

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549**

Form 10-K

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended December 31, 2016

OR

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

For the transition period from _____ to _____
Commission File Number 000-28018

Yahoo! Inc.

(Exact name of Registrant as specified in its charter)

Delaware
(State or other jurisdiction of incorporation or organization)

77-0398689
(I.R.S. Employer Identification No.)

701 First Avenue
Sunnyvale, California 94089
(Address of principal executive offices, including zip code)

Registrant's telephone number, including area code: **(408) 349-3300**

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

Title of Each Class
Common stock, \$.001 par value

Name of Each Exchange on Which Registered
The NASDAQ Stock Market LLC
(NASDAQ Global Select Market)

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

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

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

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

Indicate by check mark whether the Registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted 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 and post such files). Yes No

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

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

Large accelerated filer

Accelerated filer

Non-accelerated filer (Do not check if a smaller reporting company)

Smaller reporting company

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

As of June 30, 2016, the last business day of the Registrant's most recently completed second fiscal quarter, the aggregate market value of voting stock held by non-affiliates of the Registrant, based upon the closing sales price for the Registrant's common stock, as reported on the NASDAQ Global Select Market was \$32,522,108,074. Shares of common stock held by each officer and director and by each person who owns 10 percent or more of the outstanding common stock have been excluded in that such persons may be deemed to be affiliates. This determination of affiliate status is not necessarily a conclusive determination for any other purpose.

The number of shares of the Registrant's common stock outstanding as of February 10, 2017 was 956,487,217.

DOCUMENTS INCORPORATED BY REFERENCE

The following documents (or parts thereof) are incorporated by reference into the following parts of this Form 10-K:

Proxy Statement for the 2017 Annual Meeting of Shareholders—Part III Items 10, 11, 12, 13, and 14.

YAHOO! INC.
Form 10-K
Fiscal Year Ended December 31, 2016

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The trademarks and/or registered trademarks of Yahoo! Inc. and its subsidiaries referred to herein include, but are not limited to, Yahoo!, the Yahoo family of marks, Tumblr, BrightRoll, Xobni, Flurry and Flurry Analytics, Altaba, and Polyvore, and their respective logos. Other names are trademarks and/or registered trademarks of their respective owners.

Forward-Looking Statements

In addition to current and historical information, this Annual Report on Form 10-K contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. These statements relate to our future operations, prospects, potential products, services, developments, and business strategies. These statements can, in some cases, be identified by the use of terms such as “may,” “will,” “should,” “could,” “would,” “intend,” “expect,” “plan,” “anticipate,” “believe,” “estimate,” “predict,” “project,” “potential,” or “continue,” the negative of such terms, or other comparable terminology. This Annual Report on Form 10-K includes, among others, forward-looking statements regarding:

- expectations regarding the pending transaction with Verizon Communications Inc.;
- the Security Incidents (as defined below);
- expectations about revenue, including search, display, and other revenue, as well as revenue from our offerings in mobile, video, native, and social (“Mavens”);
- expectations about the financial and operational impacts of our Search and Advertising Services and Sales Agreement with Microsoft Corporation and our Google Services Agreement with Google Inc.;
- expectations about the opportunities for monetization of, and revenue growth from, our mobile offerings;
- expectations about growth in users;
- expectations about changes to our operating expenses;
- anticipated capital expenditures;
- expectations about changes in our earnings in equity interests and net income;
- expectations about the amount of unrecognized tax benefits, the outcome of tax assessment appeals, the adequacy of our existing tax reserves, future tax expenditures, and tax rates;
- expectations about the sufficiency of our available sources of liquidity to meet normal operating requirements and capital expenditures; and
- expectations regarding the future outcome of legal proceedings in which we are involved.

These statements involve certain known and unknown risks and uncertainties that could cause our actual results to differ materially from those expressed or implied in our forward-looking statements. You are urged to carefully review the disclosures made concerning risks and uncertainties that may affect our business or operating results, which include, among others, those listed in Part 1, Item 1A “Risk Factors” of this Annual Report on Form 10-K. We do not intend, and undertake no obligation, to update or revise any of our forward-looking statements after the date of this Annual Report on Form 10-K to reflect new information, actual results or future events or circumstances.

PART I

Item 1. Business

Overview

Yahoo! Inc., together with its consolidated subsidiaries (“Yahoo,” the “Company,” “we,” or “us”), is a guide to digital information discovery, focused on informing, connecting, and entertaining our users through our search, communications, and digital content products. By creating highly personalized experiences, we help users discover the information that matters most to them around the world—on mobile or desktop.

We create value for advertisers with a streamlined, simple advertising technology that leverages Yahoo’s data, content, and technology to connect advertisers with their target audiences. Advertisers can build their businesses through advertising to targeted audiences on our online properties and services (“Yahoo Properties”) and a distribution network of third-party entities (“Affiliates”) who integrate our advertising offerings into their websites or other offerings (“Affiliate sites”). Our revenue is generated principally from search and display advertising.

We are proud of our rich history that has evolved with the Internet, beginning in 1994 when our founders, Jerry Yang and David Filo, then graduate students at Stanford University, created *Jerry and Dave’s Guide to the World Wide Web*, a simple directory of websites to help people navigate the Internet. Yahoo was incorporated in 1995 and is a Delaware corporation. We completed our initial public offering on April 12, 1996, and our stock is listed on the NASDAQ Global Select Market under the symbol “YHOO.” Yahoo is a global company headquartered in Sunnyvale, California.

