u>	<u>2018</u>
Cost of revenue	\$ (280)	\$ (877)
Operating expenses	14,894	11,245
Operating income (loss)	<u>\$ (14,614)</u>	<u>\$ (10,368)</u>

Our customers consist primarily of consumers and corporations located in the U.S., Europe and various foreign countries (Rest of the World). Revenue by geographic region (in thousands):

	<u>Years ended December 31,</u>	
	<u>2019</u>	<u>2018</u>
United States	\$ 83,360	\$ 35,803
Europe	64,484	12,144
Rest of the World	24,269	21,563
Total	<u>\$ 172,113</u>	<u>\$ 69,510</u>

Long-lived assets (consists of equipment, software, leasehold improvements, operating lease assets, other intangible assets, and goodwill) by geographic region (in thousands):

	<u>December 31,</u>	
	<u>2019</u>	<u>2018</u>
United States	\$ 83,342	\$ 11,823
Europe	10,504	6,761
Rest of the World	2,281	1,151
Total long-lived assets	<u>\$ 96,127</u>	<u>\$ 19,735</u>

**Note 21. Related Party Transactions**

As described in Note 4. Acquisitions, on January 18, 2019, RealNetworks acquired an additional 42% interest in Rhapsody International, Inc., (doing business as Napster), bringing our aggregate ownership interest to 84% of Napster's outstanding equity, thus giving RealNetworks a majority voting interest in Napster. Following this acquisition of a controlling interest, we consolidate Napster's financial results into our financial statements for fiscal periods beginning with our first quarter of 2019. Rhapsody America LLC was initially formed in 2007 as a joint venture between RealNetworks and MTV Networks, a division of Viacom International, Inc., to own and operate a business-to-consumer digital audio music service originally branded as Rhapsody. The service has been significantly expanded and was re-branded in 2016 as Napster.

Following certain restructuring transactions effective March 31, 2010, we began accounting for the investment using the equity method of accounting. As part of the 2010 restructuring transactions, RealNetworks contributed \$18.0 million in cash, the Rhapsody brand and certain other assets, including content licenses, in exchange for shares of convertible preferred stock of Rhapsody, carrying a \$10.0 million preference upon certain liquidation events. Although we now consolidate Napster for reporting purposes, our convertible preferred stock and the related rights remain contractually binding instruments between RealNetworks and Napster.

In December 2016, RealNetworks and the other then-owner of 42% of Napster each entered into an agreement to loan up to \$5.0 million to Napster for general operating purposes, which loans were fully funded as of the end of January 2017 for an aggregate of \$10.0 million. Included in RealNetworks' January 2019 acquisition of the additional 42% interest in Napster, RealNetworks assumed the seller's \$5.0 million note, resulting in RealNetworks holding \$10.0 million of notes receivable from Napster. The terms of the notes were modified subsequent to the original December 2016 execution, including a provision, effective July 2018, that requires repayment at the greater of (a) principal plus accrued interest at an annual rate of 15% or (b) a preference of three times the principal amount.

In May 2019, RealNetworks extended a short-term loan to Napster in the principal amount of \$1.1 million. In August 2019, RealNetworks established a two-year term on this short-term loan and, as discussed in Note 10. Notes Payable and Long-term Debt, loaned Napster an additional \$3.9 million and charged Napster for associated fees. As a result, the principal amount on this two-year note is \$5.4 million. Both the two-year note and the \$10.0 million loan are subordinate to RealNetworks' and Napster's third party debt.

In each of February 2015 and February 2017, Napster issued warrants to purchase shares of its common stock to each of RealNetworks and the other then-owner of 42% of Napster. The warrants have a 10-year contractual term and were issued as compensation for past services provided by these two significant stockholders of Napster. As part of RealNetworks' January 2019 acquisition of the additional 42% interest in Napster, RealNetworks assumed the warrants held by the seller.

Upon RealNetworks' acquisition of a controlling interest in Napster, the notes and warrants were effectively settled and eliminated in our consolidated financial statements as they represent preexisting relationships between RealNetworks and Napster. However, the notes and warrants remain contractually binding instruments between RealNetworks and Napster.

In 2019, Mr. Glaser directly invested \$0.8 million in one of our subsidiaries in exchange for shares of preferred stock of that entity. The subsidiary is developing a platform that transforms the experience of viewing video entertainment into a social, connected playground. As of December 31, 2019, RealNetworks owned approximately 82% of the subsidiary's outstanding equity, and we consolidate its financial results into our financial statements. The financial results of the subsidiary are reported in our Consumer Media segment.

