J2 GLOBAL, INC.
Form 10-K
March 01, 2019

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
FORM 10-K
x ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended December 31, 2018
OR
o 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: 0-25965
j2 GLOBAL, INC.
(Exact name of registrant as specified in its charter)

Delaware	47-1053457
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

6922 Hollywood Boulevard, Suite 500, Los Angeles, California 90028, (323) 860-9200
(Address and telephone number of principal executive offices)
Securities registered pursuant to Section 12(b) of the Act:
None
Securities registered pursuant to Section 12(g) of the Act:
Common Stock, $0.01 par value
(Title of class)
Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.
Yes x No o
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 o No x
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 x No o
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 x No o
Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§ 229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.
o

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

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. o

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

As of the last business day of the registrant's most recently completed second fiscal quarter, the approximate aggregate market value of the common stock held by non-affiliates, based upon the closing price of the common stock as quoted by the NASDAQ Global Select Market was $2,654,287,562. Shares of common stock held by executive officers, directors and holders of more than 5% of the outstanding common stock have been excluded. This determination of affiliate status is not necessarily a conclusive determination for other purposes.

As of February 26, 2019, the registrant had 48,756,145 shares of common stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE:

Portions of the definitive Proxy Statement to be delivered to stockholders in connection with the Annual Meeting of Stockholders to be held May 3, 2019 are incorporated by reference into Part III of this Form 10-K.

This Annual Report on Form 10-K includes 129 pages with the Index to Exhibits located on page 125.

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PART I

Item 1. Business

Overview

j2 Global, Inc., together with its subsidiaries ("j2 Global", "our", "us" or "we"), is a leading provider of internet services. Through our Cloud Services business, we provide cloud services to consumers and businesses and license our intellectual property ("IP") to third parties. In addition, the Cloud Services business includes fax, voice, backup, security and email marketing products. Our Digital Media business specializes in the technology, gaming, broadband, business to business, healthcare, and international markets, offering content, tools and services to consumers and businesses. We were incorporated in 2014 as a Delaware corporation through the creation of a new holding company structure, and our Cloud Services business, operated by our wholly owned subsidiary, j2 Cloud Services, LLC (formerly j2 Cloud Services, Inc.), and its subsidiaries, was founded in 1995.

Our Cloud Services business generates revenues primarily from customer subscription and usage fees and from IP licensing fees. Our Digital Media business generates revenues from advertising and sponsorships, subscription and usage fees, performance marketing and licensing fees.

In addition to growing our business organically, on a regular basis we acquire businesses to grow our customer bases, expand and diversify our service offerings, enhance our technologies, acquire skilled personnel and enter into new markets.

Our consolidated revenues are currently generated from three basic business models, each with different financial profiles and variability. Our Cloud Services business is driven primarily by subscription revenues that are relatively higher margin, stable and predictable from quarter to quarter with some seasonal weakness in the fourth quarter. The Cloud Services business also includes the results of our IP licensing business, which can vary dramatically in both revenues and profitability from period to period. Our Digital Media business is driven primarily by advertising revenues, has relatively higher sales and marketing expense and has seasonal strength in the fourth quarter. We continue to pursue additional acquisitions, which may include companies operating under business models that differ from those we operate under today. Such acquisitions could impact our consolidated profit margins and the variability of our revenues.

Cloud Services

We believe that businesses of all sizes are increasingly purchasing cloud services to meet their communication, messaging, security, data backup, hosting, customer relationship management and other needs. Cloud-based services represent a model for delivering and consuming, independent of location, real time business technology services, resources and solutions over the internet. Their goal is to reduce or eliminate costs, increase sales and enhance productivity, mobility, business continuity and security. Our eFax®, MyFax® and sFax® online fax services enable users to receive faxes into their email inboxes and to send faxes via the internet. eVoice® and Onebox® provide our customers a virtual phone system with various available enhancements. KeepItSafe®, LiveVault®, and Livedrive® enable our customers to securely back up their data and dispose of tape or other physical systems. Our FuseMail® service provides our customers email, encryption, archival and perimeter protection solutions, while Campaigner® provides our customers enhanced email marketing solutions. All of these services represent software-as-a-service solutions except online backup which represents both a software-as-a-service solution and an infrastructure-as-a-service solution. We believe these services represent more efficient and less expensive solutions than many existing alternatives, and provide increased security, privacy, flexibility and mobility.

We generate substantially all of our Cloud Services revenues from "fixed" subscription revenues for basic customer subscriptions and, to a lesser extent, "variable" usage revenues generated from actual usage by our subscribers. Our online fax, virtual phone, email, customer relationship management and online backup products have both a fixed and variable subscription component with the substantial majority of revenues derived from the fixed portion. In addition, the cost structures of all our Cloud Services are very similar in terms of fixed and variable components and include capital expenditures that are in proportion to revenue for each product offering. We also generate Cloud Services revenues from patent licensing. We categorize our Cloud Services and solutions into two basic groups: number-based, which are services provided in whole or in part through a telephone number, and non-number-based, which are our other cloud services for business.

We market our Cloud Services offerings to a broad spectrum of prospective business customers including sole proprietors, small to medium-sized businesses, enterprises and government organizations. Our marketing efforts include enhancing brand awareness; utilizing online advertising, search engines and affiliate programs; and selling through both a telesales and direct sales force. We continuously seek to extend the number of distribution channels through which we acquire paying customers and improve the cost and volume of customers obtained through our current channels.

We offer the following cloud services and solutions:
Fax
eFax® is a leading brand in the global online fax market. Various tiers of service provide increasing levels of features and functionality to sole proprietors, small and medium-sized businesses, and enterprises around the world. Our most popular services allow individuals to receive and send faxes as email attachments. In addition to eFax®, we offer online fax services under a variety of alternative brands including sFax®, MyFax®, eFax Plus®, eFax Pro™, eFax Secure™, eFax Corporate™ and eFax Developer™.
Voice
eVoice® is a virtual phone system that provides small and medium-sized businesses on-demand voice communications services, featuring a toll-free or local company number, auto-attendant and menu tree. With these services, a subscriber can assign departmental and individual extensions that can connect to multiple U.S. or Canadian numbers, including land-line and mobile phones and IP networks, and can enhance reachability through “find me/follow me” capabilities. These services also include advanced integrated voicemail for each extension, effectively unifying mobile, office and other separate voicemail services and improving efficiency by delivering voicemails in both native audio format and as transcribed text.
Line2 is a cloud phone service which allows users to add a 2nd line to a mobile device. Line2 enables users to separate work and personal calls on a single device and includes standard business phone service features such as SMS, MMS, auto attendant, call routing, call forwarding, voicemail, call queue, toll-free and vanity numbers.
Onebox® is a full-featured unified communications suite. It combines the features of many of our other branded services, plus added functionality, to provide a full virtual office. Onebox® includes a virtual phone system, hosted email, online fax, audio conferencing and web conferencing.
Backup
KeepItSafe® provides fully managed and monitored online backup and disaster recovery solutions for businesses, using its ISO-certified platform. By securing critical digital assets via the internet to highly secure data vaults, customers enjoy peace of mind knowing they have reliable and cost effective backups, and equally importantly rapid restores of the data that keeps their businesses operating. Furthermore, our solution for business continuity, backup and recovery will fully protect the customer’s physical, virtual and cloud resources. The software installs simply and provides full-server imaging and proven off-site data recovery capabilities without costly investments. Company data is protected from human error, file corruption, ransomware and other harmful factors.
LiveDrive®, which was acquired in February 2014, provides online backup and sync storage features for professionals and individuals. The customers can access their files from anywhere at any time so long as they have access to the internet.

LiveVault®, which was acquired in September 2015, provides cloud backup and recovery services. LiveVault® services include, among other items, offsite protection of data combined with local backup, web based access to protected data and a mirrored data center to ensure recoverability.

SugarSync®, which was acquired in March 2015, provides online file backup, synchronization and sharing of all of a customer’s documents, photos, music and movies across all of the customer’s computers and mobile devices. The product is not dependent on any specific operating system or device platforms.

Security

VIPRE™ is a provider of modern security solutions purpose-built to protect people and business from costly and malicious threats. The software portfolio includes comprehensive endpoint and email security, along with threat intelligence for real-time malware analysis. VIPRE solutions deliver easy to use, comprehensive layered defense through cloud-based and server security with mobile interfaces that enable threat response.

FuseMail® offers email security, email archiving and hosted email to businesses of all sizes around the world. These solutions are hosted offsite and seamlessly integrated into a customer's existing email system. Email security offers multi-level spam and virus detection, works with almost any email system, and deletes virus-infected emails while keeping the email message intact. Email continuity is a solution in which email systems are maintained even when a mail server is down. Email archiving solutions provide for archiving of internal and external ingoing and outgoing emails, and indexing of all emails to enable seamless search.

Excel Micro™ is a Cloud Security distributor focusing on providing email security, web security, and endpoint protection. Their solutions are offered to thousands of resellers in the United States who provide the product to their end customers.

Email Marketing

Campaigner® is a cloud-based email marketing solution to help small, medium and large businesses strengthen customer relationships and drive sales. Campaigner offers professional email campaign creation, advanced list management and segmentation tools, and targeted email autoresponders and workflows. Campaigner also helps businesses increase the size of their mailing lists, comply with email regulations like CAN-SPAM and get more emails to more inboxes.

SMTP is our cloud-based solution for email delivery that enables our customers to begin using an email relay service. Using our SMTP platform, customers control all aspects of their email distribution and can review email campaign statistics through a dashboard. We have a team of experts that help our customers' setup and optimize the SMTP relay.

IP Licensing

We hold a number of issued U.S. and foreign patents and other intellectual property rights. We seek to license some of these intellectual property rights to third parties in exchange for fees. We include the results of these activities within the Cloud Services business, exclusive of brand licensing by the Digital Media business.

Global Network and Operations

Our Cloud Services business operates multiple physical Points of Presence ("POPs") worldwide, a central data center in Los Angeles and a remote disaster recovery facility. We connect our POPs to our central data centers via redundant, and often times diverse, Virtual Private Networks ("VPNs") using the internet. Our network is designed to deliver value-added user applications, customer support and billing services for our customers anywhere in the world and a local presence for customers from thousands of cities in 50 countries on six continents. We offer our services in all major metropolitan areas in the United States ("U.S."), the United Kingdom ("U.K."), Canada and such major cities as Berlin, Copenhagen, Madrid, Manila, Mexico City, Milan, Paris, Rome, Singapore, Sydney, Taipei, Tokyo, Vienna and Zurich. Our customers are located throughout the world.

Customer Support Services

Our Cloud Services customer service organization supports our cloud services customers through a combination of online self-help, email communications, interactive chat sessions and telephone calls. Our internet-based online self-help tools enable customers to resolve simple issues on their own, eliminating the need to speak or write to our customer service representatives. We use internal personnel and contracted third parties (on a dedicated personnel basis) to answer our customer emails and telephone calls and to participate in interactive chat sessions.

Our Cloud Services customer service organization provides email support seven days per week, 24 hours per day, to all subscribers. Paying subscribers have access to live-operator telephone support seven days per week, 24 hours per day. Dedicated telephone support is provided for corporate customers 24 hours per day, seven days per week. Live sales and customer support services are available in various languages, including English, Spanish, Dutch, German, French, Japanese and Cantonese.

Competition

Our Cloud Services business faces competition from, among others, online fax-providers, traditional fax machine or multi-function printer companies, unified messaging/communications providers, telephone companies, voicemail providers, companies offering PBX systems and outsourced PBX solutions, email providers, various data backup and hosting providers and customer relationship management solutions. Historically, our most popular solutions have related to online faxing, including the ability of our customers to access faxes via email and our outbound desktop faxing capabilities. These solutions compete primarily against traditional fax machine manufacturers, which are generally large and well-established companies, as well as publicly traded and privately-held providers of fax servers and related software and outsourced fax services. Some of these companies may have greater financial and other resources than we do.

We believe that the primary competitive factors determining our success in the market for our Cloud Services include financial strength and stability; pricing; reputation for reliability and security of service; intellectual property ownership; effectiveness of customer support; sign-up, service and software ease-of-use; service scalability; customer messaging and branding; geographic coverage; scope of services; currency and payment method acceptance; and local language sales, messaging and support.

For more information regarding the competition that we face, please refer to the section entitled Risk Factors contained in Item 1A of this Annual Report on Form 10-K.

Digital Media

Our Digital Media business operates a portfolio of web properties and apps which includes IGN, Mashable, PC Mag, Humble Bundle, Speedtest, Offers, Black Friday, AskMen, MedPageToday, Everyday Health, What to Expect, among others. During 2018, our Digital Media web properties attracted approximately 7.7 billion visits and 31.7 billion page views.

Our properties provide trusted reviews of technology, gaming and lifestyle products and services; news and commentary related to their vertical markets; professional networking tools, targeted emails and white papers for IT professionals; speed testing for internet and mobile network connections; online deals and discounts for consumers; interactive tools and mobile applications that enable consumers to manage a broad array of health and wellness needs on a daily basis, including medical conditions, pregnancy, diet and fitness news; and tools and information for healthcare professionals to stay abreast of industry, legislative and regulatory developments in major medical specialties.

Our Digital Media business generates revenues from the sale of display and video advertising; customer clicks to online merchants as well as commissions on sales attributed to clicks to online merchants; business-to-business leads to IT vendors; the licensing of technology, data and other intellectual material to clients; and the sale of subscription services to consumers and businesses.

We believe competitive factors relating to attracting and retaining users include the ability to provide premium and exclusive content and the reach, effectiveness, and efficiency of our marketing services to attract consumers, advertisers, healthcare professionals and publishers. We continue to seek opportunities to acquire additional web properties, both within and outside of the technology, gaming, lifestyle, and healthcare verticals, with the goal of monetizing their audiences and content though application of our proprietary technologies and insight.

Web Properties

Our Digital Media properties and services include the following:

Technology

PCMag is an online resource for laboratory-based product reviews, technology news and buying guides. We operate one of the largest and oldest independent testing facilities for consumer technology products. Founded in 1984, our lab produces more than 2,200 unbiased technology product and service reviews annually. PCMag’s “Editor’s Choice” award is recognized globally as a trusted mark for buyers and sellers of technology products and services.

Mashable.com is a global media brand publishing premium content for individuals interested in technology and culture. Mashable is recognized as a trusted global brand and produces stories for more than a dozen platforms, including Snapchat, Twitter and Facebook.

Offers.com is a coupons & deals website featuring offers from more than 16,000 of the internet's more popular stores and brands. Offers.com's objective is to help consumers find the best deals on the web. Additionally, Offers.com employs a process to verify that its coupon codes work, saving consumers time and money.
BlackFriday.com and BestBlackFriday.com are resources for shoppers to find the best deals and offers from retailers during the height of the holiday shopping season.
Ookla provides customers fixed broadband and mobile network testing applications, data and analysis. Over ten million tests are actively initiated by consumers each day across all of Ookla's Speedtest platforms, with more than 17 billion completed to date. As a result, Ookla maintains comprehensive analytics on worldwide internet performance and accessibility. Ookla solutions have been adopted by a significant number of internet service providers and mobile carriers worldwide and have been translated into over 30 languages for use by thousands of businesses, governments, universities and trade organizations.
Ekahau provides solutions for enterprise wireless network design and troubleshooting. More than 15,000 customers run their networks with Ekahau's Wi-Fi planning and measurement solutions, which design and manage superior wireless networks by minimizing network deployment time and ensuring sufficient wireless coverage across the network.

Downdetector offers real-time overviews of status information and outages for services and digital products that consumers use everyday. Downdetector aims to track any service that its users consider vital to their everyday lives, including (but not limited to) internet providers, mobile providers, airlines, public transport and other online services.

Ziff Davis B2B provides digital content for buyers of information technology (IT) products and services, allowing IT vendors to identify, reach and influence corporate IT decision makers who are actively researching specific IT purchases.

Gaming

IGN Entertainment is an internet media brand focused on the video game and entertainment enthusiast markets. IGN reaches more than 154 million monthly users and is followed by more than 11 million subscribers on YouTube and 30 million users on social platforms.
HumbleBundle.com is a digital subscription and storefront for video games, ebooks, and software. Customers purchase monthly subscriptions, product bundles, and individual products through our website. In addition, raising money for charity is a core mission for Humble Bundle. Each product sale transaction at Humble Bundle results in a charitable contribution.
Healthcare
Everyday Health Group properties include a collection of content and tools for the consumer, and healthcare professional.
Everyday Health Consumer

Consumer-focused properties include online content, interactive tools and applications designed to allow consumers to manage a broad array of health and wellness needs on a daily basis. Everyday Health, our flagship brand, is a broad-based health information portal that provides consumers with trusted and actionable health information intended to empower users to better manage their health and wellness.

We operate the Mayo Clinic Diet digital program, a subscription-based plan for weight loss, and ultimately better health, developed by the weight loss experts at Mayo Clinic. Based on the bestselling book by the same name, the Mayo Clinic Diet digital program provides a step-by-step program to jump-start quick weight loss, achieve a goal weight and maintain it for life.

What to Expect When You're Expecting

We operate the digital properties for the What to Expect brand, the leading pregnancy and parenting media resource. Based on the best-selling pregnancy book, What to Expect When You’re Expecting, by author Heidi Murkoff, the What to Expect website and mobile applications contain content on conception planning and pregnancy, as well as information on newborns and toddlers.

Everyday Health Professional Properties

For healthcare professionals, we provide digital content that enables healthcare professionals to stay abreast of clinical, industry, legislative and regulatory developments across all major medical specialties. Our flagship professional property, MedPage Today, delivers breaking medical news in 34 medical specialties and major public policy developments at the state and federal levels seven days a week. MedPage Today coordinates with approximately 4,000 leading researchers and clinicians, as well as more than 300 academic medical centers, to aid in gathering in-depth information for articles. MedPage Today's excellence has been recognized with awards from the American Society of Healthcare Business Editors, the National Institute for Healthcare Management, the eHealthcare Leadership Awards, the Medical Marketing and Media Awards and the Web Health Awards. Additionally, MedPage Today was named as a finalist for the Jesse M. Neal Award and the Gerald M. Loeb Award.

PRIME Education provides accredited continuing medical education ("CME") and continuing education ("CE") programs to healthcare professionals. PRIME is nationally recognized for its healthcare outcomes research and its conduct of research-informed and other CME and CE programs in various therapeutic areas.

Display and Video Advertising

We sell online display and video advertising on our owned-and-operated web properties and on third party sites as well as targeted advertising across the internet through various unaffiliated third party digital advertising networks. We have contractual arrangements with advertisers either directly or through agencies. The terms of these contracts specify the price of the advertising to be sold and the volume of advertisements that will be served over the course of a campaign.

In addition to the contracts with advertisers and agencies, we have contractual arrangements with certain third party websites not owned by us and third party advertising networks to deliver online display and video advertising to their websites or to third-party sites.

Performance Marketing

We generate business-to-business leads for IT vendors through the marketing of content, including white papers and webinars, and offer additional lead qualification and nurturing services. On the consumer side, we generate clicks to online merchants by promoting deals and discounts on our web properties.

Licensing

We license our proprietary technology, data and intellectual property to third parties for various purposes. For instance, we will license the right to use PCMag's "Editors' Choice" logo and other copyrighted editorial content to businesses whose products have earned such distinction.

Subscriptions

We offer subscriptions to businesses for Speedtest Intelligence, which offers up-to-date insights into global fixed broadband and mobile performance data. We offer subscriptions to consumers for our Mayo Clinic Diet program, PCMag Digital Edition and Humble Bundle.

Competition

Competition in the digital media space is fierce and continues to intensify.

Our digital media business competes with online publishers including CNET, GameSpot, WebMD, Vox and others as well as with portals, advertising networks, social media sites and other platforms, including Google, Facebook, Twitch and others. We believe that the primary competitive factors determining our success in the market for our digital media include the reputation of brands as trusted sources of objective information and our ability to attract internet users and advertisers to our web properties.

For more information regarding the competition that we face, please refer to the section entitled Risk Factors contained in Item 1A of this Annual Report on Form 10-K.

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Patents and Proprietary Rights

We regard the protection of our intellectual property rights as important to our success. We aggressively protect these rights by relying on a combination of patents, trademarks, copyrights, trade dress and trade secrets. We also enter into confidentiality and intellectual property assignment agreements with employees and contractors, and nondisclosure agreements with parties with whom we conduct business in order to limit access to and disclosure of our proprietary information.

Through a combination of internal technology development and acquisitions, we have built a portfolio of numerous U.S. and foreign patents. We generate licensing revenues from some of these patents. We are currently engaged in litigation to enforce several of our patents. For a more detailed description of the lawsuits in which we are involved, see Item 3. Legal Proceedings. We intend to continue to invest in patents, to aggressively protect our patent assets from unauthorized use and to generate patent licensing revenues from authorized users.

Several of our U.S. patents have been reaffirmed through reexamination proceedings before the United States Patent and Trademark Office (“USPTO”). We have generated royalties from licensing certain of our patents and have enforced certain patents against companies using our patented technology without our permission.

We seek patents for inventions that may contribute to our business or technology sector. In addition, we have multiple pending U.S. and foreign patent applications, covering components of our technology and in some cases technologies beyond those that we currently offer. Unless and until patents are issued on the pending applications, no patent rights can be enforced.

We have obtained patent licenses for certain technologies where such licenses are necessary or advantageous.

We own and use a number of trademarks in connection with our services, including word and/or logo trademarks for eFax, MyFax, eFax Corporate, Sfax, eVoice, KeepItSafe, Fusemail, Onebox, PCMag, IGN, Everyday Health, AskMen, Humble Bundle, Mashable, Health eCareers, Ookla, Speedtest, and Geek.com, among others. Many of these trademarks are registered worldwide, and numerous trademark applications are pending around the world. We hold numerous internet domain names, including “efax.com”, “efaxcorporate.com”, “myfax.com”, “fax.com”, “evoice.com”, “keepitsafe.com”, “fusemail.com”, “campaigner.com”, “onebox.com”, “pcmag.com”, “techbargains.com”, “ign.com”, “askmen “speedtest.net”, “offers.com”, “humblebundle.com”, “mashable.com”, “healthecareers.com”, and “geek.com”, among others. W have filed to protect our rights to our brands in certain alternative top-level domains such as “.org”, “.net”, “.biz”, “.info” and “.us”, among others.

Like other technology-based businesses, we face the risk that we will be unable to protect our intellectual property and other proprietary rights, and the risk that we will be found to have infringed the proprietary rights of others. For more information regarding these risks, please refer to the section entitled Risk Factors contained in Item 1A of this Annual Report on Form 10-K.

Government Regulation

We are subject to a number of foreign and domestic laws and regulations that affect companies conducting business over the internet and, in some cases, using services of third-party telecommunications and internet service providers. These include, among others, laws and regulations addressing privacy, data storage, retention and security, freedom of expression, content, taxation, numbers, advertising and intellectual property. With respect to most of our business, we are not a regulated telecommunications provider in the U.S. For information about the risks we face with respect to governmental regulation, please see Item 1A of this Annual Report on Form 10-K entitled Risk Factors.

Seasonality

Our Cloud Services revenues are impacted by the number of effective business days in a given period. We traditionally experience lower than average Cloud Services usage and customer sign-ups in the fourth quarter. Revenues associated with our Digital Media operations are subject to seasonal fluctuations, becoming most active during the fourth quarter holiday period due to increased retail activity.

Research and Development

The markets for our services are evolving rapidly, requiring ongoing expenditures for research and development and timely introduction of new services and service enhancements. Our future success will depend, in part, on our ability to enhance our current services, to respond effectively to technological changes, attract and retain engineering talent, sell additional services to our existing customer base and introduce new services and technologies that address the increasingly sophisticated needs of our customers.

We devote significant resources to develop new services and service enhancements. Our research, development and engineering expenditures were $48.4 million, $46.0 million and $38.0 million for the fiscal years ended December 31, 2018, 2017 and 2016, respectively. For more information regarding the technological risks that we face, please refer to the section entitled Risk Factors contained in Item 1A of this Annual Report on Form 10-K.

Employees

As of December 31, 2018, we had approximately 2,587 employees, the majority of whom are in the U.S.

Our future success will depend, in part, on our ability to continue to attract, retain and motivate highly qualified technical, marketing and management personnel. Approximately 70 of the editorial employees in our Digital Media business have elected to join a union. We chose to voluntarily recognize the union and have commenced negotiations on a collective bargaining agreement. None of our other employees are represented by any collective bargaining unit or agreement. We have never experienced a work stoppage. We believe our relationship with our employees is good.

Web Availability of Reports

The Company’s Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and amendments to reports filed pursuant to Sections 13(a) and 15(d) of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), are filed with the Securities and Exchange Commission (the “SEC”). The Company is subject to the informational requirements of the Exchange Act and files or furnishes reports, proxy statements and other information with the SEC. Such reports and other information filed by the Company with the SEC are available free of charge on the Company’s website at www.j2.com as soon as reasonably practicable after we file such reports with, or furnish them to, the SEC’s website. The information on our website is not part of this report. The SEC maintains an internet site that contains reports, proxy and information statements and other information regarding our filings we file electronically with the SEC at www.sec.gov.

Item 1A. Risk Factors

Before deciding to invest in j2 Global or to maintain or increase your investment, you should carefully consider the risks described below in addition to the other cautionary statements and risks described elsewhere in this Annual Report on Form 10-K and our other filings with the SEC, including our subsequent reports on Forms 10-Q and 8-K. The risks and uncertainties described below are not the only ones we face. Additional risks and uncertainties not presently known to us or that we currently deem immaterial also may affect our business. If any of these known or unknown risks or uncertainties actually occurs, our business, prospects, financial condition, operating results and cash flows could be materially adversely affected. In that event, the market price of our common stock will likely decline and you may lose part or all of your investment.

Risks Related To Our Business

Acquisitions and investments in our business have historically played a significant role in our growth and we anticipate that they will continue to do so.

We must acquire additional or invest in new or current businesses, products, services and technologies that complement or augment our service offerings and customer base in order to sustain our rate of growth. We may not successfully identify suitable acquisition candidates or investment strategies, manage disparate technologies, lines of business, personnel and corporate cultures, realize our business strategy or the expected return on our investment or manage a geographically dispersed company. If we are unable to identify and execute on acquisitions or execute on our investment strategies, our revenues, business, prospects, financial condition, operating results and cash flows could suffer.

We have made and expect to continue to make acquisitions that could disrupt our operations and harm our operating results.

We intend to continue to develop new services, enhance existing services and expand our geographic presence through acquisitions of other companies, service lines, technologies and personnel.

Acquisitions involve numerous risks, including the following:

- Difficulties in integrating the operations, systems, technologies, products and personnel of the acquired businesses;
- Difficulties in entering markets in which we have no or limited direct prior experience and where competitors in such markets may have stronger market positions;
- Diversion of management’s attention from normal daily operations of the business and the challenges of managing larger and more widespread operations resulting from acquisitions; and
- The potential loss of key employees, customers, distributors, vendors and other business partners of the businesses we acquire.

Acquisitions may also cause us to:

- Use a substantial portion of our cash resources or incur debt;
- Significantly increase our interest expense, leverage and debt service requirements if we incur additional debt to pay for an acquisition;
- Assume liabilities;
- Issue common stock that would dilute our current stockholders’ percentage ownership;
- Record goodwill and intangible assets that are subject to impairment testing on a regular basis and potential periodic impairment charges;

- Incur amortization expenses related to certain intangible assets; and
- Become subject to intellectual property or other litigation.

Mergers and acquisitions are inherently risky and subject to many factors outside of our control. We cannot give assurance that our previous or future acquisitions will be successful and will not materially adversely affect our business, operating results or financial condition. Failure to manage and successfully integrate acquisitions could materially harm our business and operating results. In addition, our effective tax rate for future periods is uncertain and could be impacted by mergers and acquisitions.

The majority of our revenue within the Digital Media business is derived from short-term advertising arrangements and a reduction in spending by or loss of current or potential advertisers would cause our revenue and operating results to decline.

In most cases, our agreements with advertisers have a term of one year or less and may be terminated at any time by the advertiser or by us without penalty. Advertising agreements often provide that we receive payment based on "served" impressions but the online ad industry has started to shift so that payment will be made based on "viewable" impressions, and that change in basis could have a negative effect on available impressions thereby reducing our revenue potential. Accordingly, it is difficult to forecast display revenue accurately. In addition, our expense levels are based in part on expectations of future revenue. Moreover, we believe that advertising on the internet, as in traditional media, fluctuates significantly as a result of a variety of factors, many of which are outside of our control. Some of these factors include budget constraints of our advertisers, cancellations or delays of projects by our advertisers, the cyclical and discretionary nature of advertising spending, general economic, internet-related and media industry conditions, as well as extraordinary events. The state of the global economy and availability of capital has impacted and could further impact the advertising spending patterns of existing and potential advertisers. Any reduction in spending by, or loss of, existing or potential advertisers would negatively impact our revenue and operating results. Further, we may be unable to adjust our expenses and capital expenditures quickly enough to compensate for any unexpected revenue shortfall.

If we are unable to develop, commission or acquire compelling content in our Digital Media business at acceptable prices, our expenses may increase, the number of visitors to our online properties may not grow as anticipated, or may decline, and/or visitors' level of engagement with our websites may decline, any of which could harm our operating results.

Our future success depends in part on the ability of our Digital Media business to aggregate compelling content and deliver that content through our online properties. We believe that users will increasingly demand high-quality content and services including more video and mobile-specific content. Such content and services may require us to make substantial payments to third parties if we are unable to develop content of our own. Our ability to maintain and build relationships with such third-party providers is critical to our success. In addition, as new methods for accessing the internet become available, including through alternative devices, we may need to enter into amended agreements with existing third-party providers to cover the new devices. We may be unable to monetize the activity on these alternative devices including mobile devices which may supplant current traffic that we monetize. We may be unable to enter into new, or preserve existing, relationships with the third-parties whose content or services we seek to obtain. In addition, as competition for compelling content increases both domestically and internationally, our third-party providers may increase the prices at which they offer their content and services to us and potential providers may not offer their content or services to us at all, or may offer them on terms that are not agreeable to us. An increase in the prices charged to us by third-party providers could harm our operating results and financial condition. Further, many of our content and services licenses with third parties are non-exclusive. Accordingly, other media providers may be able to offer similar or identical content. This increases the importance of our ability to deliver compelling content and personalization of this content for users in order to differentiate our properties from other businesses. If we are unable to develop compelling content of our own, we may be required to engage freelance services or obtain licensed content which may not be at reasonable prices which could harm our operating results.

Users are increasingly using mobile devices to access our content within our Digital Media business and if we are unsuccessful in attracting new users to our mobile offerings, and expanding the capabilities of our content and other offerings with respect to our mobile platforms, our net revenues could decline.

Web usage and the consumption of digital content are increasingly shifting to mobile platforms such as smartphones and other connected devices. Visits to our mobile websites and applications have increased but if the percentage of visits to our mobile websites does not continue to grow or we are unable to effectively monetize our mobile content, net revenue will be impacted. In addition, we are less effective at monetizing digital content on our mobile websites and applications compared to our desktop websites. The growth of our business depends in part on our ability to continue to adapt to the mobile environment and to deliver compelling solutions to consumers and retailers through these new mobile marketing channels. In addition, our success on mobile platforms will be dependent on our interoperability with popular mobile operating systems that we do not control, and any changes in such systems that degrade our functionality or give preferential treatment to competitive services could adversely affect usage of our services through mobile devices.

In our Digital Media business, if we are unable to prove that our advertising and sponsorship solutions provide an attractive return on investment for our customers, our financial results could be harmed.

Our ability to grow revenue from our Digital Media business will be dependent on our ability to demonstrate to marketers that their marketing campaigns with us provide a meaningful return on investment (“ROI”) relative to offline and other online opportunities. Certain of the marketing campaigns with respect to our Digital Media business are designed such that the revenues received are based entirely upon the ROI delivered for customers. Our Digital Media business has invested significant resources in developing its research, analytics and campaign effectiveness capabilities and expects to continue to do so in the future. Our ability, however, to demonstrate the value of advertising and sponsorship on Digital Media business properties will depend, in part, on the sophistication of the analytics and measurement capabilities, the actions taken by our competitors to enhance their offerings, whether we meet the ROI expectations of our customers and a number of other factors. If we are unable to maintain sophisticated marketing and communications solutions that provide value to our customers or demonstrate our ability to provide value to our customers, our financial results will be harmed.

Our fax services constitute a significant percentage of our revenue.

Currently, fax-to-email revenue constitutes approximately 27% of our consolidated revenues. The success of our business is therefore dependent upon the continued use of fax as a messaging medium and/or our ability to diversify our service offerings and derive more revenue from other services, such as voice, online backup, email, unified messaging solutions and services related to our Digital Media business. If the demand for online fax-to-email as a messaging medium decreases, and we are unable to replace lost revenues from decreased usage or cancellation of our fax services with a proportional increase in our customer base or with revenues from our other services, our business, financial condition, operating results and cash flows could be materially and adversely affected.

We believe that one of the attractive features of our eFax® and similar products is that fax signatures are a generally accepted method of executing contracts. There are ongoing efforts by governmental and non-governmental entities to create a universally accepted method for electronically signing documents. Widespread adoption of so-called “digital signatures” could reduce demand for our fax services and, as a result, could have a material adverse effect on our business, prospects, financial condition, operating results and cash flows.

A system failure, security breach or other technological risk could delay or interrupt service to our customers, harm our reputation or subject us to significant liability.

Our operations are dependent on our network being free from interruption by damage from fire, earthquake, power loss, telecommunications failure, unauthorized entry, computer viruses, cyber-attacks or any other events beyond our control. Similarly, the operations of our partners and other third parties with which we work are also susceptible to the same risks. There can be no assurance that our existing and planned precautions of backup systems, regular data backups, security protocols and other procedures will be adequate to prevent significant damage, system failure or data loss and the same is true for our partners, vendors and other third parties on which we rely. We have experienced automated log in attempts to gain unauthorized access to customer accounts. To date, these events have not resulted in the material impairment of any business operations.

Also, many of our services are web-based, and the amount of data we store for our users on our servers has been increasing. Despite the implementation of security measures, our infrastructure, and that of our partners, vendors and other third parties, may be vulnerable to computer viruses, hackers or similar disruptive problems caused by our vendors, partners, other third parties, subscribers, employees or other internet users who attempt to invade public and private data networks. As seen in the industries in which we operate and others, these activities have been, and will continue to be, subject to continually evolving cybersecurity and technological risks. Further, in some cases we do not have in place disaster recovery facilities for certain ancillary services. Moreover, a significant portion of our operations relies heavily on the secure processing, storage and transmission of confidential and other sensitive data. For example, a significant number of our Cloud Services customers authorize us to bill their credit or debit card accounts directly for all transaction fees charged by us. We rely on encryption and authentication technology to effect secure transmission of confidential information, including customer credit and debit card numbers. Advances in computer capabilities, new discoveries in the field of cryptography or other developments may result in a compromise or breach of the technology used by us, our partners, vendors, or other third parties, to protect transaction and other confidential data. Any system failure or security breach that causes interruptions or data loss in our operations, our partners, vendors, or other third parties, or in the computer systems of our customers or leads to the misappropriation of our or our customers' confidential information could result in a significant liability to us (including in the form of judicial decisions and/or settlements, regulatory findings and/or forfeitures, and other means), cause considerable harm to us and our reputation (including requiring notification to customers, regulators, and/or the media), cause a loss of confidence in our products and services, and deter current and potential customers from using our services. Our Board is briefed on cybersecurity risks and we implement cybersecurity risk management under our Board's oversight. We use vendors to assist with cybersecurity risks, but these vendors may not be able to assist us adequately in preparing for or responding to a cybersecurity incident. We maintain insurance related to cybersecurity risks, but this insurance may not be sufficient to cover all of our losses from any breaches or other adverse consequences related to a cybersecurity-event. Any of these events could have a material adverse effect on our business, prospects, financial condition, operating results and cash flows, or cause us to suffer other negative consequences. For example, we may incur remediation costs (such as liability for stolen assets or information, repairs of system damage, and incentives to customers or business partners in an effort to maintain relationships after an attack); increased cybersecurity protection costs (which may include the costs of making organizational changes, deploying additional personnel and protection technologies, training employees, and engaging third party experts and consultants); lost revenues resulting from the unauthorized use of proprietary information or the failure to retain or attract customers following an attack; litigation and legal risks (including regulatory actions by state and federal governmental authorities and non-U.S. authorities); increased insurance premiums; reputational damage that adversely affects customer or investor confidence; and damage to the company's competitiveness, stock price, and diminished long-term shareholder value.

Political instability and volatility in the economy may adversely affect segments of our customers, which may result in decreased usage and advertising levels, customer acquisition and customer retention rates and, in turn, could lead to a decrease in our revenues or rate of revenue growth.

Certain segments of our customers may be adversely affected by political instability and volatility in the general economy or renewed downturns. To the extent these customers' businesses are adversely affected by political instability or volatility, their usage of our services and/or our customer retention rates could decline. This may result in decreased cloud services subscription and/or usage revenues and decreased advertising, e-commerce or other revenues, which may adversely impact our revenues and profitability.

Our growth will depend on our ability to develop, strengthen, and protect our brands, and these efforts may be costly and have varying degrees of success.

Our brand recognition has significantly contributed to the success of our business. Strengthening our current brands and launching competitive new brands will be critical to achieving widespread commercial acceptance of our products and services. This will require our continued focus on active marketing, the costs of which have been increasing and may continue to increase. In addition, substantial initial investments may be required to launch new brands and expand existing brands to cover new geographic territories and technology fields. Accordingly, we may need to spend increasing amounts of money on, and devote greater resources to, advertising, marketing and other efforts to cultivate brand recognition and customer loyalty. In addition, we are supporting an increasing number of brands, each of which requires its own investment of resources. Brand promotion activities may not yield increased revenues and, even if they do, increased revenues may not offset the expenses incurred. A failure to launch, promote, and maintain our brands, or the incurrence of substantial expenses in doing so, could have a material adverse effect on our business.

Our brand recognition depends, in part, on our ability to protect our trademark portfolio and establish trademark rights covering new brands and territories. Some regulators and competitors have taken the view that certain of our brands, such as eFax and eVoice, are descriptive or generic when applied to the products and services offered by our Cloud Services business. Nevertheless, we have obtained U.S. and foreign trademark registrations for our brand names, logos, and other brand identifiers, including, eFax and eVoice. If we are unable to obtain, maintain or protect trademark rights covering our brands across the territories in which they are or may be offered, the value of these brands may be diminished, competitors may be able to dilute, harm, or take advantage of our brand recognition and reputation, and our ability to attract subscribers may be adversely affected.

We hold domain names relating to our brands, in the U.S. and internationally. The acquisition and maintenance of domain names are generally regulated by governmental agencies and their designees. The regulation of domain names may change. Governing bodies may establish additional top-level domains, appoint additional domain name registrars or modify the requirements for holding domain names. As a result, we may be unable to acquire or maintain all relevant domain names that relate to our brands. Furthermore, international rules governing the acquisition and maintenance of domain names in foreign jurisdictions are sometimes different from U.S. rules, and we may not be able to obtain all of our domains internationally. As a result of these factors, we may be unable to prevent third parties from acquiring domain names that are similar to, infringe upon or otherwise decrease the value of our brands, trademarks or other proprietary rights. In addition, failure to secure or maintain domain names relevant to our brands could adversely affect our reputation and make it more difficult for users to find our websites and services.

Increased numbers of credit and debit card declines in our business could lead to a decrease in our revenues or rate of revenue growth.

A significant number of our paid Cloud Services subscribers and certain Digital Media subscribers pay for our services through credit and debit cards. Weakness in certain segments of the credit markets and in the U.S. and global economies could result in increased numbers of rejected credit and debit card payments. We believe this could result in increased customer cancellations and decreased customer signups. Rejected credit or debit card payments, customer cancellations and decreased customer sign up may adversely impact our revenues and profitability.

If our business experiences excessive fraudulent activity or cannot meet evolving credit card company merchant standards, we could incur substantial costs and lose the right to accept credit cards for payment and our subscriber base could decrease significantly.

A significant number of our paid Cloud Services subscribers and certain Digital Media subscribers authorize us to bill their credit card accounts directly for all service fees charged by us. If people pay for these services with stolen credit cards, we could incur substantial unreimbursed third-party vendor costs. We also incur losses from claims that the customer did not authorize the credit card transaction to purchase our service. If the numbers of unauthorized credit card transactions become excessive, we could be assessed substantial fines for excess chargebacks and could lose the right to accept credit cards for payment. In addition, we are subject to Payment Card Industry (“PCI”) data security standards, which require periodic audits by independent third parties to assess our compliance. PCI standards are a comprehensive set of requirements for enhancing payment account data security. Failure to comply with the security requirements or rectify a security issue may result in fines or a restriction on accepting payment cards. Credit card companies may change the standards required to utilize their services from time to time. If we are unable to meet these new standards, we could be unable to accept credit cards. Further, the law relating to the liability of providers of online payment services is currently unsettled and states may enact their own rules with which we may not comply. Substantial losses due to fraud or our inability to accept credit card payments, which could cause our paid subscriber base to significantly decrease, could have a material adverse effect on our business, prospects, financial condition, operating results and cash flows.

The markets in which we operate are highly competitive and our competitors may have greater resources to commit to growth, superior technologies, cheaper pricing or more effective marketing strategies. Also, we face significant competition for users, advertisers, publishers, developers and distributors.

For information regarding our competition, and the risks arising out of the competitive environment in which we operate, see the section entitled Competition contained in Item 1 of this Annual Report on Form 10-K. In addition, some of our competitors include major companies with much greater resources and significantly larger subscriber bases than we have. Some of these competitors offer their services at lower prices than we do. These companies may be able to develop and expand their network infrastructures and capabilities more quickly, adapt more swiftly to new or emerging technologies and changes in customer requirements, take advantage of acquisition and other opportunities more readily and devote greater resources to the marketing and sale of their products and services than we can. There can be no assurance that additional competitors will not enter markets that we are currently serving and plan to serve or that we will be able to compete effectively. Competitive pressures may reduce our revenue, operating profits or both.

Our Digital Media business faces significant competition from online media companies as well as from social networking sites, mobile application, traditional print and broadcast media, general purpose and search engines and various e-commerce sites.
Several of our competitors offer an integrated variety of internet products, advertising services, technologies, online services and content. We compete against these and other companies to attract and retain users, advertisers and

developers. We also compete with social media and networking sites which are attracting a substantial and increasing share of users and users' online time, and may continue to attract an increasing share of online advertising dollars. In addition, several competitors offer products and services that directly compete for users with our Digital Media business offerings. Similarly, the advertising networks operated by our competitors or by other participants in the display marketplace offer services that directly compete with our offerings for advertisers, including advertising exchanges, ad networks, demand side platforms, ad serving technologies and sponsored search offerings. We also compete with traditional print and broadcast media companies to attract advertising spending. Some of our existing competitors and possible entrants may have greater brand recognition for certain products and services, more expertise in a particular segment of the market, and greater operational, strategic, technological, financial, personnel, or other resources than we do. Many of our competitors have access to considerable financial and technical resources with which to compete aggressively, including by funding future growth and expansion and investing in acquisitions, technologies, and research and development. Further, emerging start-ups may be able to innovate and provide new

products and services faster than we can. In addition, competitors may consolidate with each other or collaborate, and new competitors may enter the market. Some of the competitors for our Cloud Services business in international markets have a substantial competitive advantage over us because they have dominant market share in their territories, are owned by local telecommunications providers, have greater brand recognition, are focused on a single market, are more familiar with local tastes and preferences, or have greater regulatory and operational flexibility due to the fact that we may be subject to both U.S. and foreign regulatory requirements.
If our competitors are more successful than we are in developing and deploying compelling products or in attracting and retaining users, advertisers, publishers, developers, or distributors, our revenue and growth rates could decline.

As a creator and a distributor of content over the internet, we face potential liability for legal claims based on the nature and content of the materials that we create or distribute.

Users access health-related content through our Everyday Health properties, including information regarding particular medical conditions, diagnosis and treatment and possible adverse reactions or side effects from medications. If our content, or content we obtain from third parties, contains inaccuracies, it is possible that consumers who rely on that content or others may make claims against us with various causes of action. Although our properties contain terms and conditions, including disclaimers of liability, that are intended to reduce or eliminate our liability, third parties may claim that these online agreements are unenforceable.

Our editorial and other quality control procedures may not be sufficient to ensure that there are no errors or omissions in our content offerings or to prevent such errors and omissions in content that is controlled by our partners. Even if potential claims do not result in liability to us, investigating and defending against these claims could be expensive and time consuming and could divert management’s attention away from our operations.

Inadequate intellectual property protections could prevent us from defending our proprietary technology and intellectual property.

Our success depends, in part, upon our proprietary technology and intellectual property. We rely on a combination of patents, trademarks, trade secrets, copyrights, contractual restrictions, and other confidentiality safeguards to protect our proprietary technology. However, these measures may provide only limited protection and it may be costly and time-consuming to enforce compliance with our intellectual property rights. In some circumstances, we may not have adequate, economically feasible or realistic options for enforcing our intellectual property and we may be unable to detect unauthorized use. While we have a robust worldwide portfolio of issued patents and pending patent applications, there can be no assurance that any of these patents will not be challenged, invalidated or circumvented, that we will be able to successfully police infringement, or that any rights granted under these patents will in fact provide a competitive advantage to us.

In addition, our ability to register or protect our patents, copyrights, trademarks, trade secrets and other intellectual property may be limited in some foreign countries. As a result, we may not be able to effectively prevent competitors in these regions from utilizing our intellectual property, which could reduce our competitive advantage and ability to compete in those regions and negatively impact our business.

We also strive to protect our intellectual property rights by relying on federal, state and common law rights, as well as contractual restrictions. We typically enter into confidentiality and invention assignment agreements with our employees and contractors, and confidentiality agreements with parties with whom we conduct business in order to limit access to, and disclosure and use of, our proprietary information. However, we may not be successful in executing these agreements with every party who has access to our confidential information or contributes to the development of our technology or intellectual property rights. Those agreements that we do execute may be breached, and we may not have adequate remedies for any such breach. These contractual arrangements and the other steps we have taken to protect our intellectual property rights may not prevent the misappropriation or disclosure of our proprietary information nor deter independent development of similar technology or intellectual property by others.

Monitoring unauthorized use of the content on our websites and mobile applications, and our other intellectual property and technology, is difficult and costly. Our efforts to protect our proprietary rights and intellectual property may not have been and may not be adequate to prevent their misappropriation or misuse. Third parties from time to time copy content or other intellectual property or technology from our solutions without authorization and seek to use it for their own benefit. We generally seek to address such unauthorized copying or use, but we have not always been successful in stopping all unauthorized use of our content or other intellectual property or technology, and may not be successful in doing so in the future. Further, we may not have been and may not be able to detect unauthorized use of our technology or intellectual property, or to take appropriate steps to enforce our intellectual property rights.

Companies that operate in the same industry as our Cloud Services and Digital Media businesses have experienced substantial litigation regarding intellectual property. Currently, we have pending patent infringement lawsuits, both offensive and defensive, against several companies in this industry. Furthermore, we may find it necessary or appropriate to initiate claims or litigation to enforce our intellectual property rights or determine the validity and scope of intellectual property rights claimed by others. This or any other litigation to enforce or defend our intellectual property rights may be expensive and time-consuming, could divert management resources and may not be adequate to protect our business.

We may be found to have infringed the intellectual property rights of others, which could expose us to substantial damages or restrict our operations.

We have been and expect to continue to be subject to legal claims that we have infringed the intellectual property rights of others. The ready availability of damages and royalties and the potential for injunctive relief have increased the costs associated with litigating and settling patent infringement claims. In addition, we may be required to indemnify our resellers and users for similar claims made against them. Any claims, whether or not meritorious, could require us to spend significant time, money, and other resources in litigation, pay damages and royalties, develop new intellectual property, modify, design around, or discontinue existing products, services, or features, or acquire licenses to the intellectual property that is the subject of the infringement claims. These licenses, if required, may not be available at all or have acceptable terms. As a result, intellectual property claims against us could have a material adverse effect on our business, prospects, financial condition, operating results and cash flows.

We may be subject to risks from international operations.

As we continue to expand our business operations in countries outside the U.S., our future results could be materially adversely affected by a variety of uncontrollable and changing factors including, among others, foreign currency exchange rates; political or social unrest or economic instability in a specific country or region; trade protection measures and other regulatory requirements which may affect our ability to provide our services; difficulties in staffing and managing international operations; and adverse tax consequences, including imposition of withholding or other taxes on payments by subsidiaries and affiliates. Any or all of these factors could have a material adverse impact on our future business, prospects, financial condition, operating results and cash flows.

We have only limited experience in marketing and operating our services in certain international markets. Moreover, we have in some cases experienced and expect to continue to experience in some cases higher costs as a percentage of revenues in connection with establishing and providing services in international markets versus in the U.S. In addition, certain international markets may be slower than the U.S. in adopting the internet and/or outsourced messaging and communications solutions and so our operations in international markets may not develop at a rate that supports our level of investments.

As we continue to grow our international operations, adverse currency fluctuations and foreign exchange controls could have a material adverse effect on our financial condition and results of operations.

As we expand our international operations, we could be exposed to significant risks of currency fluctuations. In some countries outside the U.S., we offer our services in the applicable local currency, including but not limited to the Australian Dollar, the Canadian Dollar, the Euro, the Hong Kong Dollar, the Japanese Yen, the New Zealand Dollar, the Norwegian Kroner and the British Pound Sterling, among others. As a result, fluctuations in foreign currency exchange rates affect the results of our operations, which in turn may materially adversely affect reported earnings and the comparability of period to period results of operations. Changes in currency exchange rates may also affect the relative prices at which we and foreign competitors sell our services in the same market. In addition, changes in the value of the relevant currencies may affect the cost of certain items required in our operations. Furthermore, we may become subject to exchange control regulations, which might restrict or prohibit our conversion of other currencies into U.S. Dollars. We cannot assure you that future exchange rate movements will not have a material adverse effect on our future business, prospects, financial condition, operating results and cash flows. To date, we have not entered into foreign currency hedging transactions to control or minimize these risks.

We may be engaged in legal proceedings that could cause us to incur unforeseen expenses and could divert significant operational resources and our management's time and attention.

From time to time, we are subject to litigation or claims or are involved in other legal disputes or regulatory inquiries, including in the areas of patent infringement and anti-trust, that could negatively affect our business operations and financial condition. Such disputes could cause us to incur unforeseen expenses, divert operational resources, occupy a significant amount of our management's time and attention and negatively affect our business operations and financial condition. The outcomes of such matters are subject to inherent uncertainties, carrying the potential for unfavorable rulings that could include monetary damages and injunctive relief. We do not always have insurance coverage for defense costs, judgments, and settlements. We may also be subject to indemnification requirements with business partners, vendors, current and former officers and directors, and other third parties. Payments under such indemnification provisions may be material. For a more detailed description of certain lawsuits in which we are involved, see Item 3. Legal Proceedings.

The successful operation of our business depends upon the supply of critical business elements and marketing relationships from other companies.

We depend upon third parties for critical elements of our business, including technology, infrastructure, customer service and sales and marketing components. We rely on private third-party providers for our internet, telecommunications, website traffic and other connections and for co-location of a significant portion of our servers. In addition, we rely on third-party platforms to facilitate and provide access to products sold through our sites. Any disruption in the services provided by any of these suppliers, any adverse change in access to their platforms or services or in their terms and conditions of use or services, or any failure by them to handle current or higher volumes of activity could have a material adverse effect on our business, prospects, financial condition, operating results and cash flows. To obtain new Cloud Services customers, we have marketing agreements with operators of leading search engines and websites and employ the use of resellers to sell our products. These arrangements typically are not exclusive and do not extend over a significant period of time. Failure to continue these relationships on terms that are acceptable to us or to continue to create additional relationships could have a material adverse effect on our business, prospects, financial condition, operating results and cash flows.

Our business is highly dependent on our billing systems.

A significant part of our revenues depends on prompt and accurate billing processes. Customer billing is a highly complex process, and our billing systems must efficiently interface with third-party systems, such as those of credit card processing companies. Our ability to accurately and efficiently bill our customers is dependent on the successful operation of our billing systems and the third-party systems upon which we rely, such as our credit card processor, and our ability to provide these third parties the information required to process transactions. In addition, our ability to offer new services or alternative-billing plans is dependent on our ability to customize our billing systems. Any failures or errors in our billing systems or procedures could impair our ability to properly bill our current customers or attract and service new customers, and thereby could materially and adversely affect our business and financial results.

Our success depends on our retention of our executive officers, senior management and our ability to hire and retain key personnel.

Our success depends on the skills, experience and performance of executive officers, senior management and other key personnel. The loss of the services of one or more of our executive officers, senior managers or other key employees could have a material adverse effect on our business, prospects, financial condition, operating results and cash flows. Our future success also depends on our continuing ability to attract, integrate and retain highly qualified technical, sales and managerial personnel. Competition for these people is intense, and there can be no assurance that we can retain our key employees or that we can attract, assimilate or retain other highly qualified technical, sales and managerial personnel in the future.

We are exposed to risk if we cannot maintain or adhere to our internal controls and procedures.

We have established and continue to maintain, assess and update our internal controls and procedures regarding our business operations and financial reporting. Our internal controls and procedures are designed to provide reasonable assurances regarding our business operations and financial reporting. However, because of the inherent limitations in this process, internal controls and procedures may not prevent or detect all errors or misstatements. To the extent our internal controls are inadequate or not adhered to by our employees, our business, financial condition and operating results could be materially adversely affected.

If we are not able to maintain internal controls and procedures in a timely manner, or without adequate compliance, we may be unable to accurately report our financial results or prevent fraud and may be subject to sanctions or investigations by regulatory authorities such as the SEC or NASDAQ. Any such action or restatement of prior-period financial results as a result could harm our business or investors' confidence in j2 Global, and could cause our stock price to fall.

Our level of indebtedness could adversely affect our financial flexibility and our competitive position.

Our level of indebtedness could have significant effects on our business. For example, it could:

- make it more difficult for us to satisfy our obligations, including our current indebtedness and any other indebtedness we may incur in the future;
- increase our vulnerability to adverse changes in general economic, industry and competitive conditions;
- require us to dedicate a substantial portion of our cash flow from operations to make payments on our indebtedness, thereby reducing the availability of our cash flow to fund working capital, capital expenditures, acquisitions and other elements of our business strategy and other general corporate purposes, including share repurchases and payment of dividends;
- limit our flexibility in planning for, or reacting to, changes in our business and the industries in which we operate;
- restrict us from exploiting business opportunities;
- place us at a competitive disadvantage compared to our competitors that have less indebtedness; and
- limit our ability to borrow additional funds for working capital, capital expenditures, acquisitions, debt service requirements, execution of our business strategy or other general corporate purposes.

In addition, (i) the indenture governing the 6.0% Senior Notes of our subsidiary, j2 Cloud Services, LLC ("j2 Cloud Services") and (ii) the Credit Agreement, dated as of January 7, 2019 (the "MUFG Credit Facility"), by and among j2 Cloud Services, the lenders from time to time party thereto and MUFG Union Bank, N.A., as sole lead arranger and as administrative agent, contain, and the agreements evidencing or governing other future indebtedness may contain, restrictive covenants that may limit our ability to engage in activities that may be in our long-term best interests. Our failure to comply with those covenants could result in an event of default which, if not cured or waived, could result in the acceleration of all of our indebtedness.

The indenture governing the 6.0% Senior Notes and MUFG Credit Facility contain a number of restrictive covenants that impose significant operating and financial restrictions and may limit our ability to plan for or react to market conditions, meet capital needs or make acquisitions, or otherwise restrict our activities or business plans. These include restrictions on our ability to:

- incur additional indebtedness;
- create liens;
- engage in sale-leaseback transactions;
- pay dividends or make distributions in respect of capital stock;
- purchase or redeem capital stock;
- make investments or certain other restricted payments;
- sell assets;
- enter into transactions with affiliates;
- amend the terms of certain other indebtedness and organizational documents; or
- effect a consolidation or merger.

A breach of the covenants under the indenture governing the 6.0% Senior Notes or under the MUFG Credit Facility could result in an event of default. Such a default may allow the creditors to accelerate the related indebtedness and may result in the acceleration of any other indebtedness to which a cross-acceleration or cross-default provision applies. In the event our lenders (including under the MUFG Credit Facility) or the holders of our 6.0% Senior Notes accelerate the repayment of our borrowings, we and our subsidiaries may not have sufficient assets to repay that indebtedness or our other indebtedness.

To service our debt and fund our other capital requirements, we will require a significant amount of cash, and our ability to generate cash will depend on many factors beyond our control.

Our ability to meet our debt service obligations and to fund working capital, capital expenditures, acquisitions and other elements of our business strategy and other general corporate purposes, including share repurchases and payment of dividends, will depend upon our future performance, which will be subject to financial, business and other factors affecting our operations. To some extent, this is subject to general and regional economic, financial, competitive, legislative, regulatory and other factors that are beyond our control. We cannot ensure that we will generate cash flow from operations, or that future borrowings will be available, in an amount sufficient to enable us to pay our debt or to fund our other liquidity needs.

If our cash flows and capital resources are insufficient to fund our debt service obligations, we could face substantial liquidity problems and could be forced to reduce or delay investments and capital expenditures or to dispose of material assets or operations, seek additional indebtedness or equity capital or restructure or refinance our indebtedness. We may not be able to effect any such alternative measures on commercially reasonable terms or at all and, even if successful, those alternative actions may not allow us to meet our scheduled debt service obligations. The indenture governing the 6.0% Senior Notes and the MUFG Credit Facility restrict our ability to dispose of assets and may also restrict our ability to raise indebtedness or equity capital to be used to repay other indebtedness when it becomes due. We may not be able to consummate those dispositions or to obtain proceeds in an amount sufficient to meet any debt service obligations then due.

Our inability to generate sufficient cash flows to satisfy our debt obligations, or to refinance our indebtedness on commercially reasonable terms, or at all, would materially and adversely affect our financial position and results of operations.

We may not have the ability to raise the funds necessary to settle conversions of the Convertible Notes or to repurchase the Convertible Notes upon a fundamental change or on a repurchase date or the Senior Notes upon a change in control, and our future debt may contain limitations on our ability to pay cash upon conversion or repurchase of the Convertible Notes or the Senior Notes.

Holders of the 3.25% convertible senior notes due June 15, 2029 (the “Convertible Notes”) will have the right to require us to repurchase their Convertible Notes on each of June 15, 2021 and June 15, 2024 and upon the occurrence of a fundamental change (as defined in the indenture governing the Convertible Notes), in each case, at a repurchase price equal to 100% of the principal amount of the Convertible Notes to be repurchased, plus accrued and unpaid interest, if any. Holders of the Senior Notes also have the right to require our subsidiary, j2 Cloud Services, to repurchase the Senior Notes upon the occurrence of a change in control (as defined in the indenture governing the Senior Notes) at a repurchase price equal to 101% of the principal amount of the Senior Notes to be repurchased, plus accrued and unpaid interest, if any. In addition, upon conversion of the Convertible Notes, unless we elect to deliver solely shares of our common stock to settle such conversion (other than paying cash in lieu of delivering any fractional share), we will be required to make cash payments in respect of the Convertible Notes being converted. It is our intention to satisfy our conversion obligation by paying and delivering a combination of cash and shares of our common stock, where cash will be used to settle each $1,000 of principal and the remainder, if any, will be settled via shares of our common stock. However, we may not have enough available cash or be able to obtain financing at the time we are required to make repurchases of Convertible Notes or Senior Notes surrendered therefor or Convertible Notes being converted. In addition, our ability to repurchase the Convertible Notes or Senior Notes or to pay cash upon conversions of the Convertible Notes may be limited by law, by regulatory authority or by agreements governing our future indebtedness. Our failure to repurchase Convertible Notes or Senior Notes at a time when the repurchase is required by the applicable indenture or to pay any cash payable on future conversions of the Convertible Notes as required by the Convertible Notes indenture would constitute a default under the Convertible Notes indenture. A default under either indenture or the fundamental change or change of control itself could also lead to a default under agreements governing our future indebtedness. If the repayment of the related indebtedness were to be accelerated after any applicable notice or grace periods, we may not have sufficient funds to repay the indebtedness and repurchase the Convertible Notes or the Senior Notes or make cash payments upon conversions of the Convertible Notes.

The conditional conversion feature of the Convertible Notes, if triggered, may adversely affect our financial condition and operating results.

In the event the conditional conversion feature of the Convertible Notes is triggered, holders of Convertible Notes will be entitled to convert the Convertible Notes at any time during specified periods at their option. If one or more holders elect to convert their Convertible Notes, unless we elect to satisfy our conversion obligation by delivering solely shares of our common stock (other than paying cash in lieu of delivering any fractional share), we would be required to settle a portion or all of our conversion obligation through the payment of cash, which could adversely affect our liquidity. In addition, even if holders do not elect to convert their Convertible Notes, we could be required under applicable accounting rules to reclassify all or a portion of the outstanding principal of the notes as a current rather than long-term liability, which would result in a material reduction of our net working capital.

Our interest deductions attributable to the Convertible Notes may be deferred, limited or eliminated under certain conditions.

We believe that the Convertible Notes are subject to the IRS contingent payment debt instrument regulations. This conclusion is subject to complex factual and legal uncertainty and is not binding on the IRS or the courts. If the IRS takes a contrary position and a court sustains the IRS' position, our tax deductions would be severely diminished with a resulting adverse effect on our cash flow and ability to service the Convertible Notes.

The Company is subject to laws and regulations worldwide, changes to which could increase the Company's costs and individually or in the aggregate adversely affect the Company's business.

The Company is subject to laws and regulations affecting its domestic and international operations in a number of areas. These U.S. and foreign laws and regulations affect the Company's activities in areas including, but not limited to, labor, advertising, digital content, consumer protection, real estate, billing, e-commerce, promotions, quality of services, telecommunications, mobile communications and media, television, intellectual property ownership and infringement, tax, import and export requirements, anti-corruption, foreign exchange controls and cash repatriation restrictions, data privacy and data localization requirements, anti-competition, environmental, health and safety. Compliance with these laws, regulations and similar requirements may be onerous and expensive, and they may be inconsistent from jurisdiction to jurisdiction, further increasing the cost of compliance and doing business. Any such costs, which may rise in the future as a result of changes in these laws and regulations or in their interpretation, could individually or in the aggregate make the Company's products and services less attractive to the Company's customers, delay the introduction of new products in one or more regions, or cause the Company to change or limit its business practices. The Company has implemented policies and procedures designed to ensure compliance with applicable laws and regulations, but there can be no assurance that the Company's employees, contractors, or agents will not violate such laws and regulations or the Company's policies and procedures.

The United Kingdom's decision to end its membership in the European Union and other adverse changes in global financial markets could materially and adversely impact our results of operations, financial condition and cash flows.

In June 2016, a majority of voters in the United Kingdom elected to withdraw from the European Union ("EU") in a national referendum ("BREXIT"). The results of the United Kingdom's BREXIT has caused, and may continue to cause, volatility in global stock markets, currency exchange rate fluctuations and global economic uncertainty. Although it is unknown what the terms of the United Kingdom's future relationship with the EU will be, it is possible that there will be higher tariffs or greater restrictions on imports and exports between the United Kingdom and the EU and increased regulatory complexities. The effects of BREXIT will depend on whether the United Kingdom and the EU are able to reach an agreement to retain United Kingdom access to EU markets either during a transitional period or on a permanent basis and, if so, the terms of those agreements. These measures could potentially disrupt our access to human capital and some of our target markets and jurisdictions in which we operate, and adversely change tax benefits or liabilities in these or other jurisdictions. In addition, BREXIT could lead to legal uncertainty and potentially divergent national laws and regulations as the United Kingdom determines which EU laws to replace or replicate. Any of these effects of BREXIT, among others, and other adverse changes in global financial markets could have a materially adverse impact on our results of operations, financial condition, cash flows and could render us either unable to access global financial markets or able to access these markets only at higher interest costs and with restrictive financial or other conditions.

Changes in our tax rates, changes in tax treatment of companies engaged in e-commerce, the adoption of new U.S. or international tax legislation, or exposure to additional tax liabilities may adversely impact our financial results.

We are a U.S.-based multinational company subject to taxes in the U.S. and numerous foreign jurisdictions, including Ireland, where a number of our subsidiaries are organized. Our provision for income taxes is based on a jurisdictional mix of earnings, statutory tax rates and enacted tax rules, including transfer pricing. Due to economic and political conditions, tax rates in various jurisdictions may be subject to significant change. As a result, our future effective tax rates could be affected by changes in the mix of earnings in countries with differing statutory tax rates, changes in the valuation of deferred tax assets and liabilities, or changes in tax laws or their interpretation. These changes may adversely impact our effective tax rate and harm our financial position and results of operations.

On December 22, 2017, the U.S. enacted the Tax Cuts and Jobs Act (“Tax Act” or “2017 Tax Act”) and all adjustments to the 2017 estimates were incorporated into our financial results in 2018. There continues to be a risk that states or foreign jurisdictions may amend their tax laws in response to the Tax Act, which could have a material impact on our future results.

We are subject to examination of our income tax returns by the U.S. Internal Revenue Service ("IRS") and other domestic and foreign tax authorities. We are currently under audit by the IRS for tax years 2012 through 2016 and the California Franchise Tax Board ("FTB") for tax years 2012, 2013, 2015 and 2016. The FTB has agreed to suspend its audit for 2012 and 2013 pending the outcome of the IRS audit for such tax years. However, the FTB has commenced the initial information gathering state of the 2015 and 2016 audit period. We are also under audit or review by other state and foreign taxing authorities for various periods. Our future income tax returns are likely to become the subject of audits by these or other taxing authorities. We regularly assess the likelihood of adverse outcomes resulting from these examinations to determine the adequacy of our income tax reserves and expense. If our reserves are not sufficient to cover these contingencies, such inadequacy could materially adversely affect our business, prospects, financial condition, operating results, and cash flows.

In addition, due to the global nature of the internet, it is possible that various states or foreign countries might attempt to impose additional or new regulation on our business or levy additional or new sales, income or other taxes relating to our activities. Tax authorities at the international, federal, state and local levels are currently reviewing the appropriate treatment of companies engaged in e-commerce. New or revised international, federal, state or local tax regulations or court decisions may subject us or our customers to additional sales, income and other taxes. For example, Congress is considering various approaches to legislation that would require companies engaged in e-commerce to collect sales taxes on internet revenue and a growing number of U.S. states and certain foreign jurisdictions have adopted or are considering proposals to impose obligations on remote sellers and online marketplaces to collect taxes on their behalf. Additionally, the U.S. Supreme Court ruling in South Dakota v. Wayfair, Inc., No.17-494 reversed a longstanding precedent that remote sellers are not required to collect state and local sales taxes. We cannot predict the effect of these and other attempts to impose sales, income or other taxes on e-commerce. The application of existing, new or revised taxes on our business, in particular, sales taxes, VAT and similar taxes would likely increase the cost of doing business online and decrease the attractiveness of selling products over the internet. The application of these taxes on our business could also create significant increases in internal costs necessary to capture data and collect and remit taxes. Any of these events could have a material adverse effect on our business, financial condition, and operating results.

Moreover, we are currently under audit for indirect taxes in several states and municipalities. We currently have no material financial reserves established with respect to indirect taxes. If a material indirect tax liability associated with prior periods were to be recorded, it could materially affect our financial results for the period in which it is recorded.

Furthermore, much of our Digital Media e-commerce revenue comes from arrangements in which we are paid by retailers to promote their digital product and service offers on our sites. Certain states have implemented regulations that require retailers to collect and remit sales taxes on sales made to residents of such states if a publisher, such as us, that facilitated that sale is a resident of such state. Paid retailers in our marketplace that do not currently have sales tax nexus in any state that subsequently passes similar regulations and in which we have operations, employees or contractors now or in the future, may significantly alter the manner in which they pay us, cease paying us for sales we facilitate for that retailer in such state, or cease using our marketplace, each of which could adversely impact our business, financial condition, and operating results.