**Note 22. Subsequent Event**

On February 10, 2020, we entered into a Series B Preferred Stock Purchase Agreement with Mr. Glaser, pursuant to which Mr. Glaser invested approximately \$10.0 million in RealNetworks in exchange for the issuance to him of 8,064,516 shares of Series B Preferred Stock. The Series B Preferred Stock is non-voting and is convertible into common stock on a one-to-one basis, provided, however, that no conversion is permitted in the event that such conversion would cause Mr. Glaser's beneficial ownership of our common stock to exceed the 38.5% threshold set forth in our Second Amended and Restated Shareholder Rights Plan dated November 30, 2018. The Series B Preferred Stock has no liquidation preference and no preferred dividend.

**Note 23. Quarterly Information (Unaudited)**

The following table summarizes the unaudited statement of operations for each quarter of 2019 and 2018 (in thousands, except per share data):

	Total	Dec. 31	Sept. 30	June 30	Mar. 31
<b>2019</b>					
Net revenue	\$ 172,113	\$ 43,400	\$ 44,993	\$ 44,248	\$ 39,472
Gross profit	68,986	18,703	18,715	16,966	14,602
Operating (loss) income	(32,443)	(5,883)	(6,265)	(9,391)	(10,904)
Net income (loss) attributable to RealNetworks <sup>(2)</sup>	(20,001)	(6,364)	(5,968)	(9,202)	1,533
Basic net income (loss) per share <sup>(1)</sup> :					
Net income (loss) per share - basic	(0.53)	(0.17)	(0.16)	(0.24)	0.04
Diluted net income (loss) per share <sup>(1)</sup> :					
Net income (loss) per share - diluted	(0.53)	(0.17)	(0.16)	(0.24)	0.04
<b>2018</b>					
Net revenue	\$ 69,510	\$ 16,557	\$ 17,579	\$ 15,724	\$ 19,650
Gross profit	51,783	12,830	13,340	11,099	14,514
Operating (loss) income	(22,271)	(5,556)	(4,928)	(6,833)	(4,954)
Net income (loss) attributable to RealNetworks <sup>(2)</sup>	(24,989)	(6,904)	(5,977)	(6,930)	(5,178)
Basic net income (loss) per share <sup>(1)</sup> :					
Net income (loss) per share - basic	(0.66)	(0.18)	(0.16)	(0.18)	(0.14)
Diluted net income (loss) per share <sup>(1)</sup> :					
Net income (loss) per share - diluted	(0.66)	(0.18)	(0.16)	(0.18)	(0.14)

- (1) The sum of the quarterly net income per share amounts will not necessarily equal net income per share for the year due to the use of weighted average quarterly shares and the effects of rounding.
- (2) Net income attributable to RealNetworks for the quarter ended March 31, 2019 includes \$12.3 million related to RealNetworks' gain on consolidation of Napster, as described in more detail in Note 4. Acquisitions.

## REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and Board of Directors  
RealNetworks, Inc.:

### *Opinion on the Consolidated Financial Statements*

We have audited the accompanying consolidated balance sheets of RealNetworks, Inc. and subsidiaries (the Company) as of December 31, 2019 and 2018, the related consolidated statements of operations and comprehensive income (loss), shareholders' equity, and cash flows for each of the years in the two-year period ended December 31, 2019, and the related notes (collectively, the consolidated financial statements). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2019 and 2018, and the results of its operations and its cash flows for each of the years in the two-year period ended December 31, 2019, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2019, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission, and our report dated March 30, 2020 expressed an unqualified opinion on the effectiveness of the Company's internal control over financial reporting.

### *Change in Accounting Principle*

As discussed in Note 2 to the consolidated financial statements, the Company has changed its method of accounting for leases in 2019 due to the adoption of Accounting Standards Codification Topic 842 - *Leases*.

### *Going Concern*

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1 to the consolidated financial statements, the Company has suffered recurring losses from operations and anticipates negative operating cash flows that raise substantial doubt about its ability to continue as a going concern. Management's plans in regard to these matters are also described in Note 1. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

### *Basis for Opinion*

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

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the consolidated 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 consolidated 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 consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ KPMG LLP

We have served as the Company's auditor since 1994.