Taxing authorities may successfully assert that we should have collected, or in the future should collect sales and use, telecommunications or similar taxes, and we could be subject to liability with respect to past or future tax, which could adversely affect our operating results.

We do not collect and remit sales and use, telecommunications, or similar taxes in all jurisdictions in which we have sales, based on our belief that such taxes are not applicable or legally required. Several states and other taxing jurisdictions have presented or threatened us with assessments, alleging that we are required to collect and remit such taxes there. The recent U.S. Supreme Court ruling in South Dakota v. Wayfair, Inc., No. 17-494 reversed existing constitutional precedent that remote sellers are not required to collect and remit such taxes. The Company is evaluating the impact of the ruling. The jurisdictions where we have sales may apply more rigorous enforcement efforts or take more aggressive positions in the future that could result in greater tax liability. In addition, in the future we may also decide to engage in activities that would require us to pay sales and use, telecommunications, or similar taxes in new jurisdictions. Such tax assessments, penalties and interest or future requirements may materially adversely affect our business, financial condition and operating results.

Risks Related To Our Industries

Our services may become subject to burdensome regulation, which could increase our costs or restrict our service offerings.

We believe that most of our cloud services are “information services” under the Telecommunications Act of 1996 and related precedent, or, if not “information services,” that we are entitled to other exemptions, meaning that we generally are not currently subject to U.S. telecommunications services regulation at both the federal and state levels. In connection with our Cloud Services business, we utilize data transmissions over public telephone lines and other facilities provided by third-party carriers. These transmissions are subject to foreign and domestic laws and regulation by the Federal Communications Commission (the “FCC”), state public utility commissions and foreign governmental authorities. These regulations affect the availability of numbers, the prices we pay for transmission services, the administrative costs associated with providing our services, the competition we face from telecommunications service providers and other aspects of our market. However, as messaging and communications services converge and as the services we offer expand, we may become subject to FCC or other regulatory agency regulation. It is also possible that a federal or state regulatory agency could take the position that our offerings, or a subset of our offerings, are properly classified as telecommunications services or otherwise not entitled to certain exemptions upon which we currently rely. Such a finding could potentially subject us to fines, penalties or enforcement actions as well as liabilities for past regulatory fees and charges, retroactive contributions to various telecommunications-related funds, telecommunications-related taxes, penalties and interest. It is also possible that such a finding could subject us to additional regulatory obligations that could potentially require us either to modify our offerings in a costly manner, diminish our ability to retain customers, or discontinue certain offerings, in order to comply with certain regulations. Changes in the regulatory environment could decrease our revenues, increase our costs and restrict our service offerings. In many of our international locations, we are subject to regulation by the applicable governmental authority.

In the U.S., Congress, the FCC, and a number of states require regulated telecommunications carriers to contribute to federal and/or state Universal Service Funds (“USF”). Generally, USF is used to subsidize the cost of providing service to low-income customers and those living in high cost or rural areas. Congress, the FCC and a number of states are reviewing the manner in which a provider’s contribution obligation is calculated, as well as the types of entities subject to USF contribution obligations. If any of these reforms are adopted, they could cause us to alter or eliminate our non-paid services and to raise the price of our paid services, which could cause us to lose customers. Any of these results could lead to a decrease in our revenues and net income and could materially adversely affect our business, prospects, financial condition, operating results and cash flows.

The Telephone Consumer Protection Act (the “TCPA”) and FCC rules implementing the TCPA, as amended by the Junk Fax Act, prohibit sending unsolicited facsimile advertisements to telephone fax machines. The FCC, the Federal Trade Commission (“FTC”), or both may initiate enforcement action against companies that send “junk faxes” and individuals also may have a private cause of action. Although entities that merely transmit facsimile messages on behalf of others are not liable for compliance with the prohibition on faxing unsolicited advertisements, the exemption from liability does not apply to fax transmitters that have a high degree of involvement or actual notice of an illegal use and have failed to take steps to prevent such transmissions. We take significant steps to ensure that our services are not used to send unsolicited faxes on a large scale, and we do not believe that we have a high degree of involvement in or notice of the use of our service to broadcast junk faxes. However, because fax transmitters do not enjoy an absolute exemption from liability under the TCPA and related FCC and FTC rules, we could face inquiries from the FCC and FTC or enforcement actions by these agencies, or private causes of action, if someone uses our service for such impermissible purposes. If this were to occur and we were to be held liable for someone’s use of our service for transmitting unsolicited faxes, the financial penalties could cause a material adverse effect on our operations and harm our business reputation.

Likewise, the TCPA also prohibits placing calls or sending text messages to mobile phones without “prior express consent” subject to limited exceptions. Parties that solely enable calling or text messaging are only directly liable under the TCPA pursuant to federal common law vicarious liability principles. We take significant steps to ensure that users understand that they are responsible for how they use our technology including complying with relevant federal and state law. However, because we do not enjoy absolute exemption from liability under the TCPA and related FCC and FTC rules, we could face inquiries from the FCC and FTC or enforcement actions by these agencies, or private causes of action, if someone uses our service for such impermissible purposes. If this were to occur and we were to be held liable for someone’s use of our service for unauthorized calling or text messaging mobile users, the financial penalties could cause a material adverse effect on our operations and harm our business reputation.

Also, in the U.S., the Communications Assistance to Law Enforcement Act (“CALEA”) requires telecommunications carriers to be capable of performing wiretaps and recording other call identifying information. In September 2005, the FCC released an order defining telecommunications carriers that are subject to CALEA obligations as facilities-based broadband internet access providers and Voice-over-Internet-Protocol (“VoIP”) providers that interconnect with the public switched telephone network. As a result of this definition, we do not believe that j2 Global is subject to CALEA. However, if the category of service providers to which CALEA applies broadens to also include information services, that change may impact our operations.

We are subject to a variety of new and existing laws and regulations which could subject us to claims, judgments, monetary liabilities and other remedies, and to limitations on our business practices.

The application of existing domestic and international laws and regulations to us relating to issues such as defamation, pricing, advertising, taxation, promotions, billing, consumer protection, accessibility, content regulation, data privacy, intellectual property ownership and infringement, and accreditation in many instances is unclear or unsettled. In addition, we will also be subject to any new laws and regulations directly applicable to our domestic and international activities. Further, the application of existing laws to us or our subsidiaries regulating or requiring licenses for certain businesses of our advertisers including, for example, distribution of pharmaceuticals, alcohol or other regulated substances, adult content, tobacco, or firearms, as well as insurance and securities brokerage, and legal services, can be unclear. Internationally, we may also be subject to laws regulating our activities in foreign countries and to foreign laws and regulations that are inconsistent from country to country. Our Digital Media and Cloud Services businesses utilize contractors, freelancers and/or staff from third party outsourcers to provide content and other services. However, in the future, arrangements with such individuals may not be deemed appropriate by the relevant government authority, which could result in additional costs and expenses. We may incur substantial liabilities for expenses necessary to defend such litigation or to comply with these laws and regulations, as well as potential substantial penalties for any failure to comply. Compliance with these laws and regulations may also cause us to change or limit our business practices in a manner adverse to our business.

The use of consumer data by online service providers and advertising networks is a topic of active interest among federal, state, and international regulatory bodies, and the regulatory environment is unsettled and evolving. Federal, state, and international laws and regulations govern the collection, use, retention, disclosure, sharing, and security of data that we receive from and about our users. Our privacy and cookie policies and practices concerning the collection, use, and disclosure of user data are posted on our websites.

A number of U.S. federal laws, including those referenced below, impact our business. The Digital Millennium Copyright Act (“DMCA”) is intended, in part, to limit the liability of eligible online service providers for listing or linking to third-party websites that include materials that infringe copyrights or other rights of others. Portions of the Communications Decency Act (“CDA”) are intended to provide statutory protections to online service providers who distribute third-party content. We rely on the protections provided by both the DMCA and the CDA in conducting our business. If these or other laws or judicial interpretations are changed to narrow their protections, or if international jurisdictions refuse to apply similar provisions in foreign lawsuits, we will be subject to greater risk of liability, our costs of compliance with these regulations or to defend litigation may increase, or our ability to operate certain lines of business may be limited. The Children’s Online Privacy Protection Act (“COPPA”) is intended to impose restrictions on the ability of online services to collect some types of information from children under the age of 13. In addition, the Providing Resources, Officers, and Technology to Eradicate Cyber Threats to Our Children Act of 2008 (“PROTECT Act”) requires online service providers to report evidence of violations of federal child pornography laws under certain circumstances, as well as other federal, state or international laws and legislative efforts designed to protect children on the internet may impose additional requirements on us. U.S. export control laws and regulations impose requirements and restrictions on exports to certain nations and persons and on our business.

In certain instances, we may be subject to enhanced privacy obligations based on the type of information we store and process. While we believe we are in compliance with the relevant laws and regulations, we could be subject to enforcement actions, fines, forfeitures, and other adverse actions.

The Controlling the Assault of Non-Solicited Pornography and Marketing Act of 2003 (the “CAN-SPAM Act”), which allows for penalties that run into the millions of dollars, requires commercial emails to include identifying information from the sender and a mechanism for the receiver to opt out of receiving future emails. Several states have enacted additional, more restrictive and punitive laws regulating commercial email. Foreign legislation exists as well, including Canada’s Anti-Spam Legislation and the European laws that have been enacted pursuant to the GDPR and European Union Directive 2002/58/EC and its amendments. We use email as a significant means of communicating with our existing and potential users. We believe that our email practices comply with the requirements of the CAN-SPAM Act, state laws, and applicable foreign legislation. If we were ever found to be in violation of these laws and regulations, or any other laws or regulations, our business, financial condition, operating results, and cash flows could be materially adversely affected.

Many third-parties are examining whether the Americans with Disabilities Act (“ADA”) concept of public accommodation also extends to websites and to mobile applications. Generally, some plaintiffs have argued that websites and mobile applications are places of public accommodation under Title III of the ADA and, as such, must be equipped so that individuals with disabilities can navigate and make use of subject websites and mobile applications. The issue is currently under litigation and there is a split in the federal court of appeals circuits as to what the ADA requires. Certain appellate circuits have found that websites standing alone are subject to the ADA and therefore must be accessible to people with disabilities. Other circuits, including the Ninth Circuit, which has appellate jurisdiction over federal district courts in California and is where our company is headquartered, have found that in order for websites to be places of public accommodation, and therefore subject to the ADA, there must be both a nexus between the website and the goods and services the website provides as well as a physical brick and mortar location for consumers. We cannot predict how the ADA will ultimately be interpreted as applied to websites and mobile applications.

We believe we are in compliance with relevant law. If the law changes or if certain courts with appellate jurisdiction outside of California attempt to exercise jurisdiction over us and find that our website and mobile applications must comply with the ADA, then any adjustments or requirements to implement any changes prescribed by the ADA could result in increased costs to our business, we may become subject to injunctive relief, plaintiffs may be able to recover attorneys' fees, and it is possible that, while the ADA does not provide for monetary damages, we become subject to such damages through state consumer protection or other laws. It is possible that these potential liabilities could cause a material adverse effect on our operations and harm our business reputation.

Native advertising is an increasing part of our Digital Media business's online advertising revenue. On December 22, 2015, the FTC issued Guidelines and an Enforcement Policy Statement on native advertising, described by the FTC as, in part, ads which often "resemble the design, style, and functionality of the media in which they are disseminated." The Company believes it is compliant with the requirements of these guidelines on our current practices and offerings. However, we will continue to monitor what effect this guideline and other related government regulations, and how the FTC enforces it, could have on our native advertising and branded content business. In addition, the timing and extent of any enforcement by the FTC with regard to the native advertising practices by the Company, or others, could reduce the revenue we generate from this line of business.

As of May 25, 2018, certain data transfers from and between the European Union ("EU") are subject to the GDPR. As discussed in more detail below, the GDPR prohibits data transfers from the EU to other countries outside of the EU, including the U.S., without appropriate security safeguards and practices in place. Previously, for certain data transfers from and between the EU and the U.S., j2 Global, like many other companies, had relied on what is referred to as the "EU-U.S. Safe Harbor," in order to comply with privacy obligations imposed by EU countries. The European Court of Justice invalidated the EU-U.S. Safe Harbor. Although U.S. and EU policymakers approved a new framework known as "Privacy Shield" that would allow companies like us to continue to rely on some form of a safe harbor for the transfer of certain data from the EU to the U.S., the Privacy Shield may not be adequate for all data transfers between the EU and U.S. It is also unclear whether the United Kingdom ("UK") will offer a similar program to Privacy Shield if the UK leaves the EU. Additionally, other countries that relied on the EU-U.S. Safe Harbor that were not part of the EU have also found that data transfers to the U.S. are no longer valid based on the European Court of Justice ruling. We cannot predict how or if this issue will be resolved nor can we evaluate any potential liability at this time.

The Company has put into place various alternative frameworks and grounds on which to rely in order to be in compliance with relevant law for the transfer of data from overseas locations to the U.S. including reviewing Company's data collection process, procedures and putting into place Data Processing Agreements with vendors, partners and other third parties. Some independent data regulators have adopted the position that other forms of compliance are also invalid though the legal grounds for these findings remain unclear at this time. We cannot predict at this time whether the alternative grounds that j2 Global continues to implement will be found to be consistent with relevant laws nor can we evaluate what, if any, potential liability may be at this time.

On June 28, 2018, the California legislature enacted the CCPA, which is scheduled to take effect on January 1, 2020. The CCPA, which covers business that obtain or access personal information on California resident consumers, grants consumers enhanced privacy rights and control over their personal information and imposes significant requirements on covered companies with respect to consumer data privacy rights. The Company is assessing the impact of this law on its business and operations.

Further, failure or perceived failure by us to comply with our policies, applicable requirements, or industry self-regulatory principles related to the collection, use, sharing, or security of personal information, or other privacy, data-retention or data– protection matters could result in a loss of user confidence in us, damage to our brands, and ultimately in a loss of users and advertising partners, which could adversely affect our business. Changes in these or any other laws and regulations or the interpretation of them could increase our future compliance costs, limit the amount and type of data we can collect, transfer, share, or sell, make our products and services less attractive to our users, or cause us to change or limit our business practices. Further, any failure on our part to comply with any relevant laws or regulations may subject us to significant civil or criminal liabilities.

Moreover, our Everyday Health business may be subject to government oversight or regulation by Congress, the FDA, the U.S. Department of Health and Human Services and state regulatory agencies. In addition, certain services provided by Everyday Health are also subject to private regulation both directly by accrediting bodies and indirectly by industry codes followed by commercial supporters of CME and CE programs.
If we are subject to burdensome laws or regulations or if we fail to adhere to the requirements of public or private regulations, our business, financial condition and results of operations could suffer.

Government and private actions or self-regulatory developments regarding internet privacy matters could adversely affect our ability to conduct our business.

Our Digital Media business collects and sells data about its users' online behavior and the revenue associated with this activity could be impacted by government regulation and enforcement, industry trends, self-regulation, technology changes, consumer behavior and attitude, and private action. We also use such information to work with our advertisers to more effectively target ads to relevant users and consumers, which ads command a higher rate.

Many of our users voluntarily provide us with demographic and other information when they register for one of our service or properties. In order for our Everyday Health brand to deliver marketing and communications solutions to pharmaceutical companies, health insurers and hospital systems, we rely on data provided by our customers. We also purchase data from third-party sources to augment our user profiles and marketing databases so we are better able to personalize content, enhance our analytical capabilities and better target our marketing programs. If changes in user sentiment regarding the sharing of information results in a significant number of visitors to our websites and applications refusing to provide us with demographic information or information about their specific health interests, our ability to personalize content for our users and provide targeted marketing solutions would be impaired. If our users choose to opt-out of having their data used for behavioral targeting, it would be more difficult for us to offer targeted marketing programs to our customers.

We append data from third-party sources to augment our user profiles. If we are unable to acquire data from third-party sources for whatever reason, or if there is a marked increase in the cost of obtaining such data, our ability to personalize content and provide marketing solutions could be negatively impacted.

The use of such consumer data by online service providers and advertising networks is a topic of active interest among federal, state, and international regulatory bodies, and the regulatory environment is unsettled. Federal, state, and international laws and regulations govern the collection, use, retention, disclosure, sharing and security of data that we receive from and about our users. Our privacy policies and practices concerning the collection, use, and disclosure of user data are posted on our websites.

New and expanding "Do Not Track" regulations have recently been enacted or proposed that protect users' right to choose whether or not to be tracked online. These regulations seek, among other things, to allow consumers to have greater control over the use of private information collected online, to forbid the collection or use of online information, to demand a business to comply with their choice to opt out of such collection or use, and to place limits upon the disclosure of information to third party websites. These laws and regulations could have a significant impact on the operation of our advertising and data businesses. U.S. regulatory agencies have also placed an increased focus on online privacy matters and, in particular, on online advertising activities that utilizes cookies or other tracking tools. Consumer and industry groups have expressed concerns about online data collection and use by companies, which has resulted in the release of various industry self-regulatory codes of conduct and best practice guidelines that are binding for member companies and that govern, among other things, the ways in which companies can collect, use and disclose user information, how companies must give notice of these practices and what choices companies must provide to consumers regarding these practices.

We may be required or otherwise choose to adopt Do Not Track mechanisms or self-regulation principles, in which case our ability to use our existing tracking technologies, to collect and sell user behavioral data, and permit their use by other third parties could be impaired. This could cause our net revenues to decline and adversely affect our operating results.

U.S. and foreign governments have enacted or considered or are considering legislation or regulations that could significantly restrict our ability to collect, augment, analyze, use and share anonymous data, which could increase our costs and reduce our revenue.

We operate across many different markets both domestically and internationally which may subject us to cybersecurity, privacy, data security and data protection laws with uncertain interpretations as well as impose conflicting obligations on us.

Cybersecurity, privacy, data security, and data protection laws are constantly evolving at the federal and state levels in the United States, as well as abroad. We are currently subject to such laws both at the federal and state levels in the U.S. as well as similar laws in a variety of international jurisdictions. The interpretation of these laws may be uncertain and may also impose confliction obligations on us. While we work to comply with all applicable law and relevant "best practices" addressing cybersecurity, privacy, data security and data protection, this is an area of the law that is constantly evolving as are the relevant industry codes and threat matrix. Further it is possible that applicable law and "best practices" are interpreted in an inconsistent or conflicting manner either by differing federal, state or international authorities or across the jurisdictions in which we operate. Any failure or perceived failure by us, our partners, our vendors, or third parties on which we rely could result in a significant liability to us (including in the form of judicial decisions and/or settlements, regulatory findings and/or forfeitures, and other means), cause considerable harm to us and our reputation (including requiring notification to customers, regulators, and/or the media), cause a loss of confidence in our products and services, and deter current and potential customers from using our services. Any of these events could have a material adverse effect on our business, prospects, financial condition, operating results and cash flows.

The GDPR imposes significant compliance costs and exposes the Company to substantial risks.

The EU has traditionally imposed more strict obligations under data privacy laws and regulations. Individual EU member countries have had discretion with respect to their interpretation and implementation of EU data privacy laws, resulting in a variation of privacy standards from country to country. The GDPR harmonizes EU data privacy laws and contains significant obligations and requirements that have resulted in a greater compliance burden with respect to our operations and data use in Europe, which will continue to increase our costs. Additionally, government authorities will have more power to enforce compliance and impose substantial penalties for any failure to comply. In addition, individuals have the right to compensation under the GDPR. In the event the Company fails to maintain compliance, the Company could be exposed to material damages, costs and/or fines if an EU government authority or EU resident commenced an action. Failure to comply or maintain compliance could cause considerable harm to us and our reputation (including requiring notification to customers, regulators, and/or the media), cause a loss of confidence in our products and services, and deter current and potential customers from using our services. Any of these events could have a material adverse effect on our business, prospects, financial condition, operating results and cash flows.

We face potential liability related to the privacy and security of health-related information we collect from, or on behalf of, our consumers and customers.

The privacy and security of information about the physical or mental health or condition of an individual is an area of significant focus in the U.S. because of heightened privacy concerns and the potential for significant consumer harm from the misuse of such sensitive data. We have procedures and technology in place intended to safeguard the information we receive from customers and users of our services from unauthorized access or use.

The Privacy Standards and Security Standards under the Health Insurance Portability and Accountability Act of 1996 ("HIPAA") establish a set of basic national privacy and security standards for the protection of individually identifiable health information by health plans, healthcare clearinghouses and certain healthcare providers, referred to as "covered entities", and the business associates with whom such covered entities contract for services. Notably, whereas HIPAA previously directly regulated only these covered entities, the Health Information Technology for Economic and Clinical Health Act of 2009 ("HITECH") makes certain of HIPAA's Privacy and Security Standards directly applicable to covered entities' business associates. As a result, business associates are now subject to significant civil and criminal penalties for failure to comply with applicable Privacy and Security Standards. Additionally, certain states have adopted comparable privacy and security laws and regulations, some of which may be more stringent than HIPAA.

HIPAA directly applies to covered entities such as hospital clients of certain of our subsidiaries. Since these clients disclose protected health information to our subsidiaries so that those subsidiaries can provide certain services to them, those subsidiaries are business associates of those clients. In addition, we may sign business associate agreements in connection with the provision of the products and services developed for other third parties or in connection with certain of our other services that may transmit or store protected health information.

Failure to comply with the requirements of HIPAA or HITECH or any of the applicable federal and state laws regarding patient privacy, identity theft prevention and detection, breach notification and data security may subject us to penalties, including civil monetary penalties and, in some circumstances, criminal penalties or contractual liability under agreements with our customers and clients. Any failure or perception of failure of our products or services to meet HIPAA, HITECH and related regulatory requirements could expose us to risks of investigation, notification, litigation, penalty or enforcement, adversely affect demand for our products and services and force us to expend significant capital and other resources to modify our products or services to address the privacy and security requirements of our clients and HIPAA and HITECH.

Developments in the healthcare industry could adversely affect our business.

A significant portion of Everyday Health's advertising and sponsorship revenues is derived from the healthcare industry, including pharmaceutical, over-the-counter and consumer-packaged-goods companies, and could be affected by changes affecting healthcare spending. Industry changes affecting healthcare spending could impact the market for these offerings. General reductions in expenditures by healthcare industry participants could result from, among other things:

- government regulation or private initiatives that affect the manner in which healthcare industry participants interact with consumers and the general public;
- consolidation of healthcare industry participants;
- reductions in governmental funding for healthcare; and
- adverse changes in business or economic conditions affecting pharmaceutical companies or other healthcare industry participants.

Even if general expenditures by industry participants remain the same or increase, developments in the healthcare industry may result in reduced spending in some or all of the specific market segments that we serve now or in the future. For example, use of our content offerings and the sale of our products and services could be affected by:

- changes in the design and provision of health insurance plans;
- a decrease in the number of new drugs or pharmaceutical products coming to market; and
- decreases in marketing expenditures by pharmaceutical companies as a result of governmental regulation or private initiatives that discourage or prohibit advertising or sponsorship activities by pharmaceutical companies.

The healthcare industry has changed significantly in recent years, and we expect that significant changes to the healthcare industry will continue to occur. However, the timing and impact of developments in the healthcare industry are difficult to predict. We cannot assure you that the demand for our offerings will continue to exist at current levels or that we will have adequate technical, financial and marketing resources to react to changes in the healthcare industry.

Government regulation of healthcare creates risks and challenges with respect to our compliance efforts and our business strategies with our Everyday Health brand.

The healthcare industry is highly regulated and subject to changing political, legislative, regulatory and other influences. Existing and future laws and regulations affecting the healthcare industry could create unexpected liabilities for us, cause us to incur additional costs and restrict our operations. Many healthcare laws are complex, and their application may not be clear. Our failure to accurately anticipate the application of these laws and regulations, or other failure to comply with such laws and regulations, could create liability for us. Even in areas where we are not subject to healthcare regulation directly, we may become involved in governmental actions or investigations through our relationships with customers that are regulated, and participation in such actions or investigations, even if we are not a party and not the subject of an investigation, may cause us to incur significant expenses.

For example, there are federal and state laws that govern patient referrals, physician financial relationships and inducements to healthcare providers and patients. The federal healthcare programs’ anti-kickback provisions prohibit any person or entity from willingly offering, paying, soliciting or receiving anything of value, directly or indirectly, to induce or reward, or in return for either the referral of patients covered by Medicare, Medicaid and other federal healthcare programs or the leasing, purchasing, ordering or arranging for or recommending the lease, purchase or order of any item, good, facility or service covered by these programs. Many states also have similar anti-kickback laws that are not necessarily limited to items or services for which payment is made by a federal healthcare program. Our sale of advertising and sponsorships to healthcare providers implicates these laws. However, we review our practices to ensure that we comply with all applicable laws. The laws in this area are broad and we cannot determine precisely how they will be applied to our business practices. Any determination by a state or federal regulatory agency that any of our practices violate any of these laws could subject us to liability and require us to change or terminate some portions of our business.

Further, we derive revenues from the sale of advertising and promotion of prescription and over-the-counter drugs. If the FDA or the FTC finds that any of the information provided on our properties violates FDA or FTC regulations, they may take regulatory or judicial action against us and/or the advertiser of that information. State attorneys general may also take similar action based on their state’s consumer protection statutes. Any increase or change in regulation of advertising and promotion in the healthcare industry could make it more difficult for us to generate and grow our advertising and sponsorship revenues.

In addition, the practice of most healthcare professions requires licensing under applicable state law and state laws may further prohibit business entities from practicing medicine, which is referred to as the prohibition against the corporate practice of medicine. Similar state prohibitions may exist with respect to other licensed professions. We believe that we do not engage in the practice of medicine or any other licensed healthcare profession, or provide, through our properties, professional medical advice, diagnosis, treatment or other advice that is tailored in such a way as to implicate state licensing or professional practice laws. However, a state may determine that some portion of our business violates these laws and may seek to have us discontinue those portions or subject us to penalties or licensure requirements. Any determination that we are a healthcare provider and acted improperly as a healthcare provider may result in liability to us.

Our business could suffer if providers of broadband internet access services block, impair or degrade our services.

Our business is dependent on the ability of our cloud services customers and visitors to our digital media properties to access our services and applications over broadband internet connections. Internet access providers and internet backbone providers may be able to block, degrade or charge for access or bandwidth use of certain of our products and services, which could lead to additional expenses and the loss of users. Our products and services depend on the ability of our users to access the internet. Use of our services and applications through mobile devices, such as smartphones and tablets, must have a high-speed data connection. Broadband internet access services, whether wireless or landline, are provided by companies with significant market power. Many of these providers offer products and services that directly compete with ours.

On January 4, 2018, the FCC released an order that largely repeals rules that the FCC had in place which prevented broadband internet access providers from degrading or otherwise disrupting a broad range of services provisioned over consumers’ and enterprises’ broadband internet access lines. The FCC’s January 4, 2018 Order is not yet effective and there are efforts in Congress to prevent the Order from becoming effective. Additionally, a number of state attorneys general have filed an appeal of the FCC’s January 4, 2018 Order and others may also appeal the Order. A number of states have either passed legislation, adopted state executive agency policies or are in the process of adopting legislation that would prevent broadband internet access providers from blocking, degrading and otherwise impairing consumers’ and internet applications service providers’ broadband internet access services. We cannot predict whether the FCC’s January 4, 2018 Order will become effective, whether it will withstand appeal, or whether states have the authority to adopt legislation and executive policies that may conflict with the FCC’s January 4, 2018 Order.

Many of the largest providers of broadband services have publicly stated that they will not degrade or disrupt their customers’ use of applications and services, like ours. If such providers were to degrade, impair or block our services, it would negatively impact our ability to provide services to our customers and likely result in lost revenue and profits, and we would incur legal fees in attempting to restore our customers’ access to our services. Broadband internet access providers may also attempt to charge us or our customers additional fees to access services like ours that may result in the loss of customers and revenue, decreased profitability, or increased costs to our retail offerings that may make our services less competitive. We cannot predict the potential impact of the FCC’s January 4, 2018 Order on us at this time nor can we evaluate the potential impact at this time.

Our cloud services business is dependent on a small number of telecommunications carriers in each region and our inability to maintain agreements at attractive rates with such carriers may negatively impact our business.

Our cloud services business substantially depends on the capacity, affordability, reliability and security of our network and services provided to us by our telecommunications suppliers. Only a small number of carriers in each region, and in some cases only one carrier, offer the number and network services we require. We purchase certain telecommunications services pursuant to short-term agreements that the providers can terminate or elect not to renew. As a result, any or all of our current carriers could discontinue providing us with service at rates acceptable to us, or at all, and we may not be able to obtain adequate replacements, which could materially and adversely affect our business, prospects, financial condition, operating results and cash flows.

Our business could suffer if we cannot obtain or retain numbers, are prohibited from obtaining local numbers or are limited to distributing local numbers to only certain customers.

The future success of our number-based cloud services business depends on our ability to procure large quantities of local numbers in the U.S. and foreign countries in desirable locations at a reasonable cost and offer our services to our prospective customers without restrictions. Our ability to procure and distribute numbers depends on factors such as applicable regulations, the practices of telecommunications carriers that provide numbers, the cost of these numbers and the level of demand for new numbers. For example, several years ago the FCC conditionally granted petitions by Connecticut and California to adopt specialized "unified messaging" area codes, but neither state has adopted such a code. Adoption of a specialized area code within a state or nation could harm our ability to compete in that state or nation if it materially affects our ability to acquire numbers for our operations or makes our services less attractive due to the unavailability of numbers with a local geographic area.

In addition, although we are the customer of record for all of our U.S. numbers, from time to time, certain U.S. telephone carriers inhibit our ability to port numbers or port our numbers away from us to other carriers. If a federal or regulatory agency determines that our customers should have the ability to port numbers without our consent, we may lose customers at a faster rate than what we have experienced historically, potentially resulting in lower revenues. Also, in some foreign jurisdictions, under certain circumstances, our customers are permitted to port their numbers to another carrier. These factors could lead to increased cancellations by our Cloud Services customers and loss of our number inventory. These factors may have a material adverse effect on our business, prospects, financial condition, operating results, cash flows and growth in or entry into foreign or domestic markets.

In addition, future growth in our number-based cloud services subscriber base, together with growth in the subscriber bases of other providers of number-based services, has increased and may continue to increase the demand for large quantities of numbers, which could lead to insufficient capacity and our inability to acquire sufficient numbers to accommodate our future growth.

We may be subject to increased rates for the telecommunications services we purchase from regulated carriers which could require us to either raise the retail prices of our offerings and lose customers or reduce our profit margins.

The FCC adopted wide-ranging reforms to the system under which regulated providers of telecommunications services compensate each other for the exchange of various kinds of traffic. While we are not a provider of regulated telecommunications services, we rely on such providers to offer our cloud services to our customers. As a result of the FCC's reforms, regulated providers of telecommunications services are determining how the rates they charge customers like us will change in order to comply with the new rules. It is possible that some or all of our underlying carriers will increase the rates we pay for certain telecommunications services. Should this occur, the costs we incur to provide number-based cloud services may increase which may require us to increase the retail price of our services. Increased prices could, in turn, cause us to lose customers, or, if we do not pass on such higher costs to our subscribers, our profit margins may decrease.

New technologies have been developed that are able to block certain of our advertisements or impair our ability to serve interest-based advertising which could harm our operating results.

Technologies have been developed and are likely to continue to be developed that can block internet or mobile display advertising. Most of our Digital Media business revenues are derived from fees paid by advertisers in connection with the display of advertisements or clicks on advertisements on web pages or mobile devices. As a result, such technologies and tools are reducing the number of display advertisements that we are able to deliver or our ability to serve our interest-based advertising and this, in turn, could reduce our advertising revenue and operating results. Adoption of these types of technologies by more of our users could have a material impact on our revenues. We have implemented third party products to combat these ad-blocking technologies and are developing other strategies to address advertisement blocking. However, our efforts may not be successful to offset the potential increasing impact of these advertising blocking products.

If we or our third-party service providers fail to prevent click fraud or choose to manage traffic quality in a way that advertisers find unsatisfactory, our profitability may decline.

A portion of our display revenue comes from advertisers that pay for advertising on a price-per-click basis, meaning that the advertisers pay a fee every time a user clicks on their advertising. This pricing model can be vulnerable to so-called “click fraud,” which occurs when clicks are submitted on ads by a user who is motivated by reasons other than genuine interest in the subject of the ad. We or our third-party service providers may be exposed to the risk of click fraud or other clicks or conversions that advertisers may perceive as undesirable. If fraudulent or other malicious activity is perpetrated by others and we or our third-party service providers are unable to detect and prevent it, or choose to manage traffic quality in a way that advertisers find unsatisfactory, the affected advertisers may experience or perceive a reduced return on their investment in our advertising programs which could lead the advertisers to become dissatisfied with our advertising programs and they might refuse to pay, demand refunds, or withdraw future business. Undetected click fraud could damage our brands and lead to a loss of advertisers and revenue.

If we are unable to continue to attract visitors to our websites from search engines, then consumer traffic to our websites could decrease, which could negatively impact the sales of our products and services, our advertising revenue and the number of purchases generated for our retailers through our Digital Media marketplace.

We generate consumer traffic to our websites using various methods, including search engine marketing, or SEM, search engine optimization, or SEO, email campaigns and social media referrals. Our net revenues and profitability levels are dependent upon our continued ability to use a combination of these methods to generate consumer traffic to our websites in a cost-efficient manner. We have experienced and continue to experience fluctuations in search result rankings for a number of our websites. There can be no assurances that we will be able to grow or maintain current levels of consumer traffic.

Our SEM and SEO techniques have been developed to work with existing search algorithms utilized by the major search engines. Major search engines frequently modify their search algorithms. Changes in these algorithms could cause our websites to receive less favorable placements, which could reduce the number of users who visit our websites. In addition, we use keyword advertising to improve our search ranking and to attract users to our sites. If we fail to follow legal requirements regarding the use of keywords or search engine guidelines and policies properly, search engines may rank our content lower in search results or could remove our content altogether from their indices. Any decline in consumer traffic to our websites could adversely impact the amount of ads that are displayed and the number of purchases we generate for our retailers, which could adversely affect our net revenues. An attempt to replace this traffic through other channels may require us to increase our sales and marketing expenditures, which would adversely affect our operating results and which may not be offset by additional net revenues.

The industries in which we operate are undergoing rapid technological changes and we may not be able to keep up.

The industries in which we operate are subject to rapid and significant technological change. We cannot predict the effect of technological changes on our business. We expect that new services and technologies will emerge in the markets in which we compete. These new services and technologies may be superior to the services and technologies that we use or these new services may render our services and technologies obsolete. Our future success will depend, in part, on our ability to anticipate and adapt to technological changes and evolving industry standards. We may be unable to obtain access to new technologies on acceptable terms or at all, and may therefore be unable to offer services in a competitive manner. Any of the foregoing risks could have a material adverse effect on our business, prospects, financial condition, operating results and cash flows.

Increased cost of email transmissions could have a material adverse effect on our business.

We rely on email for the delivery of certain cloud services. We also offer email security, encryption and archival services. If regulations or other changes in the industry lead to a charge associated with the sending or receiving of email messages, the cost of providing our services could increase and, if significant, could materially adversely affect our business, prospects, financial condition, operating results and cash flows.

Risks Related To Our Stock

The fundamental change purchase feature of the Convertible Notes and the change of control features of the Senior Notes may delay or prevent an otherwise beneficial attempt to take over our company.

The terms of the Convertible Notes require us to offer to purchase the Convertible Notes for cash in the event of a fundamental change (as defined in the indenture governing the Convertible Notes), and the terms of the Senior Notes require our subsidiary, j2 Cloud Services, to offer to repurchase the Senior Notes for cash in the event of a change of control (as defined in the indenture governing the Senior Notes). These features may have the effect of delaying or preventing a takeover of our company that would otherwise be beneficial to investors.

Conversions of the Convertible Notes will dilute the ownership interest of our existing stockholders, including holders who had previously converted their Convertible Notes.

The conversion of some or all of the Convertible Notes will dilute the ownership interests of our existing stockholders. Any sales in the public market of our common stock issuable upon such conversion could adversely affect prevailing market prices of our common stock. In addition, the existence of the Convertible Notes may encourage short selling by market participants because the conversion of the Convertible Notes could depress the price of our common stock.

We are a holding company and our operations are conducted through, and substantially all of our consolidated assets are held by, our subsidiaries, which are subject to certain restrictions on their ability to pay dividends to us to fund dividends on our stock, pay interest on the Convertible Notes and fund other holding company expenses.

We are a holding company. We conduct substantially all of our operations through our subsidiaries. A substantial portion of our consolidated assets is held by our subsidiaries. Accordingly, our ability to pay dividends on our stock, service our debt, including the Convertible Notes and fund other holding company expenses depends on the results of operations of our subsidiaries and upon the ability of such subsidiaries to provide us with cash, whether in the form of dividends, loans or otherwise.

In addition, dividends, loans or other distributions to us from such subsidiaries are subject to contractual and other restrictions and are subject to other business considerations. j2 Cloud Services, is subject to restrictions on dividends in its existing indenture with respect to the Senior Notes and in the MUFG Credit Facility. The Senior Notes indenture generally prohibits dividends except out of a basket of 50% of cumulative net income (as defined in the indenture) and proceeds from equity offerings, although it permits any dividends if j2 Cloud Services' pro forma leverage ratio (as calculated as required by the indenture) is less than 3.0 to 1. The MUFG Credit Facility generally prohibits dividends (as long as commitments from the lenders or amounts remain outstanding thereunder), except when certain conditions are met, including conditions relating to j2 Cloud Services' total leverage ratio and EBITDA and the condition that j2 Cloud Services must have at least $25 million in cash and cash equivalents on its balance sheet after giving effect to such dividend. While j2 Cloud Services is currently in compliance with such covenants, its ability to comply with such covenants is subject to conditions outside its control. If we cannot obtain cash from our subsidiaries, we may not be able to pay dividends on our stock, pay interest on the Convertible Notes and fund other operating company expenses without additional sources of cash.

Quarterly dividends may not continue, may not continue to grow or could decrease.

We may not continue to issue quarterly dividends or we could decrease the amount of any future dividends or cease to increase the amount of any future dividends. We paid our first quarterly dividend of $0.20 per share of common stock on September 19, 2011. We have declared increasing dividends in each subsequent quarter. Future dividends are subject to Board approval. We cannot assure that the Company will continue to pay a dividend in the future or the amount of any future dividends.

Future sales of our common stock may negatively affect our stock price.

As of February 26, 2019, substantially all of our outstanding shares of common stock were available for resale, subject to volume and manner of sale limitations applicable to affiliates under SEC Rule 144. Sales of a substantial number of shares of common stock in the public market or the perception of such sales could cause the market price of our common stock to decline. These sales also might make it more difficult for us to issue equity securities in the future at a price that we think is appropriate, or at all.

Anti-takeover provisions could negatively impact our stockholders.

Provisions of Delaware law and of our certificate of incorporation and bylaws could make it more difficult for a third-party to acquire control of us. For example, we are subject to Section 203 of the Delaware General Corporation Law, which would make it more difficult for another party to acquire us without the approval of our Board of Directors. Additionally, our certificate of incorporation authorizes our Board of Directors to issue preferred stock without requiring any stockholder approval, and preferred stock could be issued as a defensive measure in response to a takeover proposal. These provisions could make it more difficult for a third-party to acquire us even if an acquisition might be in the best interest of our stockholders.

Our stock price may be volatile or may decline.

Our stock price and trading volumes have been volatile and we expect that this volatility will continue in the future due to factors, such as:

- Assessments of the size of our subscriber base and our average revenue per subscriber, and comparisons of our results in these and other areas versus prior performance and that of our competitors;
- Variations between our actual results and investor expectations;
- Regulatory or competitive developments affecting our markets;
- Investor perceptions of us and comparable public companies;
- Conditions and trends in the communications, messaging and internet-related industries;
- Announcements of technological innovations and acquisitions;
- Introduction of new services by us or our competitors;
- Developments with respect to intellectual property rights;
- Conditions and trends in the internet and other technology industries;
- Rumors, gossip or speculation published on public chat or bulletin boards;
- General market conditions; and
- Geopolitical events such as war, threat of war or terrorist actions.

In addition, the stock market has from time to time experienced significant price and volume fluctuations that have affected the market prices for the common stocks of technology and other companies, particularly communications and internet companies. These broad market fluctuations have previously resulted in a material decline in the market price of our common stock. In the past, following periods of volatility in the market price of a particular company's securities, securities class action litigation has often been brought against that company. We may become involved in this type of litigation in the future. Litigation is often expensive and diverts management's attention and resources, which could have a material adverse effect on our business, prospects, financial condition, operating results and cash flows.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

As of December 31, 2018, we are leasing approximately 43,000 square feet of office space for our global headquarters in Los Angeles, California under a lease that expires on January 31, 2020. The Digital Media business is headquartered in New York City, where it leases approximately 43,000 square feet of office space pursuant to a lease that extends through May 2019; 80,000 square feet of office space pursuant to a lease that extends through October 2023 in connection with the EveryDay Health acquisition and 39,000 square feet of office space in connection with the Mashable acquisition. Additionally, we have smaller leased offices throughout Asia, North America, Europe and Australia.

All of our network equipment is housed either at our leased properties or at one of our multiple co-location facilities around the world. We believe our current facilities are generally in good operating condition and are sufficient to meet our needs for the foreseeable future.

Item 3. Legal Proceedings

From time to time, j2 Global and its affiliates are involved in litigation and other legal disputes or regulatory inquiries that arise in the ordinary course of business. Any claims or regulatory actions against j2 Global and its affiliates, whether meritorious or not, could be time consuming and costly, and could divert significant operational resources. The outcomes of such matters are subject to inherent uncertainties, carrying the potential for unfavorable rulings that could include monetary damages and injunctive relief.

On February 17, 2011, Emmanuel Pantelakis (“Pantelakis”) filed suit against a j2 Global affiliate in the Ontario Superior Court of Justice (No. 11-50673), alleging that the j2 Global affiliate breached a contract relating to Pantelakis’s use of the Campaigner service. The j2 Global affiliate filed a responsive pleading on March 23, 2011 and responses to undertakings on July 16, 2012. On November 6, 2012, Pantelakis filed a second amended statement of claim, reframing his lawsuit as a negligence action. The j2 Global affiliate filed an amended statement of defense on April 8, 2013. Discovery has closed. A judicial pre-trial conference took place on September 27, 2018. There is an anticipated trial date of January 2020.

On January 17, 2013, the Commissioner of the Massachusetts Department of Revenue (“Commissioner”) issued a notice of assessment to a j2 Global affiliate for sales and use tax for the period of July 1, 2003 through December 31, 2011. On July 22, 2014, the Commissioner denied the j2 Global affiliate’s application for abatement. On September 18, 2014, the j2 Global affiliate petitioned the Massachusetts Appellate Tax Board for abatement of the tax asserted in the notice of assessment (No. C325426). A trial was held on December 16, 2015. On May 18, 2017, the Appellate Board decided in favor of the Commonwealth of Massachusetts and the Company paid and expensed the tax assessment. The j2 Global affiliate has requested the findings of fact and conclusions of law from the Appellate Board.

On January 21, 2016, Davis Neurology, P.A. filed a putative class action against two j2 Global affiliates in the Circuit Court for the County of Pope, State of Arkansas (58-cv-2016-40), alleging violations of the TCPA. The case was ultimately removed to the U.S. District Court for the Eastern District of Arkansas (the “Eastern District of Arkansas”) (No. 4:16-cv-00682). On June 6, 2016, the j2 Global affiliates filed a motion for judgment on the pleadings. On March 20, 2017, the Eastern District of Arkansas dismissed all claims against the j2 Global affiliates. On July 23, 2018, the Eighth Circuit Court of Appeals vacated the judgment and remanded to district court with instructions to return the case to state court. The j2 Global affiliates have filed a petition for rehearing or rehearing en banc. On December 11, 2018, the Eight Circuit Court of Appeals denied the j2 Global affiliates’ petition for panel rehearing and petition for rehearing en banc. On January 29, 2019, the case was remanded to the Arkansas state court.

j2 Global does not believe, based on current knowledge, that the foregoing legal proceedings or claims, after giving effect to existing accrued liabilities, are likely to have a material adverse effect on the Company’s consolidated financial position, results of operations, or cash flows. However, depending on the amount and timing, an unfavorable resolution of some or all of these matters could have a material effect on j2 Global’s consolidated financial position, results of operations, or cash flows in a particular period.

The Company has not accrued for any material loss contingencies relating to these legal proceedings because materially unfavorable outcomes are not considered probable by management. It is the Company’s policy to expense as incurred legal fees related to various litigations.

Item 4. Mine Safety Disclosures

Not applicable.

PART II

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

Market Information

Our common stock is traded on the NASDAQ Global Select Market under the symbol “JCOM”. The following table sets forth the high and low closing sale prices for our common stock for the periods indicated, as reported by the NASDAQ Global Select Market.

	High	Low
Year ended December 31, 2018		
First Quarter	84.50	72.17
Second Quarter	91.00	77.11
Third Quarter	90.07	79.44
Fourth Quarter	81.65	65.47
Year ended December 31, 2017		
First Quarter	86.96	81.42
Second Quarter	91.17	80.86
Third Quarter	85.85	72.08
Fourth Quarter	78.96	72.17

Holders

We had 268 registered stockholders as of February 26, 2019. That number excludes the beneficial owners of shares held in “street” name or held through participants in depositories.

Dividends

We initiated a quarterly cash dividend program in August 2011 with a payment of $0.20 per share of common stock on September 19, 2011. We have paid an increasing quarterly cash dividend in each subsequent calendar quarter. The following is a summary of each dividend declared during fiscal year 2018 and 2017:

Declaration Date	Dividend per Common Share	Record Date	Payment Date
February 9, 2017	$ 0.3650	February 22, 2017	March 9, 2017
May 4, 2017	$ 0.3750	May 19, 2017	June 2, 2017
August 2, 2017	$ 0.3850	August 14, 2017	September 1, 2017
October 31, 2017	$ 0.3950	November 17, 2017	December 5, 2017
February 2, 2018	$ 0.4050	February 22, 2018	March 9, 2018
May 3, 2018	$ 0.4150	May 18, 2018	June 1, 2018
August 8, 2018	$ 0.4250	August 20, 2018	September 4, 2018
October 29, 2018	$ 0.4350	November 19, 2018	December 5, 2018

On February 6, 2019, the Company’s Board of Directors approved a quarterly cash dividend of $0.4450 per share of common stock payable on March 12, 2019 to all stockholders of record as of the close of business on February 25, 2019 (see Note 21 - Subsequent Events of the Notes to Consolidated Financial Statements included elsewhere in this

Annual Report on Form 10-K, which is incorporated herein by reference). Future dividends are subject to Board approval.

Recent Sales of Unregistered Securities

Not applicable.

Issuer Purchases of Equity Securities

Effective February 15, 2012, the Company's Board of Directors approved a program authorizing the repurchase of up to five million shares of our common stock through February 20, 2013 (the "2012 Program") which was subsequently extended through February 20, 2020 (see Note 21 - Subsequent Events of the Notes to Consolidated Financial Statements included elsewhere in this Annual Report on Form 10-K, which is incorporated herein by reference). Cumulatively at December 31, 2018, we had repurchased 2.7 million shares under the 2012 Program at an aggregated cost of $101.1 million (including an immaterial amount of commission fees).

In July 2016, the Company acquired and subsequently retired 935,231 shares of j2 Global common stock in connection with the acquisition of Integrated Global Concepts, Inc. (see Note 4 - Business Acquisitions of the Notes to Consolidated Financial Statements included elsewhere in this Annual Report on Form 10-K, which is incorporated herein by reference). In December 2018, the Company acquired 600,000 shares of j2 Global common stock in connection with the 2012 Program (see Note 13 - Stockholders' Equity of the Notes to Consolidated Financial Statements included elsewhere in this Annual Report on Form 10-K, which is incorporated herein by reference). As a result of the acquisition of j2 Global common stock through the Company's business combinations and share repurchase program, the number of shares available for purchase under the 2012 Program is 1,338,689 shares of j2 Global common stock as of December 31, 2018.

The following table details the repurchases that were made under and outside the 2012 Program during the three months ended December 31, 2018:

Period	Total Number of Shares Purchased (1)	Average Price Paid Per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Maximum Number of Shares that May Yet Be Purchased Under the Plans or Programs
October 1, 2018 - October 31, 2018	2,194	$ 74.77	—	1,938,689
November 1, 2018 - November 30, 2018	—	$ —	—	1,938,689
December 1, 2018 - December 31, 2018	601,428	$ 70.89	600,000	1,338,689
Total	603,622		600,000	1,338,689

(1) Includes shares surrendered to the Company to pay the exercise price and/or to satisfy tax withholding obligations in connection with employee stock options and/or the vesting of restricted stock issued to employees.

Equity Compensation Plan Information

The following table provides information as of December 31, 2018 regarding shares outstanding and available for issuance under j2 Global's existing equity compensation plans:

Plan Category	Number of Securities to Be Issued Upon	Weighted-Average Exercise Price of Outstanding Options, Warrants	Number of Securities Remaining Available for Future

	Exercise of Outstanding Options, Warrants and Rights (a)	and Rights (b)	Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column (a)) (c)
Equity compensation plans approved by security holders	707,777	$ 56.84	3,860,697
Equity compensation plans not approved by security holders	—	—	—
Total	707,777	$ 56.84	3,860,697

The number of securities remaining available for future issuance includes 2,270,716 and 1,589,981 under our 2015 Stock Option Plan and 2001 Employee Stock Purchase Plan, respectively. Please refer to Note 14 to the accompanying consolidated financial statements for a description of these Plans as well as our 2007 Stock Option Plan, which terminated on February 14, 2017.

Performance Graph

This performance graph shall not be deemed “filed” for purposes of Section 18 of the Exchange Act of 1934, or otherwise subject to the liabilities under that Section and shall not be deemed to be incorporated by reference into any filing of j2 Global under the Securities Act of 1933, as amended, or the Exchange Act.

The following graph compares the cumulative total stockholder return for j2 Global, the NASDAQ Computer Index and an index of companies that j2 Global has selected as its peer group in the cloud services for business space.

j2 Global’s peer group index for 2018 and 2017 consists of IAC/InterActive Corp., TripAdvisor, Inc., LivePerson, Inc., LogMeIn, Inc., Zillow Group, Inc., Salesforce.com, Inc., Open Text Corp. and The Ultimate Software Group, Inc.

Measurement points are December 31, 2013 and the last trading day in each of j2 Global’s fiscal quarters through the end of fiscal 2018. The graph assumes that $100 was invested on December 31, 2013 in j2 Global’s common stock and in each of the indices, and assumes reinvestment of any dividends. The stock price performance on the following graph is not necessarily indicative of future stock price performance.

Measurement Date	j2 Global	NASDAQ Computer Index	Peer Group Index
Dec-13	100.00	100.00	100.00
Mar-14	100.61	101.55	103.71
Jun-14	102.24	109.80	108.30
Sep-14	99.26	115.25	105.61
Dec-14	124.55	119.88	104.36
Mar-15	131.92	121.42	114.56
Jun-15	136.45	121.67	117.43
Sep-15	142.29	115.55	112.54
Dec-15	165.24	127.36	125.83
Mar-16	123.79	128.45	116.10
Jun-16	126.98	123.38	127.02
Sep-16	133.88	141.35	121.07
Dec-16	164.28	142.99	114.22
Mar-17	168.52	161.41	130.11
Jun-17	170.90	168.17	139.48
Sep-17	148.50	182.86	146.69
Dec-17	150.82	198.42	157.56
Mar-18	158.62	203.42	179.56
Jun-18	174.02	217.73	202.75
Sep-18	166.52	234.63	231.49
Dec-18	139.60	191.11	198.22

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Item 6. Selected Financial Data

The following selected consolidated financial data should be read in conjunction with our consolidated financial statements, the related notes contained in this Annual Report on Form 10-K and the information contained herein in Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations. Historical results are not necessarily indicative of future results.

	Years Ended December 31,				
	2018	2017	2016	2015	2014
	(In thousands, except for share and per share amounts)				
Statement of Income Data:					
Revenues	$1,207,295	$1,117,838	$874,255	$720,815	$599,030
Cost of revenues	201,074	172,313	147,100	122,958	105,989
Gross profit	1,006,221	945,525	727,155	597,857	493,041
Operating expenses:					
Sales and marketing	338,304	330,296	206,871	159,009	141,967
Research, development and engineering	48,370	46,004	38,046	34,329	30,680
General and administrative	375,267	323,517	239,672	205,137	134,188
Total operating expenses	761,941	699,817	484,589	398,475	306,835
Income from operations	244,280	245,708	242,566	199,382	186,206
Interest expense, net	61,987	67,777	41,370	42,458	31,204
Other expense (income), net	4,706	(22,035)	(10,243)	5	(165)
Income before income taxes	177,587	199,966	211,439	156,919	155,167
Income tax expense	44,760	60,541	59,000	23,283	29,840
Net loss in earnings of equity method investment	4,140	—	—	—	—
Net income	$128,687	$139,425	$152,439	$133,636	$125,327
Less extinguishment of Series A preferred stock	—	—	—	—	(991)
Net income attributable to j2 Global, Inc. common shareholders	$128,687	$139,425	$152,439	$133,636	$124,336
Net income per common share:					
Basic	$2.64	$2.89	$3.15	$2.76	$2.60
Diluted	$2.59	$2.83	$3.13	$2.73	$2.58
Weighted average shares outstanding:					
Basic	47,950,746	47,586,242	47,668,357	47,627,853	46,778,015
Diluted	48,927,791	48,669,027	47,963,226	48,087,760	47,106,538
Cash dividends declared per common share	$1.68	$1.52	$1.36	$1.22	$1.10

	2018	2017	2016	2015	2014
	(In thousands)				
Balance Sheet Data:					
Cash and cash equivalents	$209,474	$350,945	$123,950	$255,530	$433,663
Working capital	153,009	355,325	(106,090)	286,151	486,816
Total assets	2,560,830	2,453,093	2,062,328	1,783,719	1,705,202
Other long-term liabilities	51,068	31,434	3,475	18,228	22,416
Total stockholders' equity	$1,035,744	$1,020,305	$914,536	$890,208	$820,235

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

In addition to historical information, the following Management’s Discussion and Analysis of Financial Condition and Results of Operations contains forward-looking statements. These forward-looking statements involve risks, uncertainties and assumptions. The actual results may differ materially from those anticipated in these forward-looking statements as a result of many factors, including but not limited to those discussed in Part I, Item 1A - “Risk Factors” in this Annual Report on Form 10-K. Readers are cautioned not to place undue reliance on these forward-looking statements, which reflect management’s opinions only as of the date hereof. We undertake no obligation to revise or publicly release the results of any revision to these forward-looking statements, except as required by law. Readers should carefully review the Risk Factors and the risk factors set forth in other documents we file from time to time with the SEC.

Overview

j2 Global, Inc., together with its subsidiaries (“j2 Global”, “the Company”, “our”, “us” or “we”), is a leading provider of intern services. Through our Cloud Services business, we provide cloud services to consumers and businesses and license our intellectual property (“IP”) to third parties. In addition, the Cloud Services business includes fax, voice, backup, security and email marketing products. Our Digital Media business specializes in the technology, gaming, broadband, business to business, healthcare, and international markets offering content, tools and services to consumers and businesses.

j2 Global was incorporated in 2014 as a Delaware corporation through the creation of a new holding company structure, and our Cloud Services business, operated by our wholly owned subsidiary, j2 Cloud Services, LLC (formerly j2 Cloud Services, Inc.), and its subsidiaries, was founded in 1995. We manage our operations through two businesses: Cloud Services and Digital Media.

Our Cloud Services business generates revenues primarily from customer subscription and usage fees and from IP licensing fees. Our Digital Media business generates revenues from advertising and sponsorships, subscription and usage fees, performance marketing and licensing fees.

In addition to growing our business organically, on a regular basis we acquire businesses to grow our customer bases, expand and diversify our service offerings, enhance our technologies, acquire skilled personnel and enter into new markets.

Our consolidated revenues are currently generated from three basic business models, each with different financial profiles and variability. Our Cloud Services business is driven primarily by subscription revenues that are relatively higher margin, stable and predictable from quarter to quarter with some seasonal weakness in the fourth quarter. The Cloud Services business also includes the results of our IP licensing business, which can vary dramatically in both revenues and profitability from period to period. Our Digital Media business is driven primarily by advertising revenues, has relatively higher sales and marketing expense and has seasonal strength in the fourth quarter. We continue to pursue additional acquisitions, which may include companies operating under business models that differ from those we operate under today. Such acquisitions could impact our consolidated profit margins and the variability of our revenues.

Cloud Services Performance Metrics

The following table sets forth certain key operating metrics for our Cloud Services business for the years ended December 31, 2018, 2017 and 2016 (in thousands, except for percentages):

	Years Ended December 31,		
	2018	2017	2016
Subscriber revenues:			
Fixed	$488,948	$471,269	$468,395
Variable	108,333	102,928	93,950
Total subscriber revenues	597,281	574,197	562,345
Other license revenues	694	4,759	4,593
Total revenues	$597,975	$578,956	$566,938
Percentage of total subscriber revenues:			
Fixed	81.9 %	82.1 %	83.3 %
Variable	18.1 %	17.9 %	16.7 %
Total revenues:			
Number-based	$393,079	$384,929	$367,741
Non-number-based	204,896	194,027	199,197
Total revenues	$597,975	$578,956	$566,938
Average monthly revenue per Cloud Business Customer (ARPU) (1)(2)	$15.61	$15.31	$15.21
Cancel rate (3)	2.1 %	2.0 %	2.1 %

(1) Quarterly ARPU is calculated using our standard convention of applying the average of the quarter's beginning and ending base to the total revenue for the quarter. We believe ARPU provides investors an understanding of the average monthly revenues we recognize associated with each Cloud Services customer. As ARPU varies based on fixed subscription fee and variable usage components, we believe it can serve as a measure by which investors can evaluate trends in the types of services, levels of services and the usage levels of those services across our Cloud Services customer base.

(2) Cloud Services customers are defined as paying direct inward dialing numbers for fax and voice services, and direct and resellers' accounts for other services.

(3) Cancel Rate is defined as cancels of small and medium businesses and individual Cloud Services customers with greater than four months of continuous service (continuous service includes Cloud Services customers administratively canceled and reactivated within the same calendar month), and enterprise Cloud Services customers beginning with their first day of service. Calculated monthly and expressed as an average over the three months of the quarter.

Digital Media Performance Metrics

The following table sets forth certain key operating metrics for our Digital Media business for the years ended December 31, 2018, 2017 and 2016 (in millions):

	Years Ended December 31,		
	2018	2017	2016
Visits	7,706	5,720	4,992
Page views	31,727	23,731	18,063

Sources: Google Analytics and Partner Platforms

Critical Accounting Policies and Estimates

We prepare our consolidated financial statements and related disclosures in accordance with U.S. generally accepted accounting principles ("GAAP") and our discussion and analysis of our financial condition and operating results require us to make judgments, assumptions and estimates that affect the amounts reported in our consolidated financial statements and accompanying notes. See Note 2, "Basis of Presentation and Summary of Significant Accounting Policies" of the Notes to Consolidated Financial Statements in Part II, Item 8 of this Form 10-K which describes the significant accounting policies and methods used in the preparation of our consolidated financial statements. We base our estimates on historical experience and on various other assumptions we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities. Actual results may differ significantly from those estimates under different assumptions and conditions and may be material.

We believe that our most critical accounting policies are those related to revenue recognition, valuation and impairment of investments, our assessment of ownership interests as variable interest entities and the related determination of consolidation, share-based compensation expense, assets acquired and liabilities assumed in connection with business combinations, long-lived and intangible asset impairment, contingent consideration, income taxes and contingencies and allowance for doubtful accounts. We consider these policies critical because they are those that are most important to the portrayal of our financial condition and results and require management's most difficult, subjective and complex judgments, often as a result of the need to make estimates about the effect of matters that are inherently uncertain. Senior management has reviewed these critical accounting policies and related disclosures with the Audit Committee of the Company's Board of Directors.

Revenue Recognition

Cloud Services

The Company's Cloud Services revenues substantially consist of monthly recurring subscription and usage-based fees, the majority of which are paid in advance by credit card. The Company defers the portions of monthly, quarterly, semi-annually and annually recurring subscription and usage-based fees collected in advance of the satisfaction of performance obligations and recognizes them in the period earned.

Along with our numerous proprietary Cloud Services solutions, the Company also generates revenues by reselling various third-party solutions, primarily through our security and online backup lines of business. These third-party solutions, along with our proprietary products, allow the Company to offer customers a variety of solutions to better meet their needs. The Company records revenue on a gross basis with respect to reseller revenue because the Company has control of the specified good or service prior to transferring control to the customer.

j2 Global's Cloud Services also includes patent license revenues generated under license agreements that provide for the payment of contractually determined fully paid-up or royalty-bearing license fees to j2 Global in exchange for the grant of non-exclusive, retroactive and future licenses to our intellectual property, including patented technology. Patent revenues may also consist of revenues generated from the sale of patents. Patent license arrangements are evaluated to determine if they grant the customer a right to access the Company's intellectual property which is generally recognized over the life of the arrangement or a right to use the Company's intellectual property which is generally recognized at the point in time the license is granted. With regard to royalty-bearing license arrangements, the Company recognizes revenues of license fees earned during the applicable period.

The Cloud Services business also generates revenues by licensing certain technology to third parties. Generally, revenue is recognized over time as the third party uses the licensed technology over the period.

Digital Media

Digital Media revenues are earned primarily from the delivery of advertising services and from subscriptions to services and information. Payment is received in arrears by check or wire and includes terms aligned with the industry standard of 90 days or less.

Revenue is earned from the delivery of advertising services on the Company’s owned and operated websites and on those websites that are part of Digital Media’s advertising network. Depending on the individual contracts with the customer, revenue for these services are recognized over the contract period when any of the following performance obligations are satisfied: (i) when an advertisement is placed for viewing; (ii) when a qualified sales lead is delivered; (iii) when a visitor “clicks through” on an advertisement; or (iv) when commissions are earned upon the sale of an advertised product.

Revenue from subscriptions is earned through the granting of access to, or delivery of, certain data products or services to customers. Subscriptions cover video games and related content, health information, data and other copyrighted material. Revenues under such agreements are recognized over the contract term for use of the service. Revenues are also earned from listing fees, subscriptions to online publications, and from other sources. Subscription revenues are recognized over time.

j2 Global also generates Digital Media revenues through the license of certain assets to clients. Assets are licensed for clients’ use in their own promotional materials or otherwise. Such assets may include logos, editorial reviews, or other copyrighted material. Revenues under such license agreements are recognized over the contract term for use of the asset. Technology assets are also licensed to clients. These assets are recognized over the term of the access period. The Digital Media business also generates revenue from other sources which had included marketing and production services. Such other revenues are generally recognized over the period in which the products or services are delivered. Revenues were no longer generated in 2018 from certain marketing and production services as a result of the sale of certain Digital Media assets during 2017.

j2 Global also generates Digital Media revenues from transactions involving the sale of perpetual software licenses, related software support and maintenance, hardware used in conjunction with its software, and other related services. Revenue is recognized for these software transactions with multiple performance obligations after (i) the Company has had an approved contract and is committed to perform the respective obligations and (ii) the Company can identify and quantify each obligation and its respective selling price. Once the respective performance obligations have been identified and quantified, revenue will be recognized when the obligations are met, either over time or at a point in time depending on the nature of the obligation.

Revenues from software license performance obligations are generally recognized upfront at the point in time that the software is made available to the customer to download and use. Revenues for related software support and maintenance performance obligations are related to technical support provided to customers as needed and unspecified software product upgrades, maintenance releases and patches during the term of the support period when they are available. The Company is obligated to make the support services available continuously throughout the contract period. Therefore, revenues for support contracts are generally recognized ratably over the contractual period the support services are provided. Hardware product and related software performance obligations, such as an operating system or firmware, are highly interdependent and interrelated and are accounted for as a bundled performance obligation. The revenues for this bundled performance obligation are generally recognized at the point in time that the hardware and software products are delivered and ownership is transferred to the customer. Other service revenues are generally recognized over time as the services are performed.

The Company records revenue on a gross basis with respect to revenue generated (i) by the Company serving online display and video advertising across its owned and operated web properties, on third-party sites or on unaffiliated advertising networks; (ii) through the Company’s lead-generation business; and (iii) through the Company’s subscriptions. The Company records revenue on a net basis with respect to revenue paid to the Company by certain third-party advertising networks who serve online display and video advertising across the Company’s owned-and-operated web properties and certain third-party sites.

Valuation and Impairment of Investments

We account for our investments in debt securities in accordance with Financial Accounting Standards Board (“FASB”) ASC Topic No. 320, Investments - Debt Securities (“ASC 320”). Our debt investments are typically comprised of corporate debt securities. We determine the appropriate classification of our investments at the time of acquisition and evaluate such determination at each balance sheet date. Trading securities are those investments that we intend to sell within a few hours or days and are carried at fair value, with unrealized gains and losses included in investment income. Available-for-sale debt securities are those investments we do not intend to hold to maturity and can be sold. Available-for-sale debt securities are carried at fair value with unrealized gains and losses included in other comprehensive income. Held-to-maturity securities are those investments which we have the ability and intent to hold until maturity and are recorded at amortized cost. All debt securities are accounted for on a specific identification basis.

We account for our investments in equity securities in accordance with ASC Topic No. 321, Investments - Equity Securities ("ASC 321") which requires the accounting for equity investments (other than those accounted for using the equity method of accounting) generally be measured at fair value for equity securities with readily determinable fair values. For equity securities without a readily determinable fair value that are not accounted for by the equity method, we measure the equity security using cost, less impairment, if any, and plus or minus observable price changes arising from orderly transactions in the same or similar investment from the same issuer. Any unrealized gains or losses will be reported in current earnings (see Note 5 - Investments of the Notes to Consolidated Financial Statements included elsewhere in this Annual Report on Form 10-K, which is incorporated herein by reference).

We assess whether an other-than-temporary impairment loss on an investment has occurred due to declines in fair value or other market conditions (see Note 5 - Investments of the Notes to Consolidated Financial Statements included elsewhere in this Annual Report on Form 10-K, which is incorporated herein by reference).

Variable Interest Entities (“VIE”)

A VIE requires consolidation by the entity’s primary beneficiary. We evaluate our investments in entities in which we are involved to determine if the entity is a VIE and if so, whether we hold a variable interest and are the primary beneficiary. We have determined that we hold a variable interest in our investment as a limited partner in the OCV Fund I, LP (“OCV Fund”, “OCV” or the “Fund”). In determining whether we are the primary beneficiary of the VIE, both of the following characteristics must be present:

a) the Company has the power to direct the activities of the VIE that most significantly impacts the VIEs economic performance (the power criterion); and

b) the Company has the obligation to absorb losses of the VIE, or the right to receive benefits of the VIE, that could potentially be significant to the VIE (the economic criterion).

We have concluded that, as a limited partner, although the obligations to absorb losses or benefit from the gains is not insignificant, we do not have “power” over OCV because we do not have the ability to direct the significant decisions which impact the economics of OCV. We believe that the OCV general partner, as a single decision maker, holds the ability to make the decisions about the activities that most significantly impact the OCV Fund’s economic performance. As a result, we have concluded that we will not consolidate OCV, as we are not the primary beneficiary of the OCV Fund, and will account for this investment under the equity-method of accounting. See Note 5, “Investments”, of the Notes to Consolidated Financial Statements included elsewhere in this Annual Report on Form 10-K, which is incorporated herein by reference.

We recognize our equity in the net earnings or losses relating to the investment in OCV on a one-quarter lag due to the timing and availability of financial information from OCV. If we become aware of a significant decline in value, the loss will be recorded in the period in which we identify the decline.