Seattle, Washington  
March 30, 2020

## REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and Board of Directors  
RealNetworks, Inc.:

### *Opinion on Internal Control Over Financial Reporting*

We have audited RealNetworks, Inc. and subsidiaries' (the Company) internal control over financial reporting as of December 31, 2019, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2019, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of the Company as of December 31, 2019 and 2018, and the related consolidated statements of operations and comprehensive income (loss), shareholders' equity, and cash flows for each of the years in the two-year period ended December 31, 2019, and the related notes (collectively, the consolidated financial statements), and our report dated March 30, 2020 expressed an unqualified opinion on those consolidated financial statements.

The Company acquired an additional 42% interest in Napster during 2019, and management excluded from its assessment of the effectiveness of the Company's internal control over financial reporting as of December 31, 2019, Napster's internal control over financial reporting associated with 63% of total assets and 62% of total revenue included in the consolidated financial statements of the Company as of and for the year ended December 31, 2019. Our audit of internal control over financial reporting of the Company also excluded an evaluation of the internal control over financial reporting of Napster.

### *Basis for Opinion*

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

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

### *Definition and Limitations of Internal Control Over Financial Reporting*

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

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

/s/ KPMG LLP

Seattle, Washington  
March 30, 2020

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

Not applicable.

**Item 9A. *Controls and Procedures***

**Disclosure Controls and Procedures**

Our management, with the participation of the principal executive officer and principal financial officer, has evaluated the effectiveness of our “disclosure controls and procedures” (as such term is defined under Rule 13a-15(e) and 15d-15(e) promulgated under the Securities Exchange Act of 1934, as amended (the Exchange Act)). Based on their evaluation, the principal executive officer and principal financial officer concluded that, as of the end of the period covered by this report, our disclosure controls and procedures were effective for the purpose of ensuring that the information required to be disclosed in the reports that we file or submit under the Exchange Act (1) is recorded, processed, summarized, and reported within the time period specified in the Securities and Exchange Commission rules and forms and (2) is accumulated and communicated to our management, including our principal executive and principal financial officers, as appropriate to allow timely decisions regarding required disclosure.

**Management’s Annual Report on Internal Control over Financial Reporting**

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rule 13a-15(f). Under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on our evaluation, our management concluded that, as of December 31, 2019, RealNetworks maintained effective internal control over financial reporting.

KPMG LLP, an independent registered public accounting firm, has issued an attestation report on the effectiveness of our internal control over financial reporting as of December 31, 2019. This attestation report is included within Item 8.

**Changes in Internal Control over Financial Reporting**

As disclosed in Note 4. Acquisitions, on January 18, 2019, RealNetworks acquired an additional 42% interest in Napster from its former joint venture partner resulting in RealNetworks having a controlling interest, owning 84% of Napster's outstanding equity. Napster is included in RealNetworks' consolidated financial statements from the date of acquisition through December 31, 2019. As permitted by the Securities Exchange Commission Staff interpretive guidance for newly acquired businesses, management excluded Napster from its evaluation of internal control over financial reporting as of December 31, 2019. We are in the process of documenting and testing Napster's internal controls over financial reporting and plan to incorporate Napster in our evaluation of internal controls over financial reporting beginning in the first quarter of 2020. Napster accounted for approximately 63% of total assets as of December 31, 2019 and approximately 62% of total revenues of the Company for the fiscal year ended December 31, 2019. We have performed additional analyses and procedures to enable management to conclude that we believe the consolidated financial statements included in this Form 10-K present fairly, in all material respects, our financial position, results of operations, comprehensive income (loss) and cash flows for the periods presented in conformity with U.S. GAAP.

Beginning January 1, 2019, we adopted the new lease standard and implemented new processes and internal controls over lease accounting to assist us in the application of the new lease standard.

Our management, with the participation of the principal executive officer and principal financial officer, has evaluated the changes to our internal control over financial reporting that occurred during the fiscal quarter ended December 31, 2019 as required by paragraph (d) of Rules 13a-15 and 15d-15 of the Exchange Act and has concluded that, except for the change related to Napster, there were no such changes that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

**Item 9B. *Other Information***

Not applicable.

**PART III.**

**Item 10. Directors, Executive Officers and Corporate Governance**

The information required by this item is incorporated by reference to the information contained in part in the sections captioned “Proposal 1–Election of Directors,” “Board of Directors,” and “Voting Securities and Principal Holders” of the Proxy Statement relating to RealNetworks’ 2020 Annual Meeting of Shareholders or in an amendment to this 10-K, to be filed with the Securities and Exchange Commission within 120 days after the fiscal year ended December 31, 2019.