Share-Based Compensation Expense

We comply with the provisions of FASB ASC Topic No. 718, Compensation - Stock Compensation (“ASC 718”). Accordingly, we measure share-based compensation expense at the grant date, based on the fair value of the award, and recognize the expense over the employee’s requisite service period using the straight-line method. The measurement of share-based compensation expense is based on several criteria including, but not limited to, the valuation model used and associated input factors, such as expected term of the award, stock price volatility, risk free interest rate, dividend rate and award cancellation rate. These inputs are subjective and are determined using management’s judgment. If differences arise between the assumptions used in determining share-based compensation expense and the actual factors, which become known over time, we may change the input factors used in determining future share-based compensation expense. Any such changes could materially impact our results of operations in the period in which the changes are made and in periods thereafter. We elected to adopt the alternative transition method for calculating the tax effects of share-based compensation.

Long-lived and Intangible Assets

We account for long-lived assets in accordance with the provisions of FASB ASC Topic No. 360, Property, Plant, and Equipment (“ASC 360”), which addresses financial accounting and reporting for the impairment or disposal of long-lived assets.

We assess the impairment of identifiable definite-lived intangibles and long-lived assets whenever events or changes in circumstances indicate that the carrying value may not be recoverable. Factors we consider important which could individually or in combination trigger an impairment review include the following:

. Significant underperformance relative to expected historical or projected future operating results;

- Significant changes in the manner of our use of the acquired assets or the strategy for our overall business;
- Significant negative industry or economic trends;
- Significant decline in our stock price for a sustained period; and
- Our market capitalization relative to net book value.

If we determined that the carrying value of definite-lived intangibles and long-lived assets may not be recoverable based upon the existence of one or more of the above indicators of impairment, we would record an impairment equal to the excess of the carrying amount of the asset over its estimated fair value.

We have assessed whether events or changes in circumstances have occurred that potentially indicate the carrying value of definite-lived intangibles and long-lived assets may not be recoverable and noted no indicators of potential impairment for the years ended December 31, 2018, 2017 and 2016.

Goodwill and Purchased Intangible Assets

We evaluate our goodwill and indefinite-lived intangible assets for impairment pursuant to FASB ASC Topic No. 350, Intangibles - Goodwill and Other (“ASC 350”), which provides that goodwill and other intangible assets with indefinite lives are not amortized but tested for impairment annually or more frequently if circumstances indicate potential impairment. In connection with the annual impairment test for goodwill, we have the option to perform a qualitative assessment in determining whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount. If we determine that it was more likely than not that the fair value of the reporting unit is less than its carrying amount, then we perform the impairment test upon goodwill. The impairment test is performed by comparing a reporting unit’s fair value to its carrying value; if the fair value is less than its carrying value, impairment is indicated. In connection with the annual impairment test for intangible assets, we have the option to perform a qualitative assessment in determining whether it is more likely than not that the fair value is less than its carrying amount, then we perform the impairment test upon intangible assets.

In the fourth quarter of 2018, there was a change to our reporting units. As a result of this change, we allocated goodwill to our new reporting units using a relative fair value approach. In addition, we completed an assessment of any potential goodwill impairment for all reporting units immediately before and after the reallocation and determined no impairment existed. Further, we completed the required impairment review for the years ended December 31, 2017 and 2016 and noted no impairment. Consequently, no impairment charges were recorded.

Contingent Consideration

Certain of our acquisition agreements include contingent earn-out arrangements, which are generally based on the achievement of future income thresholds. The contingent earn-out arrangements are based upon our valuations of the acquired companies and reduce the risk of overpaying for acquisitions if the projected financial results are not achieved.

The fair values of these earn-out arrangements are included as part of the purchase price of the acquired companies on their respective acquisition dates. For each transaction, we estimate the fair value of contingent earn-out payments as part of the initial purchase price and record the estimated fair value of contingent consideration as a liability on the consolidated balance sheets. We consider several factors when determining that contingent earn-out liabilities are part of the purchase price, including the following: (1) the valuation of our acquisitions is not supported solely by the initial consideration paid, and the contingent earn-out formula is a critical and material component of the valuation approach to determining the purchase price; and (2) the former shareholders of acquired companies that remain as key employees receive compensation other than contingent earn-out payments at a reasonable level compared with the compensation of our other key employees. The contingent earn-out payments are not affected by employment termination.

We measure our contingent earn-out liabilities in connection with acquisitions at fair value on a recurring basis using significant unobservable inputs classified within Level 3 of the fair value hierarchy (see Note 7 - Fair Value Measurements of the Notes to Consolidated Financial Statements included elsewhere in this Annual Report on Form 10-K, which is incorporated herein by reference). We may use various valuation techniques depending on the terms and conditions of the contingent consideration including a Monte-Carlo simulation. This simulation uses probability distribution for each significant input to produce hundreds or thousands of possible outcomes and the results are analyzed to determine probabilities of different outcomes occurring. Significant increases or decreases to these inputs in isolation would result in a significantly higher or lower liability with a higher liability capped by the contractual maximum of the contingent earn-out obligation. Ultimately, the liability will be equivalent to the amount paid, and the difference between the fair value estimate and amount paid will be recorded in earnings. The amount paid that is less than or equal to the liability on the acquisition date is reflected as cash used in financing activities in our consolidated statements of cash flows. Any amount paid in excess of the liability on the acquisition date is reflected as cash used in operating activities.

We review and re-assess the estimated fair value of contingent consideration on a quarterly basis, and the updated fair value could be materially different from the initial estimates or prior quarterly amounts. Changes in the estimated fair value of our contingent earn-out liabilities are reported in operating income. Adjustments to the estimated fair value related to changes in all other unobservable inputs are reported in operating income.

Income Taxes

We account for income taxes in accordance with FASB ASC Topic No. 740, Income Taxes (“ASC 740”), which requires that deferred tax assets and liabilities be recognized using enacted tax rates for the effect of temporary differences between the book and tax basis of recorded assets and liabilities. ASC 740 also requires that deferred tax assets be reduced by a valuation allowance if it is more likely than not that some or all of the net deferred tax assets will not be realized. Our valuation allowance is reviewed quarterly based upon the facts and circumstances known at the time. In assessing this valuation allowance, we review historical and future expected operating results and other factors to determine whether it is more likely than not that deferred tax assets are realizable.

We are subject to income taxes in the U.S. (federal and state) and numerous foreign jurisdictions. Tax laws, regulations, and administrative practices in various jurisdictions may be subject to significant change, with or without notice, due to economic, political, and other conditions, and significant judgment is required in evaluating and estimating our provision and accruals for these taxes. There are many transactions that occur during the ordinary course of business for which the ultimate tax determination is uncertain. Our effective tax rates could be affected by numerous factors, such as intercompany transactions, the relative amount of our foreign earnings, including earnings being lower than anticipated in jurisdictions where we have lower statutory rates and higher than anticipated in jurisdictions where we have higher statutory rates, the applicability of special tax regimes, losses incurred in jurisdictions for which we are not able to realize the related tax benefit, changes in foreign currency exchange rates, entry into new businesses and geographies, changes to our existing businesses and operations, acquisitions (including integrations) and investments and how they are financed, changes in our stock price, changes in our deferred tax assets and liabilities and their valuation, and changes in the relevant tax, accounting, and other laws, regulations, administrative practices, principles, and interpretations. In addition, a number of countries are actively pursuing changes to their tax laws applicable to corporate multinationals, such as the recently enacted the 2017 Tax Act. Finally, foreign governments may enact tax laws in response to the 2017 Tax Act that could result in further changes to global taxation and materially affect our financial position and results of operations.

On December 22, 2017, the United States enacted the 2017 Tax Act, which imposes a repatriation tax on accumulated earnings of foreign subsidiaries, imposes a current tax on certain foreign earnings and lowers the general corporate income tax rate to 21%. In December 2017, the SEC staff issued SAB 118, which allows us to record provisional amounts during a measurement period not to extend beyond one year of the enactment date. We have completed our accounting for the tax effects of the 2017 Tax Act, including the repatriation tax, the net deferred tax remeasurement and the impact on our unrealized tax benefits. None of the adjustments we made to our provisional amounts were material to our consolidated financial statements.

Income Tax Contingencies

We calculate current and deferred tax provisions based on estimates and assumptions that could differ from the actual results reflected in income tax returns filed during the following year. Adjustments based on filed returns are recorded when identified in the subsequent year.

ASC 740 provides guidance on the minimum threshold that an uncertain income tax position is required to meet before it can be recognized in the financial statements and applies to all tax positions taken by a company. ASC 740 contains a two-step approach to recognizing and measuring uncertain income tax positions. The first step is to evaluate the income tax position for recognition by determining if the weight of available evidence indicates that it is more likely than not that the position will be sustained on audit, including resolution of related appeals or litigation processes, if any. The second step is to measure the tax benefit as the largest amount that is more than 50% likely of being realized upon settlement. If it is not more likely than not that the benefit will be sustained on its technical merits, no benefit will be recorded. Uncertain income tax positions that relate only to timing of when an item is included on a tax return are considered to have met the recognition threshold. We recognize accrued interest and penalties related to uncertain income tax positions in income tax expense on our consolidated statement of income. On a quarterly basis, we evaluate uncertain income tax positions and establish or release reserves as appropriate under GAAP.

As a multinational corporation, we are subject to taxation in many jurisdictions, and the calculation of our tax liabilities involves dealing with uncertainties in the application of complex tax laws and regulations in various taxing jurisdictions. Our estimate of the potential outcome of any uncertain tax issue is subject to management's assessment of relevant risks, facts and circumstances existing at that time. Therefore, the actual liability for U.S. or foreign taxes may be materially different from our estimates, which could result in the need to record additional tax liabilities or potentially to reverse previously recorded tax liabilities. In addition, we may be subject to examination of our tax returns by the U.S. Internal Revenue Service ("IRS") and other domestic and foreign tax authorities.

Non-Income Tax Contingencies

The Company does not collect and remit sales and use, telecommunication, or similar taxes in all jurisdictions in which it has sales, based on the Company's belief that such taxes are not applicable or legally required. Several states and other taxing jurisdictions have presented or threatened the Company with assessments, alleging that the Company is required to collect and remit such taxes there. The aggregate assessments at December 31, 2018 were not material.

The June 2018 U.S. Supreme Court ruling in South Dakota v. Wayfair, Inc., No. 17-494, along with the application of existing, new or future rulings and laws, could have adverse effects on our business, prospects and operating results. There have been, and will continue to be, substantial ongoing costs associated with complying with the various indirect tax requirements in the numerous markets in which we conduct or will conduct business.

The Company is currently under audit or is subject to audit for indirect taxes in several states and municipalities. The Company has a $4.6 million reserve established for these matters. It is reasonably possible that additional liabilities could be incurred resulting in additional expense, which could have a materially impact on our financial results.

Allowances for Doubtful Accounts

We reserve for receivables we may not be able to collect. The reserves for our Cloud Services business are typically driven by the volume of credit card declines and past due invoices and are based on historical experience as well as an evaluation of current market conditions. The reserves for our Digital Media business are typically driven by past due invoices based on historical experience. On an ongoing basis, management evaluates the adequacy of these reserves.

Recent Accounting Pronouncements

See Note 2, "Basis of Presentation and Summary of Significant Accounting Policies", to our accompanying consolidated financial statements for a description of recent accounting pronouncements and our expectations of their impact on our consolidated financial position and results of operations.

Results of Operations

Years Ended December 31, 2018, 2017 and 2016

Cloud Services

Assuming a stable or improving economic environment, and, subject to our risk factors, we expect the revenue and profits as included in the results of operations below in our Cloud Services business to be stable for the foreseeable future (excluding the impact of acquisitions). The main focus of our Cloud Services offerings is to reduce or eliminate costs, increase sales and enhance productivity, mobility, business continuity and security of our customers as the technologies and devices they use evolve over time. As a result, we expect to continue to take steps to enhance our existing offerings and offer new services to continue to satisfy the evolving needs of our customers. Through our IP licensing operations, which are included in the Cloud Services business, we seek to make our IP available for license to third parties, and we expect to continue to attempt to obtain additional IP through a combination of acquisitions and internal development in an effort to increase available licensing opportunities and related revenues.

We expect acquisitions to remain an important component of our strategy and use of capital in this business; however, we cannot predict whether our current pace of acquisitions will remain the same within this business. In a given period, we may close greater or fewer acquisitions than in prior periods or acquisitions of greater or lesser significance than in prior periods. Moreover, future acquisitions of businesses within this space but with different business models may impact Cloud Services' overall profit margins. Also, as IP licensing often involves litigation, the timing of licensing transactions is unpredictable and can and does vary significantly from period to period. This variability can cause the overall business's financial results to materially vary from period to period.

Digital Media

Assuming a stable or improving economic environment, and, subject to our risk factors, we expect the revenue and profits in our Digital Media business to improve over the next several quarters as we integrate our recent acquisitions and over the longer term as advertising transactions continue to shift from offline to online. The main focus of our advertising programs is to provide relevant and useful advertising to visitors to our websites and those included within our advertising networks, reflecting our commitment to constantly improve their overall web experience. As a result, we expect to continue to take steps to improve the relevance of the ads displayed on our websites and those included within our advertising networks.

The operating margin we realize on revenues generated from ads placed on our websites is significantly higher than the operating margin we realize from revenues generated from those placed on third-party websites. Growth in advertising revenues from our websites has generally exceeded that from third-party websites. This trend has had a positive impact on our operating margins, and we expect that this will continue for the foreseeable future. However, the trend in advertising spend is shifting to mobile devices and other newer advertising formats which generally experience lower margins than those from desktop computers and tablets. We expect this trend to continue to put pressure on our margins.

We expect acquisitions to remain an important component of our strategy and use of capital in this business; however, we cannot predict whether our current pace of acquisitions will remain the same within this business. In a given period, we may close greater or fewer acquisitions than in prior periods or acquisitions of greater or lesser significance than in prior periods. Moreover, future acquisitions of businesses within this space but with different business models may impact Digital Media's overall profit margins.

j2 Global Consolidated

We anticipate that the stable revenue trend in our Cloud Services business combined with the improving revenue and profits in our Digital Media business will result in overall improved revenue and profits for j2 Global on a consolidated basis, excluding the impact of any future acquisitions which can vary dramatically from period to period.

We expect operating profit as a percentage of revenues to generally decrease in the future primarily due to the fact that revenue with respect to our Digital Media business (i) is increasing as a percentage of our revenue on a consolidated basis and (ii) has historically operated at a lower operating margin.

The following table sets forth, for the years ended December 31, 2018, 2017 and 2016, information derived from our statements of income as a percentage of revenues. This information should be read in conjunction with the accompanying financial statements and the Notes to Consolidated Financial Statements included elsewhere in this Annual Report on Form 10-K.

	Years Ended December 31,		
	2018	2017	2016
Revenues	100%	100%	100%
Cost of revenues	17	15	17
Gross profit	83	85	83
Operating expenses:			
Sales and marketing	28	30	24
Research, development and engineering	4	4	4
General and administrative	31	29	27
Total operating expenses	63	63	55
Income from operations	20	22	28
Interest expense, net	5	6	5
Other expense (income), net	—	(2)	(1)
Income before income taxes	15	18	24
Income tax expense	4	5	7
Net loss in earnings of equity method investment	—	—	—
Net income	11%	12%	17%

Revenues

(in thousands, except percentages)	2018	2017	2016	Percentage Change 2018 versus 2017	Percentage Change 2017 versus 2016
Revenues	$1,207,295	$1,117,838	$874,255	8%	28%

Our revenues consist of revenues from our Cloud Services business and from our Digital Media business. Cloud Services revenues primarily consist of revenues from “fixed” customer subscription revenues and “variable” revenues generated from actual usage of our services. We also generate Cloud Services revenues from IP licensing. Digital Media revenues primarily consist of advertising revenues, subscriptions earned through the granting of access to, or delivery of, certain data products or services to customers, fees paid for generating business leads, and licensing and sale of editorial content and trademarks.

Our revenues have increased over the past three years primarily due to a combination of acquisitions and organic growth within both the Digital Media and Cloud Services businesses.

Cost of Revenues

(in thousands, except percentages)	2018	2017	2016	Percentage Change 2018 versus 2017	Percentage Change 2017 versus 2016
Cost of revenue	$201,074	$172,313	$147,100	17%	17%
As a percent of revenue	17%	15%	17%		

Cost of revenues is primarily comprised of costs associated with content fees, data and voice transmission, numbers, editorial and production costs, network operations, customer service, and online processing fees. The increase in cost of revenues for the year ended December 31, 2018 was primarily due to an increase in costs associated with businesses acquired in and subsequent to fiscal 2017 that resulted in additional content fees. The increase in cost of revenues for the year ended December 31, 2017 was primarily due to an increase in costs associated with businesses acquired in and subsequent to fiscal 2016 that resulted in additional editorial and production costs.

Operating Expenses

Sales and Marketing.

(in thousands, except percentages)	2018	2017	2016	Percentage Change 2018 versus 2017	Percentage Change 2017 versus 2016
Sales and Marketing	$338,304	$330,296	$206,871	2%	60%
As a percent of revenue	28%	30%	24%		

Our sales and marketing costs consist primarily of internet-based advertising, sales and marketing, personnel costs and other business development-related expenses. Our internet-based advertising relationships consist primarily of fixed cost and performance-based (cost-per-impression, cost-per-click and cost-per-acquisition) advertising relationships with an array of online service providers. Advertising cost for the years ended December 31, 2018, 2017 and 2016 was $149.7 million (primarily consisting of $100.5 million of third-party advertising costs and $40.8 million of personnel costs), $143.3 million (primarily consisting of $95.4 million of third-party advertising costs and $41.0 million of personnel costs) and $96.8 million (primarily consisting of $64.8 million of third-party advertising costs and $26.3 million of personnel costs), respectively. The increase in sales and marketing expenses from 2017 to 2018 was primarily due to increased personnel costs and advertising associated with the businesses acquired in and subsequent to fiscal 2017. The increase in sales and marketing expenses from 2016 to 2017 was primarily due to increased personnel costs and advertising associated with the acquisition of Everyday Health within the Digital Media business, which was acquired in December 2016.

Research, Development and Engineering.

(in thousands, except percentages)	2018	2017	2016	Percentage Change 2018 versus 2017	Percentage Change 2017 versus 2016
Research, Development and Engineering	$48,370	$46,004	$38,046	5%	21%
As a percent of revenue	4%	4%	4%		

Our research, development and engineering costs consist primarily of personnel-related expenses. The increase in research, development and engineering costs from 2017 to 2018 was primarily due to personnel costs associated with acquisitions within the Cloud Service business. The increase in research, development and engineering costs from 2016 to 2017 was primarily due to personnel costs associated with acquisitions within the Cloud Service and Digital Media businesses.

General and Administrative.

(in thousands, except percentages)	2018	2017	2016	Percentage Change 2018 versus 2017	Percentage Change 2017 versus 2016
General and Administrative	$375,267	$323,517	$239,672	16%	35%
As a percent of revenue	31%	29%	27%		

Our general and administrative costs consist primarily of personnel-related expenses, depreciation and amortization, changes in the fair value associated with contingent consideration, share-based compensation expense, bad debt expense, professional fees, severance and insurance costs. The increase in general and administrative expense from 2017 to 2018 was primarily due to additional amortization of intangible assets, increased depreciation expense and personnel costs relating to acquisitions closed during 2017 and 2018. The increase in general and administrative expense from 2016 to 2017 was primarily due to additional amortization of intangible assets and personnel costs relating to acquisitions closed during 2016 and 2015 and increased depreciation expense.

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Share-Based Compensation

The following table represents share-based compensation expense included in cost of revenues and operating expenses in the accompanying consolidated statements of income for the years ended December 31, 2018, 2017 and 2016 (in thousands):

	Years Ended December 31,		
	2018	2017	2016
Cost of revenues	$510	$500	$436
Operating expenses:			
Sales and marketing	1,798	1,723	1,782
Research, development and engineering	1,553	1,182	904
General and administrative	24,232	19,332	10,528
Total	$28,093	$22,737	$13,650

During the year ended December 31, 2017, the Company accelerated the vesting of certain shares held by employees which were surrendered to the Company to satisfy tax withholding obligations in connection with such employees' restricted stock. The Company recognized share-based compensation of $1.4 million for the year ended December 31, 2017 due to this vesting acceleration.

In connection with Nehemia Zucker's resignation as Chief Executive Officer effective as of December 31, 2017, all of his outstanding and unvested stock options and time-based restricted shares, along with the tranche of performance-vesting restricted shares that was then next scheduled to vest, vested in full on December 29, 2017. As a result, the Company has accelerated the recognition of share-based compensation expense associated with these awards which impacted 2017 by approximately $5.1 million.

Non-Operating Income and Expenses

Interest expense, net. Our interest expense, net is generated primarily from interest expense due to outstanding debt, partially offset by interest income earned on cash, cash equivalents and investments. Interest expense, net was $62.0 million, $67.8 million, and $41.4 million for the years ended December 31, 2018, 2017 and 2016, respectively. The decrease from 2017 to 2018 was primarily due to decreased interest expense associated with the loss on extinguishment of the $250 million 8.0% Senior Notes recognized in 2017. The increase from 2016 to 2017 was due to increased interest expense associated with the issuance of the $650 million 6.0% Senior Notes and our line of credit borrowings, the loss on the extinguishment of the $250 million 8.0% Senior Notes and decreased interest income on cash, cash equivalents and investments.

Other expense (income), net. Our other expense (income), net is generated primarily from miscellaneous items, gain or losses on currency exchange and gains or losses on investments. Other expense (income), net was $4.7 million, $(22.0) million, and $(10.2) million for the years ended December 31, 2018, 2017 and 2016, respectively. The change from 2017 to 2018 was attributable to gains earned in the prior period related to the sales of subsidiaries in our Digital Media and Cloud businesses. The change from 2016 to 2017 was attributable to an increase in gains earned related to the sales of subsidiaries in our Digital Media and Cloud businesses, partially offset by increased losses on currency exchange compared to the prior period as well as the sale of our strategic investment in Carbonite in the prior period, resulting in a gain on sale of $7.6 million, and a breakup fee received of $2.5 million in the prior period associated with the competitive bid for certain assets of Gawker Media.

Income Taxes

Our effective tax rate is based on pre-tax income, statutory tax rates, tax regulations (including those related to transfer pricing) and different tax rates in the various jurisdictions in which we operate. The tax bases of our assets and liabilities reflect our best estimate of the tax benefits and costs we expect to realize. When necessary, we establish valuation allowances to reduce our deferred tax assets to an amount that will more likely than not be realized.

On December 22, 2017, the United States enacted the 2017 Tax Act, which imposes a repatriation tax on accumulated earnings of foreign subsidiaries, imposes a current tax on certain foreign earnings and lowers the general corporate income tax rate to 21%. In December 2017, the SEC staff issued Staff Accounting Bulletin No. 118 (SAB 118), which allows us to record provisional amounts during a measurement period not to extend beyond one year of the enactment date. We have completed our accounting for the tax effects of the 2017 Tax Act, including the repatriation tax, the net deferred tax remeasurement and the impact on our unrealized tax benefits. None of the adjustments we made to our provisional amounts were material to our consolidated financial statements.

As of December 31, 2018, we had federal net operating loss carryforwards ("NOLs") of $142.2 million after considering substantial restrictions on the utilization of these NOLs due to "ownership changes", as defined in the Internal Revenue Code of 1986, as amended. We estimate that all of the above-mentioned federal NOLs will be available for use before their expiration. These NOLs expire through the year 2036.

As of December 31, 2018 and 2017, the Company had available unrecognized state research and development tax credits of $4.6 million and $2.3 million, respectively, which last indefinitely.

Income tax expense amounted to $44.8 million, $60.5 million and $59.0 million for the years ended December 31, 2018, 2017 and 2016, respectively. Our effective tax rates for 2018, 2017 and 2016 were 25.2%, 30.3% and 27.9%, respectively.

The decrease in our annual effective income tax rate from 2017 to 2018 was primarily attributable to the following:

1. a decrease during 2018 from the reduction in the U.S. federal statutory income tax rate from 35% to 21%, effective on January 1, 2018; partially offset by:

2. a decrease in the benefit for the portion of our income being taxed in foreign jurisdictions and subject to lower tax rates than in the U.S. (relative to income from U.S. domestic operations); and

3. an increase in tax expense during 2018 due to tax law changes requiring certain income earned by foreign subsidiaries to be included in the income of the U.S. shareholder.

The increase in our annual effective income tax rate from 2016 to 2017 was primarily attributable to the following:

1. an increase during 2017 in the transition tax due to the 2017 Tax Act; partially offset by:

2. a decrease during 2017 in the valuation of deferred tax liabilities due to the decrease in the federal tax rate per the 2017 Tax Act; and

3. a decrease during 2017 in the amount of deemed distribution income (Section 956) from our foreign subsidiaries.

In order to provide additional understanding in connection with our foreign taxes, the following represents the statutory and effective tax rate by significant foreign country:

	Ireland	United Kingdom	Canada
Statutory tax rate	12.5%	19.0%	26.5%
Effective tax rate (1)	4.6%	19.4%	26.6%

(1) Effective tax rate excludes certain discrete items.

The statutory tax rate is the rate imposed on taxable income for corporations by the local government in that jurisdiction. The effective tax rate measures the taxes paid as a percentage of pretax profit. The effective tax rate can differ from the statutory tax rate when a company can exempt some income from tax, claim tax credits, or due to the effect of book-tax differences that do not reverse and discrete items.

Significant judgment is required in determining our provision for income taxes and in evaluating our tax positions on a worldwide basis. We believe our tax positions, including intercompany transfer pricing policies, are consistent with the tax laws in the jurisdictions in which we conduct our business. Certain of these tax positions have in the past been, and are currently being, challenged, and this may have a significant impact on our effective tax rate if our tax reserves are insufficient.

Equity Method Investment

Net loss in earnings of equity method investment. Net loss in earnings of equity method investment is generated from our investment in the OCV Fund for which we receive annual audited financial statements. The investment in the OCV Fund is presented net of tax and on a one-quarter lag due to the timing and availability of financial information from OCV. If the Company becomes aware of a significant decline in value, the loss will be recorded in the period in which the Company identifies the decline.

The net loss in earnings of equity method investment was $4.1 million and zero and zero, net of tax benefit for the year ended December 31, 2018, 2017, and 2016 respectively. During the year ended December 31, 2018, 2017, and 2016 the Company recognized management fees of $4.5 million, zero, and zero, net of tax benefit, respectively.

Cloud Services and Digital Media Results

Our businesses are based on the organization structure used by management for making operating and investment decisions and for assessing performance and have been aggregated into two businesses: (i) Cloud Services; and (ii) Digital Media.

We evaluate the performance of our businesses based on revenues, including both external and interbusiness net sales, and operating income. We account for interbusiness sales and transfers based primarily on standard costs with reasonable mark-ups established between the businesses. Identifiable assets by business are those assets used in the respective businesses operations. Corporate assets consist of cash and cash equivalents, deferred income taxes and certain other assets. All significant interbusiness amounts are eliminated to arrive at our consolidated financial results.

Cloud Services

The following results are presented for fiscal years 2018, 2017 and 2016 (in thousands):

	2018	2017	2016
External net sales	$597,975	$578,956	$566,938
Inter-business net sales	—	—	—
Net sales	597,975	578,956	566,938
Cost of revenues	122,154	118,746	120,562
Gross profit	475,821	460,210	446,376
Operating expenses	245,701	234,166	235,497
Operating income	$230,120	$226,044	$210,879

Net sales of $598.0 million in 2018 increased $19.0 million, or 3.3%, from the prior comparable period primarily due to business acquisitions. Net sales of $579.0 million in 2017 increased $12.0 million, or 2.1%, from the prior comparable period primarily due to business acquisitions.

Gross profit of $475.8 million in 2018 increased $15.6 million from 2017 and gross profit of $460.2 million in 2017 increased $13.8 million from 2016 primarily due to an increase in net sales from acquisitions between the periods. The gross profit as a percentage of revenues for 2018 was consistent with the previous comparable period. The gross profit as a percentage of revenues for 2017 was consistent with the previous comparable period.

Operating expenses of $245.7 million in 2018 increased $11.5 million from 2017 primarily due to (a) additional expense associated with businesses acquired in and subsequent to the prior comparable period; and (b) an allocation of certain shared Corporate operating costs. Operating expenses of $234.2 million in 2017 decreased $1.3 million from 2016 primarily due to lower depreciation and amortization.

As a result of these factors, operating earnings of $230.1 million in 2018 increased $4.1 million, or 1.8%, from 2017, and operating earnings of $226.0 million in 2017 increased $15.2 million, or 7.2%, from 2016. Our Cloud Services business consists of several services which have similar economic characteristics, including the nature of the services and their production processes, the type of customers, as well as the methods used to distribute these services.

Digital Media

The following results are presented for fiscal years 2018, 2017 and 2016 (in thousands):

	2018	2017	2016
External net sales	$609,314	$538,882	$307,317
Inter-business net sales	60	57	146
Net sales	609,374	538,939	307,463
Cost of revenues	78,919	53,574	26,538
Gross profit	530,455	485,365	280,925
Operating expenses	489,019	437,297	230,225
Operating income	$41,436	$48,068	$50,700

Net sales of $609.4 million in 2018 increased $70.4 million, or 13.1%, and net sales of $538.9 million increased $231.5 million, or 75.3%, from the prior comparable period primarily due to business acquisitions subsequent to the prior comparable period.

Gross profit of $530.5 million in 2018 increased $45.1 million and gross profit of $485.4 million in 2017 increased $204.4 million from the prior comparable period primarily due to an increase in net sales between the periods. Gross profit as a percentage of revenues in 2018 and 2017 was lower than the prior comparable period due to additional content fees; partially offset by a decrease in campaign fulfillment costs. Gross profit as a percentage of revenues in 2017 and 2016 was consistent with the prior comparable periods.

Operating expenses of $489.0 million in 2018 increased $51.7 million from the prior comparable period primarily due to (a) additional expense associated with businesses acquired in and subsequent to 2017 comprised primarily of salary and related costs, marketing costs, changes in fair value of contingent consideration and amortization of intangible assets; and (b) an allocation of certain shared Corporate operating costs. Operating expenses of $437.3 million in 2017 increased $207.1 million from the prior comparable period primarily due to (a) increased sales and marketing costs primarily due to additional advertising and personnel costs associated with businesses acquired in and subsequent to 2016; and (b) amortization of intangible assets and depreciation associated with business acquisitions subsequent to the prior comparable period.

As a result of these factors, operating income of $41.4 million in 2018 decreased $6.6 million, or 13.8%, from 2017, and operating income of $48.1 million in 2017 decreased $2.6 million, or 5.2%, from 2016.

Liquidity and Capital Resources

Cash and Cash Equivalents and Investments

At December 31, 2018, we had cash and investments of $293.3 million compared to $408.7 million at December 31, 2017. The decrease in cash and investments resulted primarily from business acquisitions, dividends and interest paid, purchases of property and equipment, repurchase of common stock and purchase of equity method investments. At December 31, 2018, cash and investments consisted of cash and cash equivalents of $209.5 million and long-term investments of $83.8 million. Our investments consist of equity and debt securities. For financial statement presentation, we classify our debt securities primarily as short- and long-term based upon their maturity dates. Short-term investments mature within one year of the date of the financial statements and long-term investments mature one year or more from the date of the financial statements. We retain a substantial portion of our cash and investments in foreign jurisdictions for future reinvestment. As of December 31, 2018 cash and investments held within domestic and foreign jurisdictions were $177.3 million and $116.0 million, respectively. As of December 31, 2017 cash and investments held within domestic and foreign jurisdictions were $271.2 million and $137.5 million, respectively.

The Company's Board of Directors approved four quarterly cash dividends during the year ended December 31, 2018, totaling $1.68 per share of common stock. On February 6, 2019, the Company's Board of Directors approved a quarterly cash dividend of $0.4450 per share of common stock payable on March 12, 2019 to all stockholders of record as of the close of business on February 25, 2019. Future dividends are subject to Board approval.

On January 7, 2019, j2 Cloud Services, LLC entered into a Credit Agreement (the "Credit Agreement") with certain lenders from time to time party thereto (collectively, the "Lenders") and MUFG Union Bank, N.A., as sole lead arranger and as administrative agent for the Lenders (the "Agent"). Pursuant to the Credit Agreement, the Lenders have provided j2 with a credit facility of $100 million (the "Credit Facility") expandable to $150 million. The proceeds from the Credit Facility are intended to be used for working capital and general corporate purposes of j2 Cloud and its subsidiaries, including to finance certain permitted acquisitions and capital expenditures in accordance with the terms of the Credit Agreement. As of March 1, 2019 the Credit Facility has not been drawn upon.

On September 25, 2017, the Board of Directors of the Company authorized the Company's entry into a commitment to invest $200 million in an investment fund (the "Fund") over several years at a fairly ratable rate. The manager, OCV Management, LLC ("OCV"), and general partner of the Fund are entities with respect to which Richard S. Ressler, Chairman of the Board of Directors (the "Board") of the Company, is indirectly the majority equity holder. As a limited partner in the Fund, the Company will pay an annual management fee to the manager equal to 2.0% (reduced by 10% each year beginning with the sixth year) of capital commitments. In addition, subject to the terms and conditions of the Fund's limited partnership agreement, once the Company has received distributions equal to its invested capital, the Fund's general partner will be entitled to a carried interest equal to 20%. The Fund has a six year investment period, subject to certain exceptions. The commitment was approved by the Audit Committee of the Board in accordance with the Company's related-party transaction approval policy.

During 2018, the Company received capital call notices from the management of OCV Management, LLC. for $36.8 million, inclusive of certain management fees, of which $36.8 million has been paid for the year ended December 31, 2018.

We currently anticipate that our existing cash and cash equivalents and cash generated from operations will be sufficient to meet our anticipated needs for working capital, capital expenditure, investment requirements, stock repurchases and cash dividends for at least the next 12 months.