**Item 11. Executive Compensation**

The information required by this Item is incorporated by reference to the information contained in the section captioned “Executive Compensation” of the Proxy Statement relating to RealNetworks’ 2020 Annual Meeting of Shareholders or in an amendment to this 10-K, to be filed with the Securities and Exchange Commission within 120 days after the fiscal year ended December 31, 2019.

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

The information required by this item is incorporated by reference to the information contained in the section captioned “Voting Securities and Principal Holders” of the Proxy Statement relating to RealNetworks’ 2020 Annual Meeting of Shareholders or in an amendment to this 10-K, to be filed with the Securities and Exchange Commission within 120 days after the fiscal year ended December 31, 2019.

**Equity Compensation Plans**

As of December 31, 2019, we had awards outstanding under four equity compensation plans. These plans, which have all been approved by our shareholders, include the RealNetworks, Inc. 1995 Stock Option Plan (1995 Plan), the RealNetworks, Inc. 1996 Stock Option Plan, as amended and restated (1996 Plan), the RealNetworks, Inc. 2005 Stock Incentive Plan, as amended and restated (2005 Plan), and the RealNetworks, Inc. 2002 Director Stock Option Plan (2002 Plan). In addition, we maintain the RealNetworks, Inc. 2007 Employee Stock Purchase Plan, as amended and restated October 2010 (2007 ESPP).

In 2005, our shareholders approved the 2005 Plan and upon this approval of the 2005 Plan, we terminated the 1995 Plan, the 1996 Plan, and the 2002 Plan. In 2007, our shareholders approved an amended and restated 2005 Plan, and upon this approval, we terminated the RealNetworks, Inc. Director Compensation Stock Plan. As a result of the termination of these Plans, all new equity awards will be issued under the 2005 Plan. In 2007, our shareholders also approved the 2007 ESPP.

The following table aggregates the data from our plans (in thousands):

Plan Category	Number of Securities to be Issued upon Exercise of Outstanding Options, Warrants and Rights (in 000's)(a)	Weighted-average Exercise Price of Outstanding Options, Warrants and Rights (b)	Number of Securities Remaining Available for Future Issuance under Equity Compensation Plans (Excluding Securities Reflected in Column (a)) (in 000's)(c)
Equity compensation plans approved by security holders	8,316	\$ 4.25	2,016 (1)(2)
Equity compensation plans not approved by security holders	—	-	—
<b>Total</b>	<b>8,316</b>	<b>\$ 4.25</b>	<b>2,016 (3)</b>

- (1) On January 1, 2008, the 2007 ESPP became effective. Column (c) above excludes an aggregate of 0.1 million shares of the Company’s common stock that are authorized for issuance pursuant to the 2007 ESPP.
- (2) Includes shares available for future issuances pursuant to the RealNetworks, Inc. 2007 Director Compensation Stock Plan (2007 Director Plan), a sub-plan that operates and is administered under the 2005 Plan. Under the 2007 Director Plan, outside directors may elect to receive all or a portion of his or her quarterly director compensation in shares of the Company’s common stock in lieu of cash. Shares issued to directors under the 2007 Director Plan are issued from the shares reserved under the 2005 Plan.

- (3) The total securities in column (a) include 7,471 stock options and 845 restricted stock units and awards. The weighted average exercise prices in columns (b) relate to the stock options only; restricted stock units and awards have no exercise price.

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

The information required by this item is incorporated by reference to the information contained in the section captioned “Executive Compensation—Policies and Procedures with Respect to Related Person Transactions” and “Election of Directors—Director Independence” of the Proxy Statement relating to RealNetworks’ 2020 Annual Meeting of Shareholders or in an amendment to this 10-K, to be filed with the Securities and Exchange Commission within 120 days after the fiscal year ended December 31, 2019.

**Item 14.**            *Principal Accountant Fees and Services*

The information required by this item is incorporated by reference to the information contained in the section captioned “Proposal 2—Ratification of Appointment of Independent Registered Public Accounting Firm” of the Proxy Statement relating to RealNetworks’ 2020 Annual Meeting of Shareholders or in an amendment to this 10-K, to be filed with the Securities and Exchange Commission within 120 days after the fiscal year ended December 31, 2019.