Cash Flows

Our primary sources of liquidity are cash flows generated from operations, together with cash and cash equivalents. Net cash provided by operating activities was $401.3 million, $264.4 million and $282.4 million for the years ended December 31, 2018, 2017 and 2016, respectively. Our operating cash flows resulted primarily from cash received from our customers offset by cash payments we made to third parties for their services, employee compensation and interest payments associated with our debt. The increase in our net cash provided by operating activities in 2018 compared to 2017 was primarily attributable to an increase in deferred income tax balances; partially offset by a decrease in income tax payable. In addition, the increase was due to a decrease in accounts receivable, an increase in depreciation and amortization, changes in the fair value of contingent consideration and an increase in deferred revenue. The decrease in our net cash provided by operating activities in 2017 compared to 2016 was primarily attributable to decrease in accounts payable and accrued expenses including a $20.0 million payment of certain contingent compensation obligations of Everyday Health as well as a payment of contingent consideration of $20.0 million associated with the acquisition of Ookla; an increase in deferred income tax balances and a decrease in income tax payable and liability for uncertain tax positions; partially offset by an increase in depreciation and amortization, share-based compensation and increase in other long term liabilities. Our prepaid tax payments were zero and $6.0 million at December 31, 2018 and 2017, respectively. Our cash and cash equivalents and short-term investments were $209.5 million, $350.9 million and $124.0 million at December 31, 2018, 2017 and 2016, respectively.

Net cash used in investing activities was $(406.6) million, $(158.5) million and $(448.9) million for the years ended December 31, 2018, 2017 and 2016, respectively. Net cash used in investing activities in 2018 was primarily attributable to business acquisitions, capital expenditures associated with the purchase of property and equipment and purchases of equity method investments. Net cash used in investing activities in 2017 was primarily attributable to business acquisitions, capital expenditures associated with the purchase of property and equipment and the purchase of intangible assets; partially offset by proceeds from the sale of businesses. Net cash used in investing activities in 2016 was primarily attributable to business acquisitions, purchase of available-for-sale investments, purchases of property and equipment and investments in intangible assets, partially offset by the sale of available-for-sale investments.

Net cash (used in) provided by financing activities was $(131.4) million, $111.8 million and $41.2 million for the years ended December 31, 2018, 2017 and 2016, respectively. Net cash (used in) provided by financing activities in 2018 was primarily attributable to dividends paid, repurchase of common stock and business acquisitions. Net cash provided by financing activities in 2017 was primarily attributable to proceeds from the issuance of long-term debt, additional borrowings under our line of credit and exercise of stock options; partially offset by the repayment in full of the line of credit and other debt, dividends paid, repurchases of stock and business acquisitions. Net cash used in by financing activities in 2016 was primarily attributable to proceeds from a line of credit, exercise of stock options and excess tax benefit from share-based compensation, partially offset by dividends paid, deferred payments for acquisitions and the repurchase of stock.

Stock Repurchase Program

On February 15, 2012, the Company's Board of Directors authorized the repurchase of up to five million shares of our common stock through February 20, 2013 which was subsequently extended through February 20, 2020 (see Note 21 - Subsequent Events for discussion regarding the extension of the share repurchase program by an additional year). On November 29, 2018, the Company entered into a Rule 10b5-1 trading plan with a broker to facilitate the repurchase of up to 600,000 of Common Stock at a specified price under a new stock repurchase program (see Note 13 - Stockholders' Equity of the Notes to Consolidated Financial Statements included elsewhere in this Annual Report on Form 10-K).

Contractual Obligations and Commitments

The following table summarizes our contractual obligations and commitments as of December 31, 2018:

	Payment Due by Period (in thousands)				
Contractual Obligations	1 Year	2-3 Years	4-5 Years	More than 5 Years	Total
Long-term debt - principal (a)	$—	$402,500	$—	$650,000	$1,052,500
Long-term debt - interest (b)	50,456	97,622	78,000	78,000	304,078
Operating leases (c)	19,267	30,077	23,631	5,456	78,431
Capital leases (d)	315	279	—	—	594
Telecom services and co-location facilities (e)	3,193	3,152	230	—	6,575
Holdback payment (f)	2,495	3,236	—	—	5,731
Contingent consideration (g)	20,000	—	—	—	20,000
Transition tax (h)	—	—	—	11,675	11,675
Self-Insurance (i)	9,912	—	—	—	9,912
Other (j)	1,995	1,710	598	—	4,303
Total	$107,633	$538,576	$102,459	$745,131	$1,493,799

(a) These amounts represent principal on long-term debt.
(b) These amounts represent interest on long-term debt.
(c) These amounts represent undiscounted future minimum rental commitments under noncancellable operating leases.
(d) These amounts represent undiscounted future minimum rental commitments under noncancellable capital leases.
(e) These amounts represent service commitments to various telecommunication providers.
(f) These amounts represent the holdback amounts in connection with certain business acquisitions.
(g) These amounts represent the contingent earn-out liabilities in connection with certain business acquisitions.
(h) These amounts represent commitments related to the transition tax on unrepatriated foreign earnings. The Internal Revenue Service ("IRS") has issued guidance indicating that an overpayment of 2017 federal income tax will first be applied to unpaid transition tax with any excess applied to subsequent tax years or refunded. As of December 31, 2018, the 2017 federal tax return overpayment was reclassified from taxes payable (short-term liability) to taxes payable (long-term liability). The December 31, 2018 balance sheet amount for the transition tax long-term obligation has been reduced to reflect the 2017 federal overpayment.
(i) These amounts represent health and dental insurance plans in connection to self-insurance.
(j) These amounts primarily represent certain consulting and Board of Director fee arrangements, software license commitments and others.

As of December 31, 2018, our liability for uncertain tax positions was $59.6 million. The future payments related to uncertain tax positions have not been presented in the table above due to the uncertainty of the amounts and timing of cash settlement with the taxing authorities.

We have not presented contingent consideration associated with acquisitions (other than the $20.0 million in contingent consideration associated with the acquisition of Humble Bundle) in the table above due to the uncertainty of the amounts and the timing of cash settlements.

Off-Balance Sheet Arrangements

We are not party to any material off-balance sheet arrangements.

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Item 7A. Quantitative and Qualitative Disclosures About Market Risk

The following discussion of the market risks we face contains forward-looking statements. Forward-looking statements are subject to risks and uncertainties. Actual results could differ materially from those discussed in the forward-looking statements. Readers are cautioned not to place undue reliance on these forward-looking statements, which reflect management's opinions only as of the date hereof. j2 Global undertakes no obligation to revise or publicly release the results of any revision to these forward-looking statements, except as required by law. Readers should carefully review the risk factors described in this document as well as in other documents we file from time to time with the SEC, including the Quarterly Reports on Form 10-Q and any Current Reports on Form 8-K filed or to be filed by us in 2019.

Interest Rate Risk

Our exposure to market risk for changes in interest rates relates primarily to our investment portfolio. The primary objectives of our investment activities are to preserve our principal while at the same time maximizing yields without significantly increasing risk. To achieve these objectives, we maintain our portfolio of cash equivalents and investments in a mix of instruments that meet high credit quality standards, as specified in our investment policy or otherwise approved by the Board of Directors. Our cash and cash equivalents are not subject to significant interest rate risk due to the short maturities of these instruments. As of December 31, 2018, the carrying value of our cash and cash equivalents approximated fair value. Our return on these investments is subject to interest rate fluctuations.

As of December 31, 2018, we had investments in debt securities with effective maturities greater than one year of approximately $21.4 million. As of December 31, 2018 and December 31, 2017, we had cash and cash equivalent investments primarily in money market funds with maturities of 90 days or less of $209.5 million and $350.9 million, respectively. We do not have interest rate risk on our outstanding long-term debt as these arrangements have fixed interest rates.

We cannot ensure that future interest rate movements will not have a material adverse effect on our future business, prospects, financial condition, operating results and cash flows. To date, we have not entered into interest rate hedging transactions to control or minimize certain of these risks.

Foreign Currency Risk

We conduct business in certain foreign markets, primarily in Canada, Australia and the European Union. Our principal exposure to foreign currency risk relates to investment and inter-company debt in foreign subsidiaries that transact business in functional currencies other than the U.S. Dollar, primarily the Australian Dollar, the Canadian Dollar, the Euro, the Hong Kong Dollar, the Japanese Yen, the New Zealand Dollar, the Norwegian Kroner and the British Pound Sterling. If we are unable to settle our short-term intercompany debts in a timely manner, we remain exposed to foreign currency fluctuations.

As we expand our international presence, we become further exposed to foreign currency risk by entering new markets with additional foreign currencies. The economic impact of currency exchange rate movements is often linked to variability in real growth, inflation, interest rates, governmental actions and other factors. These changes, if material, could cause us to adjust our financing and operating strategies.

As currency exchange rates change, translation of the income statements of the international businesses into U.S. Dollars affects year-over-year comparability of operating results, the impact of which is immaterial to the comparisons set forth in this Annual Report on Form 10-K.

Historically, we have not hedged translation risks because cash flows from international operations were generally reinvested locally; however, we may do so in the future. Our objective in managing foreign exchange risk is to minimize the potential exposure to changes that exchange rates might have on earnings, cash flows and financial position.

For the years ended December 31, 2018, 2017 and 2016, foreign exchange losses amounted to $2.3 million, $5.8 million and $0.7 million, respectively. The decrease in losses to our earnings in the current period were primarily attributable to decreased inter-company balances between the periods in foreign subsidiaries that were in functional currencies other than the U.S. Dollar. Foreign exchange losses were not material to our earnings in 2018, 2017 and 2016, respectively.

Cumulative translation adjustments, net of tax, included in other comprehensive income for the years ended December 31, 2018, 2017 and 2016, was $(15.5) million, $25.6 million, and $(23.1) million respectively.

We currently do not have derivative financial instruments for hedging, speculative or trading purposes and therefore are not subject to such hedging risk. However, we may in the future engage in hedging transactions to manage our exposure to fluctuations in foreign currency exchange rates.

Item 8. Financial Statements and Supplementary Data

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Shareholders and Board of Directors
j2 Global, Inc.
Los Angeles, California

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of j2 Global, Inc. (the “Company”) and subsidiaries as of December 31, 2018 and 2017, the related consolidated statements of income and comprehensive income, stockholders’ equity, and cash flows for each of the three years in the period ended December 31, 2018, and the related notes and schedule (collectively referred to as the “consolidated financial statements”). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company and subsidiaries at December 31, 2018 and 2017, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2018, in conformity with accounting principles generally accepted in the United States of America.

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, 2018, based on criteria established in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (“COSO”) and our report dated March 1, 2019, expressed an unqualified opinion thereon.

Change in Accounting Method Related to Revenue

As discussed in Notes 2 and 3 to the consolidated financial statements, the Company has changed its method for accounting for revenue from contracts with customers effective January 1, 2018 as a result of adopting Accounting Standards Codification 606, Revenue from Contract with Customers. The Company adopted this new revenue standard using a modified retrospective approach.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company’s management. Our responsibility is to express an opinion on the Company’s 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/ BDO USA, LLP

We have served as the Company's auditor since 2014.

Los Angeles, California
March 1, 2019

j2 GLOBAL, INC. AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
December 31, 2018 and 2017
(In thousands, except share amounts)

	2018	2017
ASSETS		
Cash and cash equivalents	$209,474	$350,945
Accounts receivable, net of allowances of $10,422 and $8,701, respectively	221,615	234,195
Prepaid expenses and other current assets	29,242	35,287
Total current assets	460,331	620,427
Long-term investments	83,828	57,722
Property and equipment, net	98,813	79,773
Trade names, net	142,888	123,947
Patent and patent licenses, net	7,346	10,871
Customer relationships, net	191,208	193,606
Goodwill	1,380,376	1,196,611
Other purchased intangibles, net	185,026	157,327
Other assets	11,014	12,809
TOTAL ASSETS	$2,560,830	$2,453,093
LIABILITIES AND STOCKHOLDERS' EQUITY		
Accounts payable and accrued expenses	$166,521	$169,837
Income taxes payable, current	12,915	—
Deferred revenue, current	127,568	95,255
Other current liabilities	318	10
Total current liabilities	307,322	265,102
Long-term debt	1,013,129	1,001,944
Deferred revenue, noncurrent	13,200	47
Income taxes payable, noncurrent	11,675	43,781
Liability for uncertain tax positions	59,644	52,216
Deferred income taxes, noncurrent	69,048	38,264
Other long-term liabilities	51,068	31,434
TOTAL LIABILITIES	1,525,086	1,432,788
Commitments and contingencies	—	—
Preferred stock - Series A, $0.01 par value. Authorized 6,000 at December 31, 2018 and 2017, respectively; total issued and outstanding is zero and zero at December 31, 2018 and 2017, respectively.	—	—
Preferred stock - Series B, $0.01 par value. Authorized 20,000 at December 31, 2018 and 2017, respectively; total issued and outstanding is zero and zero at December 31, 2018 and 2017, respectively.	—	—
Common stock, $0.01 par value. Authorized 95,000,000 at December 31, 2018 and 2017; total issued 48,082,800 and 47,854,510 shares at December 31, 2018 and 2017, respectively; total outstanding 47,482,800 and 47,854,510 shares at December 31, 2018 and 2017, respectively.	481	479
Additional paid-in capital	354,210	325,854
Treasury stock, at cost (600,000 and zero shares, respectively, at December 31, 2018 and 2017, respectively).	(42,543)	—
Retained earnings	769,575	723,062
Accumulated other comprehensive loss	(45,979)	(29,090)
TOTAL STOCKHOLDERS' EQUITY	1,035,744	1,020,305

TOTAL LIABILITIES AND STOCKHOLDERS’ EQUITY	$2,560,830	$2,453,093

See Notes to Consolidated Financial Statements

j2 GLOBAL, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF INCOME
Years Ended December 31, 2018, 2017 and 2016
(In thousands, except share and per share data)

	2018	2017	2016
Total revenues	$1,207,295	$1,117,838	$874,255
Cost of revenues [1]	201,074	172,313	147,100
Gross profit	1,006,221	945,525	727,155
Operating expenses:			
Sales and marketing [1]	338,304	330,296	206,871
Research, development and engineering [1]	48,370	46,004	38,046
General and administrative [1]	375,267	323,517	239,672
Total operating expenses	761,941	699,817	484,589
Income from operations	244,280	245,708	242,566
Interest expense, net	61,987	67,777	41,370
Other expense (income), net	4,706	(22,035)	(10,243)
Income before income taxes and net loss in earnings of equity method investment	177,587	199,966	211,439
Income tax expense	44,760	60,541	59,000
Net loss in earnings of equity method investment	4,140	—	—
Net income	$128,687	$139,425	$152,439
Net income per common share:			
Basic	$2.64	$2.89	$3.15
Diluted	$2.59	$2.83	$3.13
Weighted average shares outstanding:			
Basic	47,950,746	47,586,242	47,668,357
Diluted	48,927,791	48,669,027	47,963,226
Cash dividends paid per common share	$1.68	$1.52	$1.36

[1] Includes share-based compensation expense as follows:			
Cost of revenues	$510	$500	$436
Sales and marketing	1,798	1,723	1,782
Research, development and engineering	1,553	1,182	904
General and administrative	24,232	19,332	10,528
Total	$28,093	$22,737	$13,650

See Notes to Consolidated Financial Statements

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j2 GLOBAL, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
Years Ended December 31, 2018, 2017 and 2016
(In thousands)

	2018	2017	2016
Net income	$128,687	$139,425	$152,439
Other comprehensive (loss) income, net of tax:			
Foreign currency translation adjustment	(15,471)	25,559	(23,076)
Change in fair value on available-for-sale investments, net of tax (benefit) expense of ($460), zero and $1,495 for the years ended 2018, 2017 and 2016, respectively	(1,418)	—	(2,449)
Other comprehensive (loss) income, net of tax	(16,889)	25,559	(25,525)
Comprehensive income	$111,798	$164,984	$126,914

See Notes to Consolidated Financial Statements

j2 GLOBAL, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS
Years Ended December 31, 2018, 2017 and 2016
(In thousands)

	2018	2017	2016
Cash flows from operating activities:			
Net income	$128,687	$139,425	$152,439
Adjustments to reconcile net earnings to net cash provided by operating activities:			
Depreciation and amortization	187,174	162,041	122,091
Amortization of financing costs and discounts	11,385	11,952	9,818
Share-based compensation	28,093	22,737	13,650
Provision for doubtful accounts	17,338	13,159	13,169
Deferred income taxes, net	25,050	(21,432)	(13,779)
Loss on extinguishment of debt and related interest expense	—	7,962	—
Gain on sale of businesses	—	(27,681)	—
Changes in fair value of contingent consideration	18,944	2,300	4,850
Gain on available-for-sale investment	—	—	(7,716)
Loss on equity investments	10,506	—	—
Decrease (increase) in:			
Accounts receivable	4,034	(37,546)	(30,687)
Prepaid expenses and other current assets	2,211	4,001	(957)
Other assets	2,391	(2,712)	(497)
Increase (decrease) in:			
Accounts payable and accrued expenses	(35,220)	(34,116)	6,363
Income taxes payable	(29,042)	14,888	25,409
Deferred revenue	11,991	941	(4,213)
Liability for uncertain tax positions	7,694	4,936	10,620
Other long-term liabilities	10,089	3,564	(18,173)
Net cash provided by operating activities	401,325	264,419	282,387
Cash flows from investing activities:			
Purchases of equity method investment	(36,635)	—	—
Maturity of investments	—	—	241,817
Purchases of available-for-sale investments	(500)	(4)	(80,918)
Purchases of property and equipment	(56,379)	(39,595)	(24,746)
Acquisition of businesses, net of cash received	(312,430)	(174,951)	(580,691)
Proceeds from sale of businesses, net of cash divested	—	58,300	—
Purchases of intangible assets	(669)	(2,240)	(4,321)
Net cash used in investing activities	(406,613)	(158,490)	(448,859)
Cash flows from financing activities:			
Issuance of long-term debt, net	—	636,485	—
Payment of debt	(2,204)	(255,000)	—
Proceeds from line of credit, net	—	44,981	178,710
Repayment of line of credit	—	(225,000)	—
Repurchase of common stock	(47,102)	(9,850)	(56,496)
Issuance of common stock under employee stock purchase plan	2,084	259	254
Exercise of stock options	1,540	1,108	3,570
Dividends paid	(81,679)	(73,469)	(65,835)
Deferred payments for acquisitions	(3,558)	(7,637)	(20,832)
Other	(443)	(54)	1,779

Net cash (used in) provided by financing activities	(131,362)	111,823	41,150
Effect of exchange rate changes on cash and cash equivalents	(4,821)	9,243	(6,258)
Net change in cash and cash equivalents	(141,471)	226,995	(131,580)
Cash and cash equivalents at beginning of year	350,945	123,950	255,530
Cash and cash equivalents at end of year	$209,474	$350,945	$123,950

See Notes to Consolidated Financial Statements

j2 GLOBAL, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
Years Ended December 31, 2018, 2017 and 2016
(in thousands, except share amounts)

	Common stock		Additional paid-in	Treasury stock		Retained	Accumulated other comprehensive	Total Stockholders'
	Shares	Amount	capital	Shares	Amount	earnings	income/(loss)	Equity
Balance, January 1, 2016	47,950,677	$ 479	$ 292,064	—	$—	$ 626,789	$ (29,124)	$ 890,208
Net income	—	—	—	—	—	152,439	—	152,439
Other comprehensive income, net of tax expense $1,495	—	—	—	—	—	—	(25,525)	(25,525)
Dividends	—	—	—	—	—	(65,835)	—	(65,835)
Exercise of stock options	142,870	1	3,569	—	—	—	—	3,570
Issuance of shares under Employee Stock Purchase Plan	3,918	—	254	—	—	—	—	254
Vested restricted stock	270,098	3	(3)	—	—	—	—	—
Repurchase and retirement of common stock	(1,015,584)	(10)	(3,344)	—	—	(53,142)	—	(56,496)
Exchange of Series B preferred stock	91,737	1	(1)	—	—	—	—	—
Share based compensation	—	—	13,519	—	—	131	—	13,650
Excess tax benefit on share based compensation	—	—	2,271	—	—	—	—	2,271
Balance, December 31, 2016	47,443,716	$ 474	$ 308,329	—	$—	$ 660,382	$ (54,649)	$ 914,536
Net income	—	—	—	—	—	139,425	—	139,425
Other comprehensive income, net of tax of zero	—	—	—	—	—	—	25,559	25,559
Dividends	—	—	—	—	—	(73,469)	—	(73,469)
Exercise of stock options	38,183	1	1,107	—	—	—	—	1,108
Issuance of shares under Employee Stock Purchase Plan	3,283	—	259	—	—	—	—	259
Vested restricted stock	397,781	4	(4)	—	—	—	—	—
Repurchase and retirement of common stock	(117,076)	(1)	(6,441)	—	—	(3,408)	—	(9,850)
Exchange of Series B preferred stock	88,623	1	(1)	—	—	—	—	—
Share based compensation	—	—	22,605	—	—	132	—	22,737
Balance, December 31, 2017	47,854,510	$ 479	$ 325,854	—	$—	$ 723,062	$ (29,090)	$ 1,020,305
Cumulative effect of change in accounting principle	—	—	—	—	—	1,599	—	1,599
Net income	—	—	—	—	—	128,687	—	128,687
Other comprehensive income, net of tax benefit	—	—	—	—	—	—	(16,889)	(16,889)

($460)								
Dividends	—	—	—	—	—	(82,573)	—	(82,573)
Exercise of stock options	67,898	1	1,539	—	—	—	—	1,540
Issuance of shares under Employee Stock Purchase Plan	33,262	—	2,084	—	—	—	—	2,084
Vested restricted stock	169,512	2	(2)	—	—	—	—	—
Repurchase and retirement of common stock	(52,912)	(1)	(3,230)	—	—	(1,328)	—	(4,559)
Exchange of Series B preferred stock	10,530	—	—	—	—	—	—	—
Repurchase of shares	—	—	—	(600,000)	(42,543)	—	—	(42,543)
Share based compensation	—	—	27,965	—	—	128	—	28,093
Balance, December 31, 2018	48,082,800	$ 481	$ 354,210	(600,000)	$ (42,543)	$ 769,575	$ (45,979)	$ 1,035,744

See Notes to Consolidated Financial Statements

j2 GLOBAL, INC. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
DECEMBER 31, 2018, 2017 and 2016

1. The Company

j2 Global, Inc., together with its subsidiaries ("j2 Global", the "Company", "our", "us", or "we"), is a leading provider of intern services. Through our Cloud Services business, we provide cloud services to consumers and businesses and license our intellectual property ("IP") to third parties. In addition, the Cloud Services business includes fax, voice, backup, security and email marketing products. Our Digital Media business specializes in the technology, gaming, broadband, business to business ("B2B"), healthcare, and international markets, offering content, tools and services to consumers and businesses.

2. Basis of Presentation and Summary of Significant Accounting Policies

(a) Principles of Consolidation

The accompanying consolidated financial statements include the accounts of j2 Global and its direct and indirect wholly-owned subsidiaries. All intercompany accounts and transactions have been eliminated in consolidation.

On August 10, 2016, j2 Cloud Services, Inc., a Delaware corporation and subsidiary of the Company, converted into a Delaware limited liability company which continues as j2 Cloud Services, LLC.

On August 12, 2016, all of the equity interests in Ziff Davis, LLC, a Delaware limited liability company, and all of the equity interests in Advanced Messaging Technologies, Inc., a Delaware corporation, held by j2 Cloud Services, LLC, a Delaware limited liability company, were distributed to j2 Global, the parent company of j2 Cloud Services, LLC.

(b) Use of Estimates

The preparation of consolidated financial statements in accordance with accounting principles generally accepted in the United States of America ("GAAP") requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements, including judgments about investment classifications and the reported amounts of net revenue and expenses during the reporting period. The Company believes that its most significant estimates are those related to revenue recognition, valuation and impairment of investments, its assessment of ownership interests as variable interest entities and the related determination of consolidation, share-based compensation expense, assets acquired and liabilities assumed in connection with business combinations, long-lived and intangible asset impairment, contingent consideration, income taxes and contingencies and allowance for doubtful accounts. On an ongoing basis, management evaluates its estimates based on historical experience and on various other factors that the Company believes to be reasonable under the circumstances. Actual results could materially differ from those estimates.

(c) Allowances for Doubtful Accounts

j2 Global reserves for receivables it may not be able to collect. The reserves for the Company's Cloud Services business are typically driven by the volume of credit card declines and past due invoices and are based on historical experience as well as an evaluation of current market conditions. These reserves for the Company's Digital Media business are typically driven by past due invoices based on historical experience. On an ongoing basis, management evaluates the adequacy of these reserves.

(d) Revenue Recognition

Accounting Standard Codification ("ASC") Topic 605, Revenue Recognition ("Topic 605")

j2 Global recognizes revenue when persuasive evidence of an arrangement exists, services have been provided, the sales price is fixed and determinable and collection is probable.

Principal vs. Agent

The Company determines whether revenue should be reported on a gross or net basis by assessing whether the Company is acting as the principal or an agent in the transaction. If the Company is acting as the principal in a transaction, the Company reports revenue on a gross basis. If the Company is acting as an agent in a transaction, the Company reports revenue on a net basis. In determining whether the Company acts as the principal or an agent, the Company follows the accounting guidance under Topic 605 for principal-agent considerations and places the most weight on three factors: whether or not the Company (i) is the primary obligor in the arrangement, (ii) has latitude in determining pricing and (iii) bears credit risk.

ASC Topic 606, Revenue from Contracts with Customers ("Topic 606", "ASC 606" or the "new revenue standard")

j2 Global recognizes revenue when the Company satisfies its obligation by transferring control of the goods or services to its customers in an amount that reflects the consideration to which the Company expects to be entitled in exchange for those goods or services (see Note 3 - Revenues).

Principal vs. Agent

The Company determines whether revenue should be reported on a gross or net basis by assessing whether the Company is acting as the principal or an agent in the transaction. If the Company is acting as the principal in a transaction, the Company reports revenue on a gross basis. If the Company is acting as an agent in a transaction, the Company reports revenue on a net basis. In determining whether the Company acts as the principal or an agent, the Company follows the accounting guidance under Topic 606 for principal-agent considerations and assesses: (i) if another party is involved in providing goods or services to the customer and (ii) whether the Company controls the specified goods or services prior to transferring control to the customer.

Sales Taxes

The Company has made an accounting policy election to exclude from the measurement of the transaction price all taxes assessed by a governmental authority that are (i) both imposed on and concurrent with a specific revenue-producing transaction and (ii) collected by the Company from a customer.

(e) Fair Value Measurements

j2 Global complies with the provisions of Financial Accounting Standards Board ("FASB") ASC Topic No. 820, Fair Value Measurements and Disclosures ("ASC 820"), in measuring fair value and in disclosing fair value measurements. ASC 820 provides a framework for measuring fair value and expands the disclosures required for fair value measurements of financial and non-financial assets and liabilities.

As of December 31, 2018, the carrying values of cash and cash equivalents, accounts receivable, interest receivable, accounts payable, accrued expenses, interest payable, customer deposits and long-term debt are reflected in the financial statements at cost. With the exception of certain investments and long-term debt, cost approximates fair value due to the short-term nature of such instruments. The fair value of the Company's outstanding debt was determined using the quoted market prices of debt instruments with similar terms and maturities. As of the same dates, the carrying value of other long-term liabilities approximated fair value as the related interest rates approximate rates currently available to j2 Global.

(f) Cash and Cash Equivalents

j2 Global considers cash equivalents to be only those investments that are highly liquid, readily convertible to cash and with maturities of three months or less at the purchase date.

(g) Investments

j2 Global accounts for its investments in debt securities in accordance with ASC Topic No. 320, Investments - Debt Securities (“ASC 320”). Debt investments are typically comprised of corporate debt securities. j2 Global determines the appropriate classification of its investments at the time of acquisition and evaluates such determination at each balance sheet date. Trading securities are those investments that the Company intends to sell within a few hours or days and are carried at fair value, with unrealized gains and losses included in investment income. Available-for-sale debt securities are those investments j2 Global does not intend to hold to maturity and can be sold. Available-for-sale securities are carried at fair value with unrealized gains and losses included in other comprehensive income. Held-to-maturity securities are those investments which the Company has the ability and intent to hold until maturity and are recorded at amortized cost. All debt securities are accounted for on a specific identification basis.

The Company accounts for its investments in equity securities in accordance with ASC Topic No. 321, Investments - Equity Securities (“ASC 321”) which requires the accounting for equity investments (other than those accounted for using the equity method of accounting) generally be measured at fair value for equity securities with readily determinable fair values. For equity securities without a readily determinable fair value that are not accounted for by the equity method, the Company measures the equity security using cost, less impairment, if any, and plus or minus observable price changes arising from orderly transactions in the same or similar investment from the same issuer. Any unrealized gains or losses will be reported in current earnings (see Note 5 - Investments).

(h) Variable Interest Entities (“VIE”)

A VIE requires consolidation by the entity’s primary beneficiary. The Company evaluates its investments in entities in which it is involved to determine if the entity is a VIE and if so, whether it holds a variable interest and is the primary beneficiary. The Company has determined that it holds a variable interest in its investment as a limited partner in the OCV Fund I, LP (“OCV Fund”, “OCV” or the “Fund”). In determining whether the Company is deemed to be the primary beneficiary of the VIE, both of the following characteristics must be present:

a) the Company has the power to direct the activities of the VIE that most significantly impacts the VIEs economic performance (the power criterion); and

b) the Company has the obligation to absorb losses of the VIE, or the right to receive benefits of the VIE, that could potentially be significant to the VIE (the economic criterion).

The Company has concluded that, as a limited partner, although the obligations to absorb losses or benefit from the gains is not insignificant, the Company does not have “power” over OCV because it does not have the ability to direct the significant decisions which impact the economics of OCV. j2 believes that the OCV general partner, as a single decision maker, holds the ability to make the decisions about the activities that most significantly impact the OCV Fund’s economic performance. As a result, the Company has concluded that it will not consolidate OCV, as it is not the primary beneficiary of the OCV Fund, and will account for this investment under the equity-method of accounting. See Note 5, “Investments”.

The Company recognizes its equity in the net earnings or losses relating to the investment in OCV on a one-quarter lag due to the timing and availability of financial information from OCV. If the Company becomes aware of a significant decline in value, the loss will be recorded in the period in which the Company identifies the decline.

(i) Debt Issuance Costs and Debt Discount

j2 Global capitalizes costs incurred with borrowing and issuance of debt securities and records debt issuance costs and discounts as a reduction to the debt amount. These costs and discounts are amortized and included in interest expense over the life of the borrowing or term of the credit facility using the effective interest method.

(j) Derivative Instruments

j2 Global currently holds an embedded derivative instrument related to contingent interest in connection with its 3.25% Convertible Notes issued on June 10, 2014. This embedded derivative instrument is carried at fair value with changes recorded to interest expense (see Note 7 - Fair Value Measurements).

(k) Concentration of Credit Risk

All of the Company’s cash, cash equivalents and marketable securities are invested at major financial institutions primarily within the United States, United Kingdom and Ireland. These institutions are required to invest the Company’s cash in accordance with the Company’s investment policy with the principal objectives being preservation of capital, fulfillment of liquidity needs and above market returns commensurate with preservation of capital. The Company’s investment policy also requires that investments in marketable securities be in only highly rated instruments, with limitations on investing in securities of any single issuer. However, these investments are not insured against the possibility of a total or near complete loss of earnings or principal and are inherently subject to the credit risk related to the continued credit worthiness of the underlying issuer and general credit market risks. At December 31, 2018, the Company’s cash and cash equivalents were maintained in accounts in qualifying financial institutions that are insured up to the limit determined by the applicable governmental agency. These institutions are primarily in the United States and United Kingdom, however, the Company has accounts within several other countries including Australia, Austria, China, Denmark, France, Germany, Italy, Japan, New Zealand, Netherlands, Norway, and Sweden.

(l) Foreign Currency

Some of j2 Global’s foreign subsidiaries use the local currency of their respective countries as their functional currency. Assets and liabilities are translated at exchange rates prevailing at the balance sheet dates. Revenues, costs and expenses are translated into U.S. Dollars at average exchange rates for the period. Gains and losses resulting from translation are recorded as a component of accumulated other comprehensive income/(loss). Net translation (loss)/gain was $(15.5) million, $25.6 million and $(23.1) million for the years ended December 31, 2018, 2017 and 2016, respectively. Realized gains and losses from foreign currency transactions are recognized within other expense (income), net. Foreign exchange losses amounted to $2.3 million, $5.8 million and $0.7 million for the years ended December 31, 2018, 2017 and 2016, respectively.

(m) Property and Equipment

Property and equipment are stated at cost. Equipment under capital leases is stated at the present value of the minimum lease payments. Depreciation is calculated using the straight-line method over the estimated useful lives of the assets. The estimated useful lives of property and equipment range from 1 to 10 years. Fixtures, which are comprised primarily of leasehold improvements and equipment under capital leases, are amortized on a straight-line basis over their estimated useful lives or for leasehold improvements, the related lease term, if less. The Company has capitalized certain internal use software and website development costs which are included in property and equipment. The estimated useful life of costs capitalized is evaluated for each specific project and ranges from 1 to 5 years.

(n) Impairment or Disposal of Long-Lived Assets

j2 Global accounts for long-lived assets, which include property and equipment and identifiable intangible assets with finite useful lives (subject to amortization), in accordance with the provisions of FASB ASC Topic No. 360, Property, Plant, and Equipment (“ASC 360”), which requires that long-lived assets be reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability is measured by comparing the carrying amount of an asset to the expected undiscounted future net cash flows generated by the asset. If it is determined that the asset may not be recoverable, and if the carrying amount of an asset exceeds its estimated fair value, an impairment charge is recognized to the extent of the difference.

j2 Global assessed whether events or changes in circumstances have occurred that potentially indicate the carrying amount of long-lived assets may not be recoverable. No impairment was recorded in fiscal year 2018, 2017 or 2016.