**PART IV.**

**Item 15.**            *Exhibits and Financial Statement Schedules*

**(a)(1) Index to Consolidated Financial Statements**

The following consolidated financial statements of RealNetworks, Inc. and subsidiaries are filed as part of this report:

Consolidated Balance Sheets — December 31, 2019 and 2018

Consolidated Statements of Operations and Comprehensive Income (Loss) — Years Ended December 31, 2019 and 2018

Consolidated Statements of Cash Flows — Years Ended December 31, 2019 and 2018

Consolidated Statements of Shareholders’ Equity — Years Ended December 31, 2019 and 2018

Notes to Consolidated Financial Statements

Reports of Independent Registered Public Accounting Firm

**(a)(2) Financial Statement Schedules**

All financial statement schedules have been omitted since they are either not required, not applicable, or because the information required is included in the consolidated financial statements or the notes thereto.

**(a)(3) Index to Exhibits**

See Index to Exhibits below.

## SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this Report to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Seattle, State of Washington, on March 30, 2020.

REALNETWORKS, INC.

BY: /s/ ROBERT GLASER  
Robert Glaser  
Chairman of the Board and Chief Executive Officer

## POWER OF ATTORNEY

Each person whose signature appears below hereby constitutes and appoints Robert Glaser and Michael Parham, and each of them severally, his or her true and lawful attorneys-in-fact and agents, with full power to act without the other and with full power of substitution and resubstitution, to execute in his or her name and on his or her behalf, individually and in each capacity stated below, any and all amendments and supplements to this Report, and any and all other instruments necessary or incidental in connection herewith, and to file the same with the Commission.

Pursuant to the requirements of the Securities Exchange Act of 1934, this Report has been signed below by the following persons on behalf of the Registrant and in the capacities indicated below on March 30, 2020.

Signature	Title
/s/ <u>ROBERT GLASER</u> Robert Glaser	Chairman of the Board and Chief Executive Officer (Principal Executive Officer)
/s/ <u>MIKE ENSING</u> Mike Ensing	Interim Chief Financial Officer (Principal Financial and Accounting Officer)
/s/ <u>BRUCE A. JAFFE</u> Bruce A. Jaffe	Director
/s/ <u>CHRISTOPHER R. JONES</u> Christopher R. Jones	Director
/s/ <u>DAWN G. LEPORE</u> Dawn G. Lepore	Director
/s/ <u>ERIK E. PRUSCH</u> Erik E. Prusch	Director
/s/ <u>JANICE ROBERTS</u> Janice Roberts	Director
/s/ <u>MICHAEL B. SLADE</u> Michael B. Slade	Director
/s/ <u>TIM WAN</u> Tim Wan	Director