The Company classifies its long-lived assets to be sold as held for sale in the period (i) it has approved and committed to a plan to sell the asset, (ii) the asset is available for immediate sale in its present condition, (iii) an active program to locate a buyer and other actions required to sell the asset have been initiated, (iv) the sale of the asset is probable, (v) the asset is being actively marketed for sale at a price that is reasonable in relation to its current fair value, and (vi) it is unlikely that significant changes to the plan will be made or that the plan will be withdrawn. The Company initially measures a long-lived asset that is classified as held for sale at the lower of its carrying value or fair value less any costs to sell. Any loss resulting from this measurement is recognized in the period in which the held for sale criteria are met. Conversely, gains are not recognized on the sale of a long-lived asset until the date of sale. Upon designation as an asset held for sale, the Company stops recording depreciation expense on the asset. The Company assesses the fair value of a long-lived asset less any costs to sell at each reporting period and until the asset is no longer classified as held for sale.

(o) Goodwill and Intangible Assets

Goodwill represents the excess of the purchase price over the fair value of the net tangible and identifiable intangible assets acquired in a business combination. Intangible assets resulting from the acquisitions of entities accounted for using the purchase method of accounting are recorded at the estimated fair value of the assets acquired. Identifiable intangible assets are comprised of purchased customer relationships, trademarks and trade names, developed technologies and other intangible assets. Intangible assets subject to amortization are amortized over the period of estimated economic benefit ranging from 1 to 20 years. In accordance with FASB ASC Topic No. 350, Intangibles - Goodwill and Other (“ASC 350”), goodwill and other intangible assets with indefinite lives are not amortized but tested annually for impairment or more frequently if j2 Global believes indicators of impairment exist. In connection with the annual impairment test for goodwill, the Company has the option to perform a qualitative assessment in determining whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount. If the Company determines that it was more likely than not that the fair value of the reporting unit is less than its carrying amount, then it performs the impairment test upon goodwill. The impairment test involves comparing the fair values of the applicable reporting units with their aggregate carrying values, including goodwill. The Company generally determines the fair value of its reporting units using the income approach methodology of valuation. If the carrying value of a reporting unit exceeds the reporting unit’s fair value, an impairment loss is recognized for the difference. In accordance with ASC 350, the Company performed the annual impairment test for goodwill for fiscal year 2018 using a qualitative assessment primarily taking into consideration macroeconomic, industry and market conditions, overall financial performance and any other relevant company-specific events. The Company performed the annual impairment test for intangible assets with indefinite lives for fiscal 2018 using a qualitative assessment primarily taking into consideration macroeconomic, industry and market conditions, overall financial performance and any other relevant company-specific events. j2 Global concluded that there were no impairments in 2018, 2017 and 2016.

(p) Contingent Consideration

j2 Global measures the contingent earn-out liabilities in connection with acquisitions at fair value on a recurring basis using significant unobservable inputs classified within Level 3 of the fair value hierarchy (see Note 7 - Fair Value Measurements). The Company may use various valuation techniques depending on the terms and conditions of the contingent consideration including a Monte-Carlo simulation. This simulation uses a probability distribution for each significant input to produce hundreds or thousands of possible outcomes and the results are analyzed to determine probabilities of different outcomes occurring. Significant increases or decreases to these inputs in isolation would result in a significantly higher or lower liability with a higher liability capped by the contractual maximum of the contingent earn-out obligation. Ultimately, the liability will be equivalent to the amount paid, and the difference between the fair value estimate and amount paid will be recorded in earnings. The amount paid that is less than or equal to the liability on the acquisition date is reflected as cash used in financing activities in our consolidated statements of cash flows. Any amount paid in excess of the liability on the acquisition date is reflected as cash used in operating activities.

j2 Global reviews and re-assesses the estimated fair value of contingent consideration on a quarterly basis, and the updated fair value could be materially different from the initial estimates or prior amounts. Changes in the estimated fair value of our contingent earn-out liabilities are reported in operating income. Adjustments to the estimated fair value related to changes in all other unobservable inputs are reported in operating income.

(q) Self-Insurance Program

j2 Global provides health and dental insurance plans to certain of its employees through a self-insurance structure. The Company has secured reinsurance in the form of a two tiered stop-loss coverage that limits the exposure arising from any claims made. Self-insurance claims filed and claims incurred but not reported are accrued based on management's estimate of the discounted ultimate costs for self-insured claims incurred using actuarial assumptions followed in the insurance industry and historical experience. Although management believes it has the ability to reasonably estimate losses related to claims, it is possible that actual results could differ from recorded self-insurance liabilities.

(r) Income Taxes

j2 Global's income is subject to taxation in both the U.S. (federal and state) and numerous foreign jurisdictions. Significant judgment is required in evaluating the Company's tax positions and determining its provision for income taxes. During the ordinary course of business, there are many transactions and calculations for which the ultimate tax determination is uncertain. j2 Global establishes reserves for tax-related uncertainties based on estimates of whether, and the extent to which, additional taxes will be due. These reserves for tax contingencies are established when the Company believes that certain positions might be challenged despite the Company's belief that its tax return positions are fully supportable. j2 Global adjusts these reserves in light of changing facts and circumstances, such as the outcome of a tax audit or lapse of a statute of limitations. The provision for income taxes includes the impact of reserve provisions and changes to reserves that are considered appropriate.

j2 Global accounts for income taxes in accordance with FASB ASC Topic No. 740, Income Taxes ("ASC 740"), which requires that deferred tax assets and liabilities be recognized using enacted tax rates for the effect of temporary differences between the book and tax basis of recorded assets and liabilities. ASC 740 also requires that deferred tax assets be reduced by a valuation allowance if it is more likely than not that some or all of the net deferred tax assets will not be realized. The valuation allowance is reviewed quarterly based upon the facts and circumstances known at the time. In assessing this valuation allowance, j2 Global reviews historical and future expected operating results and other factors, including its recent cumulative earnings experience, expectations of future taxable income by taxing jurisdiction and the carryforward periods available for tax reporting purposes, to determine whether it is more likely than not that deferred tax assets are realizable.

ASC 740 provides guidance on the minimum threshold that an uncertain income tax benefit is required to meet before it can be recognized in the financial statements and applies to all income tax positions taken by a company. ASC 740 contains a two-step approach to recognizing and measuring uncertain income tax positions. The first step is to evaluate the tax position for recognition by determining if the weight of available evidence indicates that it is more likely than not that the position will be sustained on audit, including resolution of related appeals or litigation processes, if any. The second step is to measure the tax benefit as the largest amount that is more than 50% likely of being realized upon settlement. If it is not more likely than not that the benefit will be sustained on its technical merits, no benefit will be recorded. Uncertain income tax positions that relate only to timing of when an item is included on a tax return are considered to have met the recognition threshold. j2 Global recognized accrued interest and penalties related to uncertain income tax positions in income tax expense on its consolidated statements of income.

(s) Share-Based Compensation

j2 Global accounts for share-based awards in accordance with the provisions of FASB ASC Topic No. 718, Compensation - Stock Compensation ("ASC 718"). Accordingly, j2 Global measures share-based compensation expense at the grant date, based on the fair value of the award, and recognizes the expense over the employee's requisite service period using the straight-line method. The measurement of share-based compensation expense is based on several criteria, including but not limited to the valuation model used and associated input factors, such as expected term of the award, stock price volatility, risk free interest rate, dividend rate and award cancellation rate. These inputs are subjective and are determined using management's judgment. If differences arise between the assumptions used in determining share-based compensation expense and the actual factors, which become known over time, j2 Global may change the input factors used in determining future share-based compensation expense. Any such changes could materially impact the Company's results of operations in the period in which the changes are made and in periods thereafter. The Company estimates the expected term based upon the historical exercise behavior of our employees.

j2 Global accounts for option grants to non-employees in accordance with FASB ASC Topic No. 505, Equity, whereby the fair value of such options is determined using the Black-Scholes option pricing model at the earlier of the date at which the non-employee’s performance is complete or a performance commitment is reached.

(t) Earnings Per Common Share (“EPS”)

EPS is calculated pursuant to the two-class method as defined in ASC Topic No. 260, Earnings per Share (“ASC 260”), which specifies that all outstanding unvested share-based payment awards that contain rights to nonforfeitable dividends or dividend equivalents are considered participating securities and should be included in the computation of EPS pursuant to the two-class method.

Basic EPS is calculated by dividing net distributed and undistributed earnings allocated to common shareholders, excluding participating securities, by the weighted-average number of common shares outstanding. The Company’s participating securities consist of its unvested share-based payment awards that contain rights to nonforfeitable dividends or dividend equivalents. Diluted

EPS includes the determinants of basic EPS and, in addition, reflects the impact of other potentially dilutive shares outstanding during the period. The dilutive effect of participating securities is calculated under the more dilutive of either the treasury method or the two-class method.

(u) Research, Development and Engineering

Research, development and engineering costs are expensed as incurred. Costs for software development incurred subsequent to establishing technological feasibility, in the form of a working model, are capitalized and amortized over their estimated useful lives.

(v) Segment Reporting

FASB ASC Topic No. 280, Segment Reporting ("ASC 280"), establishes standards for the way that public business enterprises report information about operating segments in their annual consolidated financial statements and requires that those enterprises report selected information about operating segments in interim financial reports. ASC 280 also establishes standards for related disclosures about products and services, geographic areas and major customers. The Company's business segments are based on the organization structure used by the chief operating decision maker for making operating and investment decisions and for assessing performance. The chief operating decision maker views the Company in two businesses: Cloud Services and Digital Media. However, in accordance with the aggregation criteria within ASC Topic 280, j2 Global's operating segments have been aggregated into three reportable segments: (i) Fax and Email Marketing; (ii) Voice, Backup, and Security; and (iii) Digital Media.

(w) Advertising Costs

Advertising costs are expensed as incurred. Advertising costs for the years ended December 31, 2018, 2017 and 2016 was $149.7 million, $143.3 million and $96.8 million, respectively.

(x) Recent Accounting Pronouncements

In May 2014, the FASB issued Accounting Standards Update ("ASU") No. 2014-09, Revenue from Contracts with Customers, as a new Topic, Topic 606. The new revenue recognition standard provides a five-step analysis of transactions to determine when and how revenue is recognized. The core principle is that a company should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. The Company has adopted this ASU and other related ASUs as of January 1, 2018 (the "adoption date") using the cumulative effect method which applied to those contracts which were not completed as of the adoption date. Results for reporting periods beginning after the adoption date are presented under Topic 606, while prior period amounts are not adjusted and continue to be reported in accordance with our historic accounting under ASC 605 as noted above (see Note 3 - Revenues).

In January 2016, the FASB issued ASU No. 2016-01, Financial Instruments - Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities. The amendments in this ASU modify how entities measure equity investments and present changes in the fair value of financial liabilities. Under the new guidance, entities will have to measure equity investments that do not result in consolidation and are not accounted under the equity method at fair value and recognize any changes in fair value in net income unless the investments qualify for the practical expedient exception. An entity may elect to measure an equity security without a readily determinable fair value that does not qualify for the practical expedient to estimate fair value under ASC 820, Fair Value Measurements, and as such these investments may be measured at cost. This ASU is effective for financial statements issued for fiscal years beginning after December 15, 2017, and interim periods within those fiscal years. The Company has adopted this ASU on a prospective basis in the first quarter of 2018 and has determined that investments within the scope of the standard will be recorded at fair value with changes in fair value recognized in earnings which may lead to increased volatility in other expense.

In February 2016, the FASB issued ASU No. 2016-02, Leases. This ASU establishes a right-of-use ("ROU") model that requires a lessee to record a ROU asset and a lease liability on the balance sheet for all leases with terms longer than 12 months. Leases will be classified as either finance or operating, with classification affecting the pattern of expense recognition in the income statement. This ASU and all the related amendments are effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. A modified retrospective transition approach is required for lessees for capital and operating leases existing at, or entered into after, the beginning of the earliest comparative period presented in the financial statements, with certain practical expedients available. In July 2018, the FASB issued ASU No. 2018-10, Codification Improvements to Topic 842, Leases. This ASU is meant to clarify the guidance in ASU No. 2016-02, Leases. This ASU does not change the core principle of the guidance in Topic 842. Instead, the amendments provide clarifying guidance in a few narrow areas. In July 2018, the FASB issued ASU No. 2018-11, Leases (Topic 842): Targeted Improvements. This ASU provides another transition method for entities who have not yet adopted the new leasing standard by allowing entities to initially apply the new standard at the adoption date and recognize a cumulative-effect adjustment to the opening balance of retained earnings in the period of adoption. In addition, this ASU provides a practical expedient to lessors to not separate nonlease components from the associated lease components similar to the expedient that is afforded to lessees. However, the lessor practical expedient is limited to circumstances in which the nonlease component or components otherwise would be accounted for under the new revenue guidance and both (1) the timing and pattern of transfer are the same for the nonlease component(s) and associated lease component and (2) the lease component, if accounted for separately, would be classified as an operating lease. In December 2018, the FASB issued ASU No. 2018-20, Leases (Topic 842): Narrow-Scope Improvements for Lessors. This ASU amends guidance related to sales taxes and other similar taxes collected from lessees, certain lessor costs, and recognition of variable payments for contracts with lease and nonlease components. The ASU provides for an accounting policy election for lessors similar to that provided in ASU 2016-12; it clarifies that costs excluded from the consideration in a contract that are paid directly to a third party by a lessor and reimbursed by the lessee are lessor costs to be accounted for as vendor payments; requires lessors to exclude from variable payments and, thus from lease revenue, lessor costs paid by a lessee directly to a third party; and clarifies the accounting by lessors for variable payments that relate to both a lease component and a nonlease component. The Company will adopt the new lease standard and related amendments as of January 1, 2019. The Company continues to review the analysis performed by its businesses to determine the balance sheet impact as a result of adoption. The most significant changes relate to the recognition of new right-of-use assets and lease liabilities on the balance sheet for operating leases. The Company expects to recognize right-of-use assets ranging from approximately $71 million to $78 million, with corresponding lease liabilities. The accounting for finance leases will remain substantially unchanged.

In addition, the Company has determined that it will elect and apply the available transition practical expedients upon adoption. By electing these practical expedients, the Company will:

- not reassess whether expired or existing contracts contain leases under the new definition of a lease;
- not reassess lease classification for expired or existing leases;
- not reassess whether previously capitalized initial direct costs would qualify for capitalization under Topic 842;

In June 2016, the FASB issued ASU No. 2016-13, Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments. The amendments in this ASU replace the incurred loss impairment methodology in current GAAP with a methodology that reflects expected credit losses and requires consideration of a broader range of reasonable and supportable information to inform credit loss estimates. This ASU is effective for fiscal years, and for interim periods within those fiscal years, beginning after December 15, 2019. In November 2018, the FASB issued ASU No. 2018-19, Codification Improvements to Topic 326, Financial Instruments - Credit Losses. The amendments in this ASU align the implementation date for nonpublic entities' annual financial statements with the implementation date for their interim financial statements. In addition, the amendment clarifies that receivables arising from operating leases are not within the scope of Subtopic 326-20; instead impairment of receivables arising from operating leases should be accounted for in accordance with Topic 842: Leases. This ASU is effective for fiscal years beginning after December 15, 2019, including interim periods within those fiscal years. The adoption of these ASUs is not expected to have a material impact on our financial statements and related disclosures.

In October 2016, the FASB issued ASU 2016-16, Income Taxes (Topic 740): Intra-Entity Transfers of Assets Other than Inventory. The amendments in this ASU reduce the complexity in the accounting standards by allowing the recognition of current and deferred income taxes for an intra-entity asset transfer, other than inventory, when the transfer occurs. Historically, the income tax consequence was not recognized until the asset was sold to an outside party. This ASU is effective for fiscal years, and interim periods within those fiscal years, beginning after December

15, 2017. Early adoption is permitted. The Company has adopted this ASU on a modified retrospective basis in the first quarter of 2018 through a cumulative-effect adjustment directly to retained earnings and has determined that there is no impact on our financial statements and related disclosures as of January 1, 2018.

In January 2017, the FASB issued ASU 2017-01, Business Combinations (Topic 805): Clarifying the Definition of a Business. The amendments in this ASU provide a robust framework to use in determining when a set of assets and activities is a business. This ASU is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2017. Early adoption is permitted and the standard should be applied prospectively. The Company has adopted this ASU on a prospective basis in the first quarter of 2018 and has determined that there is no impact on our financial statements and related disclosures.

In January 2017, the FASB issued ASU No. 2017-04, Intangibles - Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment. The amendments in this ASU simplify the subsequent measurement of goodwill by eliminating Step 2 from the goodwill impairment test and eliminating the requirement for a reporting unit with a zero or negative carrying amount to perform a qualitative assessment. Instead, under this pronouncement, an entity would perform its annual, or interim, goodwill impairment test by comparing the fair value of a reporting unit with its carrying amount and would recognize an impairment change for the amount by which the carrying amount exceeds the reporting unit's fair value; however, the loss recognized is not to exceed the total amount of goodwill allocated to that reporting unit. In addition, income tax effects will be considered, if applicable. This ASU is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2019. Early adoption is permitted and should be adopted on a prospective basis. The Company has adopted this ASU on a prospective basis in the third quarter of 2018 and has determined there to be no impact on our financial statements and related disclosures.

In February 2018, the FASB issued ASU No. 2018-02, Income Statement - Reporting Comprehensive Income (Topic 220): Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income. The amendments in this ASU allow reclassification from accumulated other comprehensive income to retained earnings for stranded tax effects resulting from the U.S. federal tax legislation, the Tax Cuts and Jobs Act of 2017 ("2017 Tax Act"). Consequently, the amendments eliminate the stranded tax effects resulting from the 2017 Tax Act and will improve the usefulness of information reported to financial statement users. However, because the amendments only relate to the reclassification of the income tax effects of the 2017 Tax Act, the underlying guidance that requires that the effect of a change in tax laws or rates to be included in income from continuing operations is not affected. This ASU is effective for all entities for fiscal years beginning after December 15, 2018, and interim periods within those fiscal years. Early adoption is permitted and should be applied either in the period of adoption or retrospectively to each period (or periods) in which the effect of the change in the U.S. federal corporate income tax rate in the 2017 Tax Act is recognized. The adoption of this ASU is not expected to have a material impact on our financial statements and related disclosures.

In February 2018, the FASB issued ASU 2018-03, Technical Corrections and Improvements to Financial Instruments - Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities. The amendments in this ASU clarify certain aspects of the guidance issued in ASU 2016-01, Financial Instruments - Overall. As is consistent with other clarifying standards, the amendments are not expected to have a significant effect on the current accounting practice. This ASU is effective for financial statements issued for fiscal years beginning after December 15, 2017, and interim periods beginning after June 15, 2018. Public entities with fiscal years beginning between December 15, 2017 and June 15, 2018 are not required to adopt these amendments until the interim period beginning after June 15, 2018. Early adoption is permitted and should be adopted in conjunction with ASU 2016-01. The Company has adopted this ASU on a prospective basis in the first quarter of 2018 and has determined that investments within the scope of the standard will be recorded at fair value with changes in fair value recognized in earnings which may lead to increased volatility in other expense.

In June 2018, the FASB issued ASU No. 2018-07, Compensation - Stock Compensation (Topic 718): Improvements to Nonemployee Share-Based Payment Accounting. The amendments in this ASU expand the scope of Topic 718 to include share-based payment transactions for acquiring goods and services from nonemployees. The amendments specify that Topic 718 applies to all share-based payment transactions in which a grantor acquires goods or services to be used or consumed in a grantor's own operations by issuing share-based payment awards. The amendments also clarify that Topic 718 does not apply to share-based payments used to effectively provide (1) financing to the issuer or (2) awards granted in conjunction with selling goods or services to customers as part of a contract accounted for under Topic 606, Revenue from Contracts with Customers. This ASU is effective for fiscal years beginning after December 15, 2018, including interim periods within that fiscal year. Early adoption is permitted. The adoption of this ASU is not expected to have a material impact on our financial statements and related disclosures.

In July 2018, the FASB issued ASU No. 2018-09, Codification Improvements. The amendments in this ASU clarify certain aspects of the guidance related to: reporting comprehensive income, debt modification and extinguishment, income taxes related to stock compensation, income taxes related to business combinations, derivatives and hedging, fair value measurements, brokers and dealers liabilities, and plan accounting. This ASU is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2018. The adoption of this ASU is not expected to have a material impact on our financial statements and related disclosures.

In August 2018, the FASB issued ASU No. 2018-13, Fair Value Measurement (Topic 820): Disclosure Framework - Changes to the Disclosure Requirements for Fair Value Measurement. The amendments in this ASU remove, add, and modify certain disclosures. The ASU removes the following disclosure requirements from Topic 820: (1) the amount of and reasons for transfers between Level 1 and Level 2 of the fair value hierarchy; (2) the policy for timing of transfers between levels; (3) the valuation process for Level 3 fair value measurements; and (4) certain other requirements for nonpublic entities. The ASU adds the following disclosure requirements: (1) the changes in unrealized gains and losses for the period included in other comprehensive income for recurring Level 3 fair value measurements held at the end of the reporting period and (2) the range and weighted average of significant unobservable inputs used to develop Level 3 fair value measurements. For certain unobservable inputs, disclosure of other quantitative information may be more appropriate if the entity determines that other quantitative information would be a more reasonable and rational method to reflect the distribution of unobservable inputs used to develop Level 3 fair value measurements. The ASU modifies disclosure requirements in Topic 820 relating to timing of liquidation of an investee's assets, the disclosure of the date when restrictions from redemption might lapse, the intention of the measurement uncertainty disclosure, and certain other requirements for nonpublic entities. This ASU is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2019. The Company is currently evaluating the effect of this ASU on our financial statements and related disclosures.

In August 2018, the FASB issued ASU No. 2018-15, Intangibles - Goodwill and Other - Internal-Use Software (Subtopic 350-40): Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract. The amendments in this ASU align the requirements for capitalizing implementation costs incurred in a hosting arrangement that is a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software (and hosting arrangements that include an internal-use software). The amendments in this ASU require an entity (customer) in a hosting arrangement that is a service to (1) determine which implementation costs to capitalize as an asset related to the service contract and which costs to expense; (2) expense the capitalized implementation costs of a hosting arrangement that is a service contract over the term of the hosting arrangement; (3) apply the existing impairment guidance to the capitalized implementation costs as if the costs were long-lived assets; (4) present the expense related to the capitalized implementation costs in the same line item in the statement of income as the fees associated with the hosting element (service) of the arrangement and classify payments for capitalized implementation costs in the statement of cash flows in the same manner as payments made for fees associated with the hosting arrangements; and (5) present the capitalized implementation costs in the statement of financial position in the same line item that a prepayment for the fees of the associated hosting arrangement would be presented. This ASU is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2019. The Company is currently evaluating the effect of this ASU on our financial statements and related disclosures.

(y) Reclassifications

Certain prior year reported amounts have been reclassified to conform with the 2018 presentation.

3. Revenues

Digital Media

Digital Media revenues are earned primarily from the delivery of advertising services, from subscriptions to services, data and information, and from licensing.

Revenue is earned from the delivery of advertising services on the Company's owned and operated websites and on those websites that are part of Digital Media's advertising network. Depending on the individual contracts with the customer, revenue for these services are recognized over the contract period when any of the following performance obligations are satisfied: (i) when an advertisement is placed for viewing; (ii) when a qualified sales lead is delivered; (iii) when a visitor “clicks through” on an advertisement; or (iv) when commissions are earned upon the sale of an advertised product.

Revenue from subscriptions is earned through the granting of access to, or delivery of, data products or services to customers. Subscriptions cover video games and related content, health information, data and other copyrighted material. Revenues under such agreements are recognized over the contract term for use of the service. Revenues are also earned from listing fees, subscriptions to online publications, and from other sources. Subscription revenues are recognized over time.

j2 Global generates Digital Media revenues through the license of certain assets to clients. Assets are licensed for clients’ use in their own promotional materials or otherwise. Such assets may include logos, editorial reviews, or other copyrighted material. Revenues under such license agreements are recognized over the contract term for use of the asset. Technology assets are also licensed to clients. These assets are recognized over the term of the access period. The Digital Media business also generates revenue from other sources which includes marketing and production services. Such other revenues are generally recognized over the period in which the products or services are delivered. Revenues are no longer generated in 2018 from certain marketing and production services as a result of the sale of certain Digital Media assets during 2017.

j2 Global also generates Digital Media revenues from transactions involving the sale of perpetual software licenses, related software support and maintenance, hardware used in conjunction with its software, and other related services. Revenue is recognized for these software transactions with multiple performance obligations after (i) the Company has had an approved contract and is committed to perform the respective obligations and (ii) the Company can identify and quantify each obligation and its respective selling price. Once the respective performance obligations have been identified and quantified, revenue will be recognized when the obligations are met, either over time or at a point in time depending on the nature of the obligation.

Revenues from software license performance obligations are generally recognized upfront at the point in time that the software is made available to the customer to download and use. Revenues for related software support and maintenance performance obligations are related to technical support provided to customers as needed and unspecified software product upgrades, maintenance releases and patches during the term of the support period when they are available. The Company is obligated to make the support services available continuously throughout the contract period. Therefore, revenues for support contracts are generally recognized ratably over the contractual period the support services are provided. Hardware product and related software performance obligations, such as an operating system or firmware, are highly interdependent and interrelated and are accounted for as a bundled performance obligation. The revenues for this bundled performance obligation are generally recognized at the point in time that the hardware and software products are delivered and ownership is transferred to the customer. Other service revenues are generally recognized over time as the services are performed.

The Company records revenue on a gross basis with respect to revenue generated (i) by the Company serving online display and video advertising across its owned and operated web properties, on third-party sites or on unaffiliated advertising networks; (ii) through the Company’s lead-generation business; and (iii) through the Company’s subscriptions. The Company records revenue on a net basis with respect to revenue paid to the Company by certain third-party advertising networks who serve online display and video advertising across the Company’s owned-and-operated web properties and certain third-party sites.

Cloud Services

The Company’s Cloud Services revenues substantially consist of monthly recurring subscription and usage-based fees, which are primarily paid in advance by credit card. The Company defers the portions of monthly, quarterly, semi-annually and annually recurring subscription and usage-based fees collected in advance of the satisfaction of performance obligations and recognizes them in the period earned.

Along with our numerous proprietary Cloud Services solutions, the Company also generates revenues by reselling various third-party solutions, primarily through our security and online backup lines of business. These third-party solutions, along with our proprietary products, allow the Company to offer customers a variety of solutions to better meet their needs. The Company records revenue on a gross basis with respect to reseller revenue because the Company has control of the specified good or service prior to transferring control to the customer.

j2 Global’s Cloud Services also include patent license revenues generated under license agreements that provide for the payment of contractually determined fully paid-up or royalty-bearing license fees to j2 Global in exchange for the grant of non-exclusive, retroactive and future licenses to our intellectual property, including patented technology. Patent revenues may also consist of revenues generated from the sale of patents. Patent license arrangements are evaluated to determine if they grant the customer a right to access the Company’s intellectual property which is generally recognized over the life of the arrangement or a right to use the Company's intellectual property which is generally recognized at the point in time the license is granted. With regard to royalty-bearing license arrangements, the Company recognizes revenues of license fees earned during the applicable period.

The Cloud Services business also generates revenues by licensing certain technology to third parties. Generally, revenue is recognized over time as the third party uses the licensed technology over the period.

The cumulative effect of the changes made to our consolidated balance sheet as of January 1, 2018 for the adoption of Topic 606 is as follows (in thousands):

	January 1, 2018	Adjustments due to ASU No. 2014-09	December 31, 2017
Balance Sheet			
Assets			
Accounts receivable, net	$234,195	$ —	$234,195
Liabilities			
Deferred revenue, current	93,656	(1,599)	95,255
Deferred revenue, noncurrent	47	—	47
Equity			
Retained earnings	$724,661	$ 1,599	$723,062

The following tables summarize the impact of adopting Topic 606 on the Company's consolidated financial statements (in thousands):

	December 31, 2018		
	As Reported	Adjustments	Balances Without Adoption of ASC 606
Balance Sheet			
Assets			
Accounts receivable, net	$221,615	$ —	$221,615
Liabilities			
Deferred revenue, current	127,568	(5,455)	122,113
Deferred revenue, noncurrent	13,200	—	13,200
Equity			
Retained earnings	$769,575	$ 5,455	$775,030

	2018		
	As Reported	Adjustments	Amounts Without Adoption of ASC 606
Statement of Income			
Revenues			
Total revenues	$1,207,295	$ 7,054	$1,214,349
Expenses			
Total expenses	1,078,608	—	1,078,608
Net income	$128,687	$ 7,054	$135,741
Diluted EPS impact	$2.59	$ 0.14	$2.73

Revenues from external customers classified by revenue source are as follows (in thousands):

	Years Ended December 31,		
Digital Media	2018	2017	2016
Advertising	$468,325	$455,647	$274,763
Subscription	138,689	70,794	32,700
Other	2,360	12,498	—
Total Digital Media revenues	$609,374	$538,939	$307,463
Cloud Services			
Subscription	$597,281	$574,197	$562,345
Other	694	4,759	4,593
Total Cloud Services revenues	$597,975	$578,956	$566,938
Corporate	$6	$—	$—
Elimination of inter-business revenues	(60)	(57)	(146)
Total Revenues	$1,207,295	$1,117,838	$874,255
Timing of revenue recognition			
Point in time	$4,752	$22,559	$14,459
Over time	1,202,543	1,095,279	859,796
Total	$1,207,295	$1,117,838	$874,255

The Company has recorded $80.0 million of revenue for the year ended December 31, 2018 which was previously included in the contract liability balance as of the adoption date.

As of December 31, 2018, the Company acquired $37.1 million of deferred revenue in connection with the Company's business acquisitions (see Note 4 - Business Acquisitions) which are subject to purchase accounting adjustments.

Performance Obligations

The Company's contracts with customers may include multiple performance obligations. For such arrangements, revenues are allocated to each performance obligation based on its relative standalone selling price.

The Company satisfies its performance obligations within the Digital Media business upon delivery of services to its customers. In addition, the Company provides content to its advertising partners which the Company sells to its partners' customer base and receives a revenue share based on the terms of the agreement.

The Company satisfies its performance obligations within the Cloud Services business upon delivery of services to its customers. Payment terms vary by type and location of our customers and the services offered. The term between invoicing and when payment is due is not significant. Due to the nature of the services provided, there are no obligations for returns.

Significant Judgments

In determining whether products and services are considered distinct performance obligations that should be accounted for separately versus together may require significant judgment. Judgment is also required to determine the standalone selling price for each distinct performance obligation.

Performance Obligations Satisfied Over Time

The Company's Digital Media business consists primarily of performance obligations that are satisfied over time. This was determined based on a review of the contracts and the nature of the services offered, where the customer simultaneously receives and consumes the benefit of the services provided. Satisfaction of these performance obligations is evidenced in the following ways:

Advertising

- Website reporting by the Company, the customer, or a third-party contains the delivery evidence needed to satisfy the performance obligations within the advertising contract
- Successfully delivered leads are evidenced by either delivery reports from the Company's internal lead management systems or through e-mail communication and/or other evidence of delivery showing acceptance of leads by the customer
- Commission is evidenced by direct site reporting from the affiliate or via direct confirmation from the customer

Subscription

- Evidence of delivery is contained in the Company's systems or from correspondence with the customer which tracks when a customer accepts delivery of any product, digital keys or download links

The Company has concluded revenue is recognized based on delivery of services over the contract period for advertising and on a straight-line basis over the contract period for subscriptions. The Company believes that the methods described are a faithful depiction of the transfer of goods and services.

The Company's Cloud Services business consists primarily of performance obligations that are satisfied over time. This has been determined based on the fact that the nature of services offered are subscription based and include fax, voice, backup, security and email marketing products where the customer simultaneously receives and consumes the benefit of the services provided regardless of whether the customer uses the services or not. Depending on the individual contracts with the customer, revenue for these services are recognized over the contract period when any of the following materially distinct performance obligations are satisfied:

- Faxing capabilities are provided
- Voice services are delivered
- Email Marketing services are delivered
- Security solutions, including email and endpoint are provided
- Online data Backup capabilities are provided

The Company has concluded that the best measure of progress toward the complete satisfaction of the performance obligation over time is a time-based measure. The Company recognizes revenue on a straight-line basis throughout the subscription period and believes that the method used is a faithful depiction of the transfer of goods and services.

Performance Obligations Satisfied at a Point in Time

The Company's Digital Media business has technology subscriptions that have standalone functionality. As a result, they are considered to be functional intellectual property where the performance obligations are satisfied at a point in time. This is evidenced once a digital key is delivered to the customer. Once the key is delivered to the customer, the customer has full control of the technology and the Company has no further performance obligations. The Company has concluded that revenue is recognized once the digital key is delivered. The Company believes that this method is a faithful depiction of the transfer of goods and services.

Practical Expedients

Existence of a Significant Financing Component in a Contract

As a practical expedient, the Company has not assessed whether a contract has a significant financing component because the Company expects at contract inception that the period between payment by the customer and the transfer of promised goods or services by the Company to the customer will be one year or less. In addition, the Company has determined that the payment terms that the Company provides to its customers are structured primarily for reasons other than the provision of finance to the Company. The Company typically charges a single upfront amount for the services because other payment terms would affect the nature of the risk assumed by the Company to provide service given the costs of the customer acquisition and the highly competitive and commoditized nature of the business we operate which allows customers to easily move from one provider to another. This additional risk may make it uneconomical to provide the service.

Costs to Fulfill a Contract

The Company’s revenues are primarily generated from customer contracts that are for one year or less. Costs primarily consist of incentive compensation paid based on the achievements of sales targets in a given period for related revenue streams and are recognized in the month when the revenue is earned. Incentive compensation is paid on the issuance or renewal of the customer contract. As a practical expedient, for amortization periods which are determined to be one year or less, the Company expenses any incremental costs of obtaining the contract with a customer when incurred. For those customer contracts greater than one year, the Company capitalizes and amortizes the expenses over the period of benefit.

Revenues Invoiced

The Company has applied the practical expedient for certain revenue streams to exclude the value of remaining performance obligations for (i) contracts with an original expected term of one year or less or (ii) contracts for which the Company recognizes revenue in proportion to the amount it has the right to invoice for services performed.

4. Business Acquisitions

The Company uses acquisitions as a strategy to grow its customer base by increasing its presence in new and existing markets, expand and diversify its service offerings, enhance its technology, and acquire skilled personnel.