## Exhibit Index

Exhibit No.	Exhibit Description	Incorporated by Reference			
		Form	SEC File No.	Exhibit	Filing Date
2.1	<a href="#">Transaction, Contribution and Purchase Agreement dated as of February 9, 2010 among Rhapsody America LLC, RealNetworks, Inc., RealNetworks Digital Music of California, Inc., Viacom International Inc. and DMS Holdco Inc.</a>	8-K	000-23137	2.1	04/06/10
2.2	• <a href="#">Asset Purchase Agreement dated as of January 26, 2012, by and between RealNetworks, Inc. and Intel Corporation. Certain schedules and exhibits referenced in the Asset Purchase Agreement have been omitted in accordance with Item 601(b)(2) of Regulation S-K. A copy of any omitted schedule or exhibit will be furnished supplementally to the Securities and Exchange Commission upon request.</a>	8-K	000-23137	2.1	01/30/12
2.3	<a href="#">Purchase Agreement dated as of January 18, 2019, by and between RealNetworks Digital Music of California, Inc., a California corporation (Buyer) and Rhapsody Applebee, LLC, a Delaware limited liability company (Seller)</a>	10-Q	001-37745	2.1	05/09/19
2.4	<a href="#">First Amendment to Purchase Agreement, dated as of June 11, 2019, by and between RealNetworks Digital Music of California, Inc., a California corporation (Buyer) and Rhapsody Applebee, LLC, a Delaware limited liability company (Seller)</a>	10-Q	001-37745	2.2	08/06/19
3.1	<a href="#">Amended and Restated Articles of Incorporation</a>	10-Q	000-23137	3.1	08/11/00
3.2	<a href="#">Articles of Amendment to the Amended and Restated Articles of Incorporation</a>	8-K	000-23137	3.1	08/31/11
3.3	<a href="#">Amended and Restated Bylaws effective July 23, 2010</a>	8-K	000-23137	3.1	07/29/10
4.1	<a href="#">Second Amended and Restated Shareholder Rights Plan dated as of November 30, 2018 by and between RealNetworks, Inc. and Computershare Inc., including the form of Certificate of Designation, the form of Rights Certificate, and the Summary of Rights attached thereto as Exhibits A, B, and C, respectively.</a>	8-K	001-37745	4.1	11/30/18
10.1	<a href="#">Shareholder Rights Plan Exception Agreement, dated as of April 15, 2016, between RealNetworks, Inc. and Ariel Investments, LLC</a>	8-K	000-23137	10.1	04/15/16
10.2	† <a href="#">RealNetworks, Inc. 1995 Stock Option Plan</a>	S-8	333-63333	99.1	09/14/98
10.3	† <a href="#">RealNetworks, Inc. 1996 Stock Option Plan, as amended and restated on September 19, 2016</a>	10-K	001-37745	10.3	02/27/17
10.4	† <a href="#">RealNetworks, Inc. 2000 Stock Option Plan, as amended and restated on June 1, 2001</a>	10-Q	000-23137	10.2	08/13/01
10.5	† <a href="#">Amendment No. 1 to the RealNetworks, Inc. 2000 Stock Option Plan, as amended and restated on June 1, 2001 (effective December 17, 2009)</a>	8-K	000-23137	10.2	12/21/09
10.6	† <a href="#">Amendment No. 2 to the RealNetworks, Inc. 2000 Stock Option Plan, as amended and restated on June 1, 2001 (effective September 19, 2016)</a>	10-K	001-37745	10.6	02/27/17
10.7	† <a href="#">RealNetworks, Inc. 2002 Director Stock Option Plan</a>	10-Q	000-23137	10.2	07/25/02
10.8	† <a href="#">Form of Stock Option Agreement under the RealNetworks, Inc. 1996 Stock Option Plan, as amended and restated</a>	10-Q	000-23137	10.1	11/14/02
10.9	† <a href="#">Form of Stock Option Agreement under the RealNetworks, Inc. 2000 Stock Option Plan, as amended and restated</a>	10-Q	000-23137	10.2	11/14/02
10.10	† <a href="#">Forms of Stock Option Agreement under the RealNetworks, Inc. 2002 Director Stock Option Plan</a>	10-Q	000-23137	10.3	11/14/02
10.11	† <a href="#">RealNetworks, Inc. 2007 Employee Stock Purchase Plan as amended and restated effective October 18, 2010</a>	10-K	000-23137	10.10	03/16/11
10.12	† <a href="#">RealNetworks, Inc. 2007 Director Compensation Stock Plan</a>	10-K	000-23137	10.9	02/29/08