The Company completed the following acquisitions during the year ended December 31, 2018, paying the purchase price in cash in each transaction: (a) a share purchase of the entire issued capital of ThreatTrack Security Holdings, Inc., acquired on January 26, 2018, a Florida-based provider of cybersecurity solutions; (b) an asset purchase of Line2, Inc., acquired on June 18, 2018, a California-based provider of voice solutions; (c) a share purchase of all the membership interests of Mosaik Solutions, LLC, acquired on June 18, 2018, a Tennessee-based provider of mobile coverage data and network intelligence for mobile operators and network-dependent enterprises; (d) a share purchase of DemandShore Solutions Private Limited, acquired on July 19, 2018, an India-based provider of software and other solutions to sales and marketing professionals; (e) a share purchase of DW PRIME Holdings, Inc., acquired on August 20, 2018, a Florida-based accredited provider of continuing medical education for medical professionals; (f) a share purchase of The Communicator Corporation Limited, acquired on September 25, 2018, an United Kingdom-based provider of email marketing services; (g) a share purchase of Ekahau Inc., acquired on October 10, 2018, a Virginia-based provider of solutions for enterprise Wi-Fi network design, troubleshooting, and optimization; and (h) other immaterial acquisitions of digital health and data analysis businesses.

The consolidated statement of income since the date of each acquisition and balance sheet as of December 31, 2018, reflect the results of operations of all 2018 acquisitions. For the year ended December 31, 2018, these acquisitions contributed $56.2 million to the Company’s revenues. Net income contributed by these acquisitions was not separately identifiable due to j2 Global’s integration activities and is impracticable to provide. Total consideration for these transactions was $324.7 million, net of cash acquired and assumed liabilities and subject to certain post-closing adjustments which may increase or decrease the final consideration paid.

The following table summarizes the allocation of the purchase consideration for all 2018 acquisitions (in thousands):

Assets and Liabilities	Valuation
Cash [(1)]	$15,532
Accounts receivable	11,321
Prepaid expenses and other current assets	3,480
Property and equipment	4,755
Trade names	33,750
Customer relationships	66,516
Goodwill	194,282
Trademarks	3,285
Other intangibles	84,907
Other long-term assets	341
Deferred tax asset	821
Accounts payables and accrued expenses	(10,864)
Deferred revenue	(37,113)
Capital lease	(956)
Income taxes payable	(1,458)
Deferred tax liability	(22,990)
Other long-term liabilities	(5,410)
Total	$340,199

[(1)] Cash contains an immaterial amount of restricted cash associated with a pre-acquisition relationship with a vendor. The entire balance has been released during the third quarter of 2018.

During 2018, the purchase price accounting has been finalized for the following acquisitions: (i) WeCloud AB; (ii) ThreatTrack Security Holdings, Inc.; (iii) Humble Bundle Inc.; (iv) blackfriday.com; (v) OnTargetJobs, Inc.; (vi) Line2, Inc.; (vii) Mashable Inc.; and (viii) other immaterial email security, digital marketing, data analysis, and digital health businesses. The initial accounting for all other 2018 acquisitions is incomplete and subject to change, which may be significant. j2 Global has recorded provisional amounts which may be based upon past acquisitions with similar attributes for certain intangible assets (including trade names, software and customer relationships), preliminary acquisition date working capital and related tax items.

During the year ended December 31, 2018, the Company recorded adjustments to prior period acquisitions due to the finalization of the purchase accounting in the Cloud Services business which resulted in a net decrease in goodwill of $1.0 million. In addition, the Company recorded adjustments to the initial working capital related to prior period acquisitions in the Digital Media business, which resulted in a net increase in goodwill of $0.2 million (see Note 9 - Goodwill and Intangible Assets). Such adjustments had an immaterial impact to amortization expense within the consolidated statement of income for the year ended December 31, 2018.

Goodwill represents the excess of the purchase price over the fair value of the net tangible and identifiable intangible assets acquired and represents intangible assets that do not qualify for separate recognition. Goodwill recognized in connection with these acquisitions during the year ended December 31, 2018 is $194.3 million, of which $38.3 million is expected to be deductible for income tax purposes.

Pro Forma Financial Information for All 2018 Acquisitions

The following unaudited pro forma supplemental information is based on estimates and assumptions, that j2 Global believes are reasonable. However, this information is not necessarily indicative of the Company's consolidated results of income in future periods or the results that actually would have been realized had j2 Global and the acquired businesses been combined companies during the periods presented. These pro forma results exclude any savings or synergies that would have resulted from these business acquisitions had they occurred on January 1, 2017 and do not take into consideration the exiting of any acquired lines of business. During 2017, the Company sold Cambridge BioMarketing Group, LLC ("Cambridge"), a subsidiary within the Digital Media business; j2 Australia Hosting Pty Ltd (dba "Web24"), a subsidiary within the Cloud Services business; and Tea Leaves, a subsidiary within the Digital Media business. These divestitures represented $22.7 million of revenue within the 2017 fiscal year. This unaudited pro forma supplemental information includes incremental intangible asset amortization and other charges as a result of the acquisitions, net of the related tax effects.

The supplemental information on an unaudited pro forma financial basis presents the combined results of j2 Global and its 2018 acquisitions as if each acquisition had occurred on January 1, 2017 (in thousands, except per share amounts):

	Year ended December 31, 2018 (unaudited)	December 31, 2017 (unaudited)
Revenues	$1,264,544	$1,218,530
Net income	$121,727	$123,378
EPS - Basic	$2.50	$2.56
EPS - Diluted	$2.45	$2.50

2017

The Company completed the following acquisitions during the year ended December 31, 2017, paying the purchase price in cash in each transaction: (a) an asset purchase of sFax, acquired on March 31, 2017, an Austin-based provider of mobile cloud faxing for health care; (b) a share purchase of the entire issued capital of WeCloud AB, acquired on June 12, 2017, a Swedish-based provider of cloud-based internet security services; (c) an asset purchase of MyPhoneFax.com, acquired on June 30, 2017, a provider of online fax services; (d) an asset purchase of EZ Publishing (dba "StreamSend"), acquired on August 22, 2017, a provider of email marketing solutions; (e) a share purchase of all the issued capital of Humble Bundle Inc., acquired on October 13, 2017, a digital storefront for video games based in California; (f) an asset purchase of blackfriday.com, acquired on November 7, 2017, an online solution that markets popular Black Friday ads that are centrally located connecting shoppers with retailers; (g) a share purchase of all the issued capital of OnTargetJobs, Inc., acquired on December 4, 2017, a provider of online recruitment solutions for job seekers and employers in North America; (h) a share purchase of all the issued capital of Mashable Inc., acquired on December 5, 2017, a global, multi-platform media and entertainment company providing tech, digital culture and entertainment content around the globe; and (i) other immaterial acquisitions of online data backup, email marketing and email security businesses.

The consolidated statement of income since the date of each acquisition and balance sheet as of December 31, 2017, reflect the results of operations of all 2017 acquisitions. For the year ended December 31, 2017, these acquisitions contributed $34.7 million to the Company's revenues. Net income contributed by these acquisitions was not separately identifiable due to j2 Global's integration activities and is impracticable to provide. Total consideration for these transactions was $203.9 million, net of cash acquired and assumed liabilities and subject to certain post-closing adjustments which may increase or decrease the final consideration paid.

The following table summarizes the allocation of the purchase consideration for all 2017 acquisitions (in thousands):

Assets and Liabilities	Valuation
Accounts receivable	$14,130
Prepaid expenses and other current assets	10,243
Property and equipment	6,411
Trade names	20,610
Customer relationships	61,307
Goodwill	121,827
Trademarks	1,373
Other intangibles	36,998
Deferred tax asset	405
Accounts payables and accrued expenses	(27,995)
Deferred revenue	(11,853)
Deferred tax liability	(29,534)
Total	$203,922

During the year ended December 31, 2017, the Company recorded adjustments to prior period acquisitions due to the finalization of the purchase accounting in the Cloud Services business which resulted in a net decrease in goodwill of $0.8 million. In addition, the Company recorded adjustments to the initial working capital related to prior period acquisitions in the Digital Media business, which resulted in a net decrease in goodwill of $4.7 million (see Note 9 - Goodwill and Intangible Assets). Such adjustments had an immaterial impact to amortization expense within the consolidated statement of income for the year ended December 31, 2017.

Goodwill represents the excess of the purchase price over the fair value of the net tangible and identifiable intangible assets acquired and represents intangible assets that do not qualify for separate recognition. Goodwill recognized in connection with these acquisitions during the year ended December 31, 2017 is $121.8 million, of which $34.7 million is expected to be deductible for income tax purposes.

2016

The Company completed the following acquisitions during the year ended December 31, 2016, paying the purchase price in cash for each transaction: (a) an asset purchase of VaultLogix, acquired on February 17, 2016, a Massachusetts-based provider of cloud data backup and storage for business clients; (b) a share purchase of the entire issued capital of Callstream Group Limited, acquired on March 3, 2016, a provider of cloud-based call management solutions to markets in the United Kingdom; (c) an asset purchase of Publicaster, acquired on April 1, 2016, a Maryland-based provider of email marketing services; (d) an asset purchase of SMTP, acquired on June 27, 2016, a Florida-based provider of cloud email services offering solutions ranging from sophisticated transactional email solutions to cost-effective Simple Mail Transfer Protocol (“SMTP”) relay services; (e) a share purchase of the entire issued capital of Integrated Global Concepts, Inc. (“IGC”), acquired on July 12, 2016, a Chicago-based provider of fax and voicemail services; (f) a share purchase of the entire issued capital of Front-safe A/S, acquired on July 15, 2016, a Denmark-based provider of cloud backup solutions; (g) an asset purchase of Fonebox Australia, acquired on October 18, 2016, an Australia-based provider of voice, call routing and virtual receptionist business; (h) a share purchase of all the outstanding shares of common stock of Everyday Health Inc. (“Everyday Health”), acquired on December 5, 2016, a New York-based provider of digital health and wellness solutions; and (i) other immaterial acquisitions of online data backup, email marketing, email security and digital media businesses.

The consolidated statement of income since the date of each acquisition and balance sheet, as of December 31, 2016, reflect the results of operations of all 2016 acquisitions. For the year ended December 31, 2016, these acquisitions contributed $52.9 million to the Company’s revenues. Net income contributed by these acquisitions was not separately identifiable due to j2 Global’s integration activities and is impracticable to provide. Total consideration for these transactions was $596.1 million, net of cash acquired and assumed liabilities and subject to certain post-closing adjustments which may increase or decrease the final consideration paid.

The following table summarizes the allocation of the purchase consideration for all 2016 acquisitions (in thousands):

Assets and Liabilities [1]	Valuation
Accounts receivable	$70,922
Prepaid expenses and other current assets	11,730
Property and equipment	11,109
Trade names	5,866
Customer relationships	85,482
Goodwill	333,190
Trademarks	70,300
Other intangibles	91,264
Accounts payables and accrued expenses	(62,188)
Deferred revenue	(6,904)
Deferred tax liability	(14,503)
Capital lease	(194)
Total	$596,074

[1] In connection with the purchase of IGC, the majority of the value was associated with the 935,231 shares of j2 Global common stock held by IGC. The value associated with these shares was recorded as a separate transaction from the fax business and has been excluded from the schedule above.

During the year ended December 31, 2016, the Company recorded adjustments to prior period acquisitions primarily due to the finalization of the purchase accounting in the Cloud Services business which resulted in a net increase in goodwill in the amount of $0.8 million. In addition, the Company recorded adjustments to the initial working capital related to prior period acquisitions and updated the purchase accounting of Offers.com in the Digital Media business, which resulted in a net decrease in goodwill in the amount of $5.0 million with a corresponding increase in trade names, net and other purchased intangibles, net. Such adjustments had an immaterial impact to amortization expense within the consolidated statement of income for the year ended December 31, 2016.

Goodwill represents the excess of the purchase price over the fair value of the net tangible and identifiable intangible assets acquired and represents intangible assets that do not qualify for separate recognition. Goodwill recognized in connection with these acquisitions during the year ended December 31, 2016 is $333.2 million, of which $102.4 million is expected to be deductible for income tax purposes.

IGC

The Company acquired the entire issued capital of IGC on July 12, 2016 for a cash purchase price of approximately $6.3 million (excluding amounts allocated to the Company’s purchase of its common stock described below), net of cash acquired and assumed liabilities and is subject to certain post-closing adjustments which may increase or decrease the final consideration paid.

At the date of acquisition, IGC held 935,231 of the Company’s common stock which the Company determined should be treated as a separate transaction from the acquired fax and voicemail businesses. In order to determine the amount of purchase consideration allocable to the fax and voicemail business and the Company’s common stock, the Company used a relative fair value approach and concluded that the amounts of consideration allocable to the fax and voicemail business and the Company’s common stock were $6.3 million and $51.5 million, respectively. See Note 13 - Stockholders’ Equity for further discussion regarding the Company’s common stock acquired in connection with the IGC business combination.

Everyday Health

On December 5, 2016, the Company acquired all the outstanding shares of common stock of Everyday Health, $0.01 par value per share, at a purchase consideration $493.7 million (net of cash acquired and assumed liabilities) or $10.50 per share in cash.

Everyday Health is a leading provider of digital health and marketing and communication solutions. Everyday Health attracts a large and engaged audience of consumers and healthcare professionals to its premier health and wellness properties and utilizes its data and analytics expertise to deliver highly personalized content experiences and efficient and effective marketing and engagement solutions. Everyday Health enables consumers to manage their daily health and wellness needs, healthcare professionals to stay informed and make better decisions for their patients, and marketers, health payers and providers to communicate and engage with consumers and healthcare professionals to drive better health outcomes. Everyday Health's content and solutions are delivered through multiple channels, including desktop, mobile web, mobile phone and tablet applications, as well as video and social media.

The Company acquired Everyday Health to bring together two leading digital media companies with complimentary visions and platforms to engage and monetize audiences. The combined company will be well positioned to deliver compelling benefits to customers with content that connects, informs and empowers audiences. The Company's Digital Media business maintains leading positions in the technology, gaming, broadband, business to business, and international verticals with strong and well-established brands. Everyday Health adds a new vertical and set of market-leading trusted health properties to the portfolio while diversifying the company's audience mix.

The consolidated statement of income, since the date of acquisition, and balance sheet, as of December 31, 2016, reflect the results of operations Everyday Health. For the year ended December 31, 2016, Everyday Health contributed $23.2 million to the Company's revenues. Net income contributed by Everyday Health was not separately identifiable due to j2 Global's integration activities and is impracticable to provide.

The following table summarizes the allocation of the purchase consideration for the Everyday Health acquisition (in thousands):

Assets and Liabilities	Valuation
Cash	$15,918
Accounts receivable	67,968
Prepaid expenses and other current assets	11,168
Property and equipment	6,494
Customer relationships	45,500
Goodwill	263,988
Trademarks	70,300
Other intangibles	88,267
Accounts payables and accrued expenses	(59,091)
Deferred revenue	(5,297)
Deferred tax liability	(11,500)
Total	$493,715

Goodwill represents the excess of the purchase price over the fair value of the net tangible and identifiable intangible assets acquired and represents intangible assets that do not qualify for separate recognition. Goodwill recognized in connection with the Everyday Health acquisition during the year ended December 31, 2016 is $264.0 million, of which $65.4 million is expected to be deductible for income tax purposes.

Pro Forma Financial Information for Everyday Health Acquisition

The following unaudited pro forma supplemental information is based on estimates and assumptions, which j2 Global believes are reasonable. However, this information is not necessarily indicative of the Company's consolidated results of income in future periods or the results that actually would have been realized had j2 Global and Everyday Health been combined companies during the periods presented. These pro forma results exclude any savings or synergies that would have resulted from the Everyday Health business acquisition had it occurred on January 1, 2015 and do not take into consideration the exiting of any acquired lines of business. This unaudited pro forma supplemental information includes incremental intangible asset amortization and other charges as a result of the Everyday Health acquisition, net of the related tax effects.

The supplemental information on an unaudited pro forma financial basis presents the combined results of j2 Global and Everyday Health as if the acquisition had occurred on January 1, 2015 (in thousands, except per share amounts):

	Year ended December 31, 2016 (unaudited)	December 31, 2015 (unaudited)
Revenues	$1,082,813	$952,806
Net income	$103,541	$115,059
EPS - Basic	$2.14	$2.38
EPS - Diluted	$2.13	$2.35

Pro Forma Financial Information for All 2016 Acquisitions

The following unaudited pro forma supplemental information is based on estimates and assumptions, that j2 Global believes are reasonable. However, this information is not necessarily indicative of the Company's consolidated results of income in future periods or the results that actually would have been realized had j2 Global and the acquired businesses been combined companies during the periods presented. These pro forma results exclude any savings or synergies that would have resulted from these business acquisitions had they occurred on January 1, 2015 and do not take into consideration the exiting of any acquired lines of business. This unaudited pro forma supplemental information includes incremental intangible asset amortization and other charges as a result of the acquisitions, net of the related tax effects.

The supplemental information on an unaudited pro forma financial basis presents the combined results of j2 Global and its 2016 acquisitions as if each acquisition had occurred on January 1, 2015 (in thousands, except per share amounts):

	Year ended December 31, 2016 (unaudited)	December 31, 2015 (unaudited)
Revenues	$1,102,510	$1,009,169
Net income	$108,822	$111,817
EPS - Basic	$2.25	$2.31
EPS - Diluted	$2.24	$2.29

5. Investments

Investments consist of equity and debt securities.

The Company has adopted ASU 2016-01 during the first quarter 2018 (see Note 2 - Basis of Presentation and Summary of Significant Accounting Policies) and determined that the equity securities that were received as part of the consideration for the sale of Tea Leaves Health, LLC ("Tea Leaves") in fiscal year 2017 are without a readily determinable fair value because these securities are privately held, not traded on any public exchanges and not an investment in a mutual fund or similar investment. As a result, management has elected to alternatively measure this investment at cost, less impairment, adjusted for subsequent observable price changes to estimate fair value. The Company will make a "reasonable effort" to identify any observable price changes for identical or similar investments with the issuer that are known are can be reasonably known. The adoption of ASU 2016-01 was done on a prospective basis and any changes in the carrying value of the equity securities will be reported in our current earnings as Other expense (income), net. In addition, the Company determined that the shares of redeemable preferred stock that were also received as part of the consideration for the sale of Tea Leaves are corporate debt securities and are classified as available-for-sale securities.

The following table summarizes the gross unrealized losses and estimated fair values for the Company’s securities without a readily determinable fair value (in thousands):

	Cost	Impairment	Adjustments	Fair Value
December 31, 2018				
Equity securities	$34,977	$ —	$ (3,678)	$31,299
Total	$34,977	$ —	$ (3,678)	$31,299
December 31, 2017				
Equity securities	$34,977	$ —	$ —	$34,977
Total	$34,977	$ —	$ —	$34,977

During the year ended December 31, 2018, the Company recorded an unrealized loss to earnings because an observable price for a similar instrument was observed in the market at an amount that was below the original carrying price of the investment (see Note 7 - Fair Value Measurements).

The following table summarizes the gross unrealized gains and losses and fair values for investments classified as available-for-sale (in thousands):

	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
December 31, 2018				
Corporate debt securities	$ 23,256	$ 21	$ (1,899)	$21,378
Total	$ 23,256	$ 21	$ (1,899)	$21,378
December 31, 2017				
Corporate debt securities	$ 22,745	$ —	$ —	$22,745
Total	$ 22,745	$ —	$ —	$22,745

At December 31, 2018, the Company’s available-for-sale debt securities are carried at fair value, with the unrealized gains and losses reported as a component of other comprehensive income.

The following table summarizes j2 Global’s corporate debt securities designated as available-for-sale, classified by the contractual maturity date of the security (in thousands):

	December 31, 2018	December 31, 2017
Due within 1 year	$ —	$ —
Due within more than 1 year but less than 5 years	21,378	22,745
Due within more than 5 years but less than 10 years	—	—
Due 10 years or after	—	—
Total	$ 21,378	$ 22,745

Recognition and Measurement of Other-Than-Temporary Impairment of Debt Securities

Regardless of the classification of the debt securities as available-for-sale or held-to-maturity, the Company has assessed each position for impairment. j2 Global regularly reviews and evaluates each investment that has an unrealized loss. An unrealized loss exists when the current fair value of an individual security is less than its amortized cost basis. Unrealized losses that are determined to be temporary in nature are recorded, net of tax, in accumulated other comprehensive income for available-for-sale securities.

Factors considered in determining whether a loss is temporary include:

- the length of time and the extent to which fair value has been below cost;
- the severity of the impairment;
- the cause of the impairment and the financial condition and near-term prospects of the issuer;
- activity in the market of the issuer which may indicate adverse credit conditions; and
- the Company’s ability and intent to hold the investment for a period of time sufficient to allow for any anticipated recovery.

j2 Global’s review for impairment generally entails:

- identification and evaluation of investments that have indications of possible impairment;
- analysis of individual investments that have fair values less than amortized cost, including consideration of the length of time the investment has been in an unrealized loss position and the expected recovery period;
- discussion of evidential matter, including an evaluation of factors or triggers that could cause individual investments to qualify as having an other-than-temporary impairment and those that would not support an other-than-temporary impairment;
- documentation of the results of these analyses, as required under business policies; and
- information provided by third-party valuation experts.

For these debt securities, a critical component of the evaluation for other-than-temporary impairments is the identification of credit impairment, where management does not expect to receive cash flows sufficient to recover the entire amortized cost basis of the security. Credit impairment is assessed using a combination of a discounted cash flow model that estimates the cash flows on the underlying securities and a market comparable method, where the security is valued based upon indications from the secondary market of what discounts buyers demand when purchasing similar securities. The cash flow model incorporates actual cash flows from the securities through the current period and then projects the remaining cash flows using relevant interest rate curves over the remaining term. These cash flows are discounted using a number of assumptions, some of which include prevailing implied credit risk premiums, incremental credit spreads and illiquidity risk premiums, among others.

Securities that have been identified as other-than-temporarily impaired are written down to their current fair value. For debt securities that are intended to be sold or that management believes it more-likely-than-not that it will be required to sell prior to recovery, the full impairment is recognized immediately in earnings.

For available-for-sale and held-to-maturity debt securities that management has no intent to sell and believes that it more-likely-than-not that it will not be required to sell prior to recovery, only the credit loss component of the impairment is recognized in earnings, while the rest of the fair value impairment is recognized in other comprehensive income. The credit loss component recognized in earnings is identified as the amount of principal cash flows not expected to be received over the remaining term of the security.

The following tables present gross unrealized losses and fair values for those investments that were in an unrealized loss position as of December 31, 2018 and 2017, aggregated by investment category and the length of time that individual securities have been in a continuous loss position (in thousands):

	As of December 31, 2018					
	Less than 12 Months		12 Months or Greater		Total	
	Fair Value	Unrealized Loss	Fair Value	Unrealized Loss	Fair Value	Unrealized Loss
Corporate debt securities	$20,846	$(1,899)	$—	$—	$20,846	$(1,899)
Total	$20,846	$(1,899)	$—	$—	$20,846	$(1,899)

	As of December 31, 2017					
	Less than 12 Months		12 Months or Greater		Total	
	Fair Value	Unrealized Loss	Fair Value	Unrealized Loss	Fair Value	Unrealized Loss
Corporate debt securities	$22,745	$—	$—	$—	$22,745	$—
Total	$22,745	$—	$—	$—	$22,745	$—

As of December 31, 2018, 2017 and 2016, we did not recognize any other-than-temporary impairment losses.

On September 25, 2017, the Company entered into a commitment to invest $200 million (approximately 66.7% of equity) in the OCV Fund. The total expected commitment to the OCV Fund is expected to be approximately $300 million. The primary purpose of the Fund is to provide a limited number of select investors with the opportunity to realize long-term appreciation from public and private companies, with a particular focus on the technology and life science industries. The general activities of the OCV Fund is to buy, sell, hold and otherwise invest in securities of every kind and nature and rights and options with respect thereto, including, without limitation, stock, notes, bonds, debentures and evidence of indebtedness; to exercise all rights, powers, privileges and other incidents of ownership or possession with respect to securities held or owned by the OCV Fund; to enter into, make and perform all contracts and other undertakings; and to engage in all activities and transactions as may be necessary, advisable or desirable to carry out the foregoing.

The manager, OCV Management, LLC, and general partner of the Fund are entities with respect to which Richard S. Ressler, Chairman of the Board of Directors (the “Board”) of the Company, is indirectly the majority equity holder and a related party. As a limited partner in the Fund, the Company will pay an annual management fee to the manager equal to 2.0% (reduced by 10% each year beginning with the sixth year) of capital commitments. In addition, subject to the terms and conditions of the Fund’s limited partnership agreement, once the Company has received distributions equal to its invested capital, the Fund’s general partner would be entitled to a carried interest equal to 20%. The Fund has a six year investment period, subject to certain exceptions. The commitment was approved by the Audit Committee of the Board in accordance with the Company’s related-party transaction approval policy.

During 2018, the Company received capital call notices from the management of OCV Management, LLC. for $36.8 million, inclusive of certain management fees, of which $36.8 million has been paid for the year ended December 31, 2018.

The Company recognizes its equity in the net earnings or losses relating to the investment in OCV on a one-quarter lag due to the timing and availability of financial information from OCV. If the Company becomes aware of a significant decline in value, the loss will be recorded in the period in which the Company identifies the decline.

During the year ended December 31, 2018, 2017, and 2016 the Company recognized a net investment loss of $4.1 million, zero, and zero, net of tax benefit, respectively, inclusive of management fees. During the year ended December 31, 2018, 2017, and 2016 the Company recognized management fees of $4.5 million, zero, and zero, net of tax benefit, respectively. The loss is presented in the Company's consolidated statement of income as loss from equity investments, net.

The following table discloses the carrying amount for the Company’s equity method investment (in thousands):

	December 31, 2018	December 31, 2017
Equity securities	$ 31,151	$ —
Maximum exposure to loss	$ 31,151	$ —

As a limited partner, the Company’s maximum exposure to loss is limited to its proportional ownership in the partnership. In addition, the Company is not required to contribute capital in an aggregate amount in excess of its capital commitment and any expected losses will not be in excess of the Capital Account. Finally, there are no call or put options, or other types of arrangements, which limit the Company’s ability to participate in losses and returns of the Fund.

6. Assets Held for Sale

During the second quarter 2017, the Company committed to a plan to sell Cambridge BioMarketing Group, LLC (“Cambridge”), a subsidiary within the Digital Media business, as it was determined to be a non-core asset. On July 12, 2017, in a cash transaction, the Company sold Cambridge for a loss of $0.9 million which was recorded in other expense (income), net.

During the third quarter 2017, the Company committed to a plan to sell j2 Australia Hosting Pty Ltd (dba “Web24”), a subsidiary within the Cloud Services business, as it was determined to be a non-core asset. On September 1, 2017, in a cash transaction, the Company sold Web24 for a gain of $1.6 million which was recorded in other expense (income), net.

During the third quarter 2017, the Company committed to a plan to sell Tea Leaves, a subsidiary within the Digital Media business, as it was determined to be a non-core asset. On October 5, 2017, in a transaction consisting of a combination of cash and various equity securities, the Company sold Tea Leaves for a gain of $27.0 million which was recorded in other expense (income), net.

7. Fair Value Measurements

j2 Global complies with the provisions of ASC 820, which defines fair value, provides a framework for measuring fair value and expands the disclosures required for fair value measurements of financial and non-financial assets and liabilities. ASC 820 clarifies that fair value is an exit price, representing the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants. As such, fair value is a market-based measurement that is determined based on assumptions that market participants would use in pricing an asset or a liability. As a basis for considering such assumptions, ASC 820 establishes a three-tier value hierarchy, which prioritizes the inputs used in the valuation methodologies in measuring fair value:

§ Level 1 – Observable inputs that reflect quoted prices (unadjusted) for identical assets or liabilities in active markets.

§ Level 2 – Observable inputs other than quoted prices in active markets for identical assets and liabilities, quoted prices for identical or similar assets or liabilities in inactive markets, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.

§ Level 3 – Unobservable inputs which are supported by little or no market activity.

The fair value hierarchy also requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value.

The Company's money market funds are classified within Level 1. The Company values these Level 1 investments using quoted market prices.

Certain of the Company's debt securities are classified within Level 2. The Company values these Level 2 investments based on model-driven valuations using significant inputs derived from or corroborated by observable market data.

The fair value of our senior notes is determined using quoted market prices or dealer quotes for instruments with similar maturities and other terms and credit ratings, which are Level 2 inputs. The fair value of long-term debt was $1.1 billion and $1.2 billion, at December 31, 2018 and December 31, 2017, respectively (see Note 10 - Long-Term Debt).

In addition, the Convertible Notes contain terms that may require the Company to pay contingent interest on the Convertible Notes which is accounted for as a derivative with fair value adjustments being recorded to interest expense (see Note 10 - Long Term Debt). The fair value of this derivative is determined using a binomial lattice convertible bond pricing model using historical and implied market information, which are Level 2 inputs.

The Company classifies its contingent consideration liability in connection with acquisitions within Level 3 because factors used to develop the estimated fair value are unobservable inputs, such as volatility and market risks, and are not supported by market activity. The fair value of the contingent consideration liability was determined using option based approaches. This methodology was utilized because the distribution of payments is not symmetric and amounts are only payable upon certain earnings before interest, tax, depreciation and amortization ("EBITDA") and certain other thresholds being reached. Such valuation approach included a Monte-Carlo simulation for the contingency since the financial metric driving the payments is path dependent. For similar reasons, certain of the Company's available-for-sale debt securities are classified within Level 3. The fair value of these debt securities was derived using a hybrid approach consisting of two scenarios and subsequent allocation among each of the outstanding securities. Both scenarios consider unobservable inputs in the market such as time to liquidity, volatility, dividend yield, and breakpoints. Significant increases or decreases in either of the inputs noted above in isolation would result in a significantly lower or higher fair value measurement.

The following tables present the fair values of the Company's financial assets or liabilities that are measured at fair value on a recurring basis (in thousands):

December 31, 2018	Level 1	Level 2	Level 3	Fair Value
Assets:				
Cash equivalents:				
Money market and other funds	$450	$—	$—	$450
Corporate debt securities	—	532	20,846	21,378
Total assets measured at fair value	$450	$532	$20,846	$21,828
Liabilities:				
Contingent consideration	$—	$—	$50,035	$50,035
Contingent interest derivative	—	768	—	768
Total liabilities measured at fair value	$—	$768	$50,035	$50,803

December 31, 2017	Level 1	Level 2	Level 3	Fair Value
Assets:				
Cash equivalents:				
Money market and other funds	$453	$—	$—	$453
Corporate debt securities	—	22,745	—	22,745
Total assets measured at fair value	$453	$22,745	$—	$23,198
Liabilities:				
Contingent consideration	$—	$—	$20,477	$20,477
Contingent interest derivative	—	768	—	768
Total liabilities measured at fair value	$—	$768	$20,477	$21,245

At the end of each reporting period, management reviews the inputs to measure the fair value measurements of financial and non-financial assets and liabilities to determine when transfers between levels are deemed to have occurred. During the fourth quarter of 2018, $20.8 million of the Company’s debt securities were transferred from Level 2 investments to Level 3. For the year ended 2017, there were no transfers that occurred between levels.

The following table presents a reconciliation of the Company's derivative instruments (in thousands):

	Amount	Affected line item in the Statement of Income
Derivative Liabilities:		
Level 2:		
Balance as of January 1, 2017	$ 958	
Total fair value adjustments reported in earnings	(190)	Interest expense, net
Balance as of December 31, 2017	$ 768	
Total fair value adjustments reported in earnings	—	Interest expense, net
Balance as of December 31, 2018	$ 768	

The following tables presents a reconciliation of the Company's Level 3 financial liabilities related to contingent consideration that are measured at fair value on a recurring basis (in thousands):

	Level 3	Affected line item in the Statement of Income
Balance as of January 1, 2017	$17,450	
Contingent consideration	17,577	
Total fair value adjustments reported in earnings	2,300	General and administrative
Contingent consideration payments	(16,850)	Not Applicable
Balance as of December 31, 2017	$20,477	
Contingent consideration	11,391	
Total fair value adjustments reported in earnings	18,944	General and administrative
Contingent consideration payments	(777)	Not Applicable
Balance as of December 31, 2018	$50,035	

In connection with the acquisition of Humble Bundle, on October 13, 2017, contingent consideration of up to an aggregate of $40.0 million may be payable upon achieving certain future EBITDA thresholds and had a fair value of $40.0 million and $19.7 million at December 31, 2018 and December 31, 2017, respectively.

In connection with the acquisition of blackfriday.com, on November 7, 2017, the Company achieved certain earnings targets and, as a result, contingent consideration of $0.8 million was paid to the seller during the first quarter of 2018 in connection with this acquisition. There are no further payments pending related to this acquisition.

In connection with the acquisition of bestblackfriday.com, on July 13, 2018, contingent consideration of up to an aggregate of $2.0 million may be payable upon achieving a certain number of visitors and had a fair value of $1.5 million at December 31, 2018.

In connection with the acquisition of DemandShore, on July 19, 2018, contingent consideration of up to an aggregate of $1.9 million may be payable upon achieving certain future EBITDA and revenue thresholds and had a fair value of $1.3 million at December 31, 2018.

In connection with the acquisition of DownDetector, on August 9, 2018, contingent consideration of up to an aggregate of $3.7 million may be payable upon achieving certain number of average monthly unique visitors thresholds and had a fair value of $3.6 million at December 31, 2018.

In connection with the acquisition of Ekahau Inc., on October 10, 2018, contingent consideration of up to an aggregate of $15.0 million may be payable upon achieving certain future revenue thresholds and had a fair value of $3.7 million at December 31, 2018.

During the year ended December 31, 2018, the Company recorded a net increase in the fair value of the contingent consideration of $18.9 million and reported such increase in general and administrative expenses.

The following tables presents a reconciliation of the Company’s Level 3 financial assets related to certain available-for-sale debt securities that are measured at fair value on a recurring basis (in thousands):

	Level 3	Affected line item in the Statement of Income
Balance as of January 1, 2018	$—	
Transfer in to Level 3	20,846	
Balance as of December 31, 2018	$20,846	