Exhibit No.	Exhibit Description	Incorporated by Reference			
		Form	SEC File No.	Exhibit	Filing Date
10.13	† <a href="#">RealNetworks, Inc. 2005 Stock Incentive Plan, as amended and restated effective September 19, 2016</a>	10-K	001-37745	10.13	02/27/17
10.14	† <a href="#">Form of Non-Qualified Stock Option Terms and Conditions for use under the RealNetworks, Inc. 2005 Stock Incentive Plan, as amended and restated</a>	10-K	000-23137	10.13	03/18/13
10.15	† <a href="#">Form of Restricted Stock Units Terms and Conditions for use under the RealNetworks, Inc. 2005 Stock Incentive Plan, as amended and restated</a>	10-K	000-23137	10.14	03/18/13
10.16	† <a href="#">Form of Performance Restricted Stock Units Terms and Conditions for use under the RealNetworks, Inc. 2005 Stock Incentive Plan, as amended and restated</a>	10-K	000-23137	10.15	03/18/13
10.17	<a href="#">Office Building Lease dated May 2, 2013 between 1501 First Avenue South Limited Partnership, as landlord, and RealNetworks, Inc., as tenant</a>	10-Q	000-23137	10.2	08/08/13
10.18	† <a href="#">Form of Director and Officer Indemnification Agreement</a>	S-1	333-36553	10.14	09/26/97
10.19	<a href="#">Voting Agreement dated September 25, 1997 by and among RealNetworks, Robert Glaser, Accel IV L.P., Mitchell Kapor and Bruce Jacobsen</a>	S-1	333-36553	10.17	09/26/97
10.20	<a href="#">Agreement dated September 26, 1997 by and between RealNetworks and Robert Glaser</a>	S-1	333-36553	10.18	09/26/97
10.21	† <a href="#">Offer Letter dated July 24, 2014 between RealNetworks, Inc. and Robert Glaser</a>	10-Q	000-23137	10.2	11/06/14
10.22	† <a href="#">Offer Letter dated January 7, 2013 between RealNetworks, Inc. and Max Pellegrini</a>	10-Q	000-23137	10.1	05/08/13
10.23	† <a href="#">Promotion Letter dated August 24, 2012 between RealNetworks, Inc. and Michael Parham</a>	10-Q	000-23137	10.3	08/08/13
10.24	† <a href="#">Offer Letter dated March 29, 2017 between RealNetworks, Inc. and Cary Baker</a>	10-Q	001-37745	10.1	05/04/17
10.25	† <a href="#">Form of Amended and Restated Change in Control and Severance Agreement for Executive Officers</a>	10-Q	000-23137	10.5	08/09/11
10.26	† <a href="#">Form of MBO Plan Document under the RealNetworks, Inc. 2016 Executive Compensation Program</a>	8-K	000-23137	10.1	05/03/16
10.27	† <a href="#">Form of MBO Plan Document under the RealNetworks, Inc. 2017 Executive Compensation Program</a>	8-K	001-37745	10.1	04/13/17
10.28	<a href="#">Form of MBO Plan Document under the RealNetworks, Inc. 2018 Executive Compensation Program</a>	8-K	001-37745	10.1	04/27/18
10.29	• <a href="#">Amended and Restated Settlement Agreement dated as of March 10, 2006 between RealNetworks, Inc. and Microsoft Corporation</a>	10-K	000-23137	10.24	03/16/06
10.30	• <a href="#">Transaction, Contribution and Purchase Agreement dated as of August 20, 2007 by and among Rhapsody America LLC, RealNetworks, Inc., RealNetworks Digital Music of California, Inc., Viacom International Inc. and DMS Holdco Inc.</a>	10-Q	000-23137	10.1	11/09/07
10.31	<a href="#">Amended and Restated Stockholder Agreement dated as of November 30, 2011 among Rhapsody International Inc., RealNetworks, Inc., RealNetworks Digital Music of California, Inc., Viacom International Inc., Napster, LLC, Best Buy Co., Inc. and DMS Holdco Inc.</a>	10-K	000-23137	10.43	02/29/12
10.32	• <a href="#">License Agreement, dated as of January 26, 2012, by and between RealNetworks, Inc. and Intel Corporation</a>	8-K/A	000-23137	10.1	04/11/12
10.33	<a href="#">Loan and Security Agreement, dated as of August 1, 2019, by and among RealNetworks, Inc., Rhapsody International Inc., RealNetworks Digital Music of California, Inc., and Western Alliance Bank</a>	10-Q	001-37745	10.1	08/06/19
21.1	* <a href="#">Subsidiaries of RealNetworks, Inc.</a>				

Exhibit No.	Exhibit Description	Incorporated by Reference			
		Form	SEC File No.	Exhibit	Filing Date
23.1	* <a href="#">Consent of KPMG LLP</a>				
24.1	* <a href="#">Power of Attorney (included on signature page)</a>				
31.1	* <a href="#">Certification of Robert Glaser, Chief Executive Officer of RealNetworks, Inc., pursuant to Exchange Act Rules 13a-14(a) and 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002</a>				
31.2	* <a href="#">Certification of Michael Ensing, Interim Chief Financial Officer of RealNetworks, Inc., pursuant to Exchange Act Rules 13a-14(a) and 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002</a>				
32.1	** <a href="#">Certification of Robert Glaser, Chief Executive Officer of RealNetworks, Inc., pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002</a>				
32.2	** <a href="#">Certification of Michael Ensing, Interim Chief Financial Officer of RealNetworks, Inc., pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002</a>				
101.INS	* XBRL Instance Document				
101.SCH	* XBRL Taxonomy Extension Schema Document				
101.CAL	* XBRL Taxonomy Extension Calculation Linkbase Document				
101.LAB	* XBRL Taxonomy Extension Label Linkbase Document				
101.PRE	* XBRL Taxonomy Extension Presentation Linkbase Document				
101.DEF	* XBRL Taxonomy Extension Definition Linkbase Document				
†	Indicates management contract or compensatory plan.				
♦	Portions of this exhibit are omitted and were filed separately with the Securities and Exchange Commission pursuant to an application requesting confidential treatment under Rule 24b-2 of the Securities Exchange Act of 1934.				
*	Filed herewith.				
**	Furnished herewith.				

## SUBSIDIARIES OF REALNETWORKS, INC.

<b>Name of Subsidiary</b>	<b>Jurisdiction of Incorporation</b>
Atrativa Latin America Ltda.	Brazil
Beijing RealNetworks Technology Co. Ltd.	China
GameHouse Europe B.V.	The Netherlands
GameHouse Spain S.L.	Spain
GameHouse Original Stories B.V.	The Netherlands
Listen.com, Inc.	California
Muzicall Ltd.	United Kingdom
Napster Do Brasil Licenciamento De Música Ltda	Brazil
Napster K.K.	Japan
Napster Luxembourg Sarl	Luxembourg
PT RealNetworks Indonesia	Indonesia
RealNetworks Asia Pacific Co., Ltd.	Republic of Korea
RealNetworks Australia Pty. Limited	Australia
RealNetworks Digital Music of California, Inc.	California
RealNetworks, d.o.o.	Croatia
RealNetworks GmbH	Austria
RealNetworks Hong Kong, Limited	Hong Kong
RealNetworks India Pvt. Ltd.	India
RealNetworks K.K.	Japan
RealNetworks Ltd.	United Kingdom
Rhapsody 2012 Ltd.	United Kingdom
Rhapsody International GmbH	Germany
Rhapsody International GmbH - French Branch	France
Rhapsody International, Inc.	Delaware
Rhapsody Washington LLC	Washington
RN Acquisition Corp.	Washington
RN International Holdings B.V.	The Netherlands
RN International Holdings C.V.	The Netherlands
Scener, Inc.	Washington

**Consent of Independent Registered Public Accounting Firm**

The Board of Directors  
RealNetworks, Inc.:

We consent to the incorporation by reference in the registration statements (No. 333-114088) on Form S-3 and (Nos. 333-63333, 333-128444, 333-42579, 333-147279, 333-172871, and 333-199898) on Form S-8 of RealNetworks, Inc. of our reports dated March 30, 2020, with respect to the consolidated balance sheets of RealNetworks, Inc. as of December 31, 2019 and 2018, the related consolidated statements of operations and comprehensive income (loss), shareholders' equity, and cash flows for each of the years in the two-year period ended December 31, 2019, and the related notes (collectively, the consolidated financial statements), and the effectiveness of internal control over financial reporting as of December 31, 2019, which reports appear in the December 31, 2019 annual report on Form 10-K of RealNetworks, Inc.

Our report dated March 30, 2020 on the effectiveness of internal control over financial reporting as of December 31, 2019 contains an explanatory paragraph that states that the Company acquired an additional 42% interest in Napster during 2019, and management excluded from its assessment of the effectiveness of the Company's internal control over financial reporting as of December 31, 2019, Napster's internal control over financial reporting associated with 63% of total assets and 62% of total revenue included in the consolidated financial statements of the Company as of and for the year ended December 31, 2019. Our audit of internal control over financial reporting of the Company also excluded an evaluation of the internal control over financial reporting of Napster.

Our report dated March 30, 2020 on the consolidated financial statements contains an explanatory paragraph that states that the accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1 to the consolidated financial statements, the Company has suffered recurring losses from operations and anticipates negative operating cash flows that raise substantial doubt about its ability to continue as a going concern. Management's plans in regard to these matters are also described in Note 1. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Our report on the consolidated financial statements refers to a change in the method of accounting for leases due to the adoption of Accounting Standards Codification Topic 842 - *Leases*.

/s/ KPMG LLP

Seattle, Washington  
March 30, 2020

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

I, Robert Glaser, certify that:

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

Date: March 30, 2020

/s/ Robert Glaser

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Robert Glaser

Title: Chairman and Chief Executive Officer  
(Principal Executive Officer)

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

I, Mike Ensing, certify that:

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

Date: March 30, 2020

/s/ Mike Ensing

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Mike Ensing

Title: Interim Chief Financial Officer

**CERTIFICATION PURSUANT TO  
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002  
(18 U.S.C. SECTION 1350)**

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

Date: March 30, 2020

By: /s/ Robert Glaser

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Name: Robert Glaser  
Title: Chairman and Chief Executive Officer  
(Principal Executive Officer)

A signed original of this written statement required by Section 906 has been provided to RealNetworks, Inc. and will be retained by RealNetworks, Inc. and furnished to the Securities and Exchange Commission or its staff upon request.