Executive Leadership

The current executive management team includes:

- Marissa Mayer—President and Chief Executive Officer;
- David Filo—Co-Founder and Chief Yahoo;
- Ken Goldman—Chief Financial Officer;
- Lisa Utzschneider—Chief Revenue Officer;
- Debra Berman—Senior Vice President, Marketing;
- Jeff Bonforte—Senior Vice President, Product and Engineering, Communications;
- Adam Cahan—Senior Vice President, Product and Engineering, Video, Design and Emerging Products;
- Simon Khalaf—Senior Vice President, Product and Engineering, Publisher Products;
- Laurence Mann—Chief Information Officer;
- Enrique Muñoz Torres—Senior Vice President, Product and Engineering, Advertising and Search;
- Martha Nelson—Senior Vice President, Global Editor-in-Chief;
- Bryan Power—Senior Vice President, People;

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- Jay Rossiter—Senior Vice President, Product and Engineering, Science and Technology;
- Rose Tsou—Senior Vice President, Asia Pacific; and
- Ian Weingarten—Senior Vice President, Corporate Development and Partnerships.

Our current Board of Directors is composed of:

- Marissa Mayer, our President and CEO; Eric Brandt, our Chairman of the Board; Maynard Webb, our Chairman Emeritus; Tor Braham; David Filo; Catherine Friedman; Eddy Hartenstein; Richard Hill; Thomas McInerney; Jane Shaw Ph.D.; and Jeffrey Smith.

Pending Sale of the Operating Business to Verizon Communications Inc.

On July 23, 2016, we entered into a Stock Purchase Agreement (the “Original Stock Purchase Agreement”) with Verizon Communications Inc. (“Verizon”), pursuant to which we have agreed to sell, and Verizon has agreed to purchase (the “Sale”), all of the outstanding shares of Yahoo Holdings, Inc., a newly formed wholly-owned subsidiary of Yahoo (“Yahoo Holdings”) (and prior to the sale of Yahoo Holdings, to cause Yahoo Holdings to sell to a foreign subsidiary of Verizon all of the equity interests in a foreign subsidiary of Yahoo Holdings that will hold certain foreign subsidiaries relating to our operating business), which, immediately prior to the consummation of the Sale, will own our operating business. Under the Original Stock Purchase Agreement, the aggregate consideration to be paid to us by Verizon in connection with the Sale was \$4,825,800,000 in cash, subject to certain adjustments as provided in the Original Stock Purchase Agreement.

Concurrently with the execution of the Original Stock Purchase Agreement, we entered into a Reorganization Agreement (the “Original Reorganization Agreement”) with Yahoo Holdings, pursuant to which we will transfer to Yahoo Holdings prior to the consummation of the Sale all of our assets and liabilities relating to our operating business, other than specified excluded assets and retained liabilities (the “Reorganization”).

On February 20, 2017, Yahoo and Verizon entered into an Amendment to Stock Purchase Agreement amending the Original Stock Purchase Agreement (the “SPA Amendment” and, together with the Original Stock Purchase Agreement, the “Amended Stock Purchase Agreement”), and, concurrently with the execution of the SPA Amendment, Yahoo and Yahoo Holdings entered into an Amendment to Reorganization Agreement amending the Original Reorganization Agreement (the “RA Amendment”). Additionally, concurrently with the execution of the SPA Amendment and the RA Amendment, Yahoo, Yahoo Holdings, and Verizon entered into a Settlement and Release Agreement (the “Settlement and Release Agreement”).

The SPA Amendment, among other things, (i) reduced the consideration to be paid by Verizon to Yahoo in connection with the Sale by \$350,000,000 to \$4,475,800,000, (ii) provided that certain data security incidents to which Yahoo has been subject will be disregarded for purposes of determining whether certain closing conditions have been satisfied and in determining whether a “Business Material Adverse Effect” has occurred, and (iii) provided that the date after which each of Yahoo and Verizon may terminate the Amended Stock Purchase Agreement if the Closing (as defined in the Amended Stock Purchase Agreement) has not occurred has been extended to July 24, 2017.

The RA Amendment provides, among other things, that Yahoo and Verizon will each be responsible for 50 percent of certain post-closing cash liabilities related to certain data security incidents and other data breaches incurred by the Company.

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Under the terms of the Settlement and Release Agreement, among other things, Verizon released certain claims, subject to certain exceptions, it (and its affiliates and representatives) may have against the Company (or its affiliates and representatives) relating to certain data security incidents and other data breaches incurred by the Company.

Upon completion of the Sale, Verizon will also receive for its benefit and that of its current and certain of its future affiliates, a non-exclusive, worldwide, perpetual, royalty-free license to certain intellectual property not core to the operating business held by Excalibur IP, LLC, a wholly-owned subsidiary of the Company ("Excalibur"), that is not being transferred to Yahoo Holdings with the operating business.

The excluded assets include our cash and marketable securities as of the closing of the Sale, our shares in Alibaba Group Holding Limited ("Alibaba Group") and Yahoo Japan Corporation ("Yahoo Japan"), certain other minority equity investments, and all of the equity in Excalibur. The retained liabilities will include the 0.00% Convertible Senior Notes due 2018 ("Notes") we issued in November 2013, securityholder litigation, certain director and officer indemnification obligations, and, pursuant to the RA Amendment, 50 percent of certain post-closing cash liabilities related to certain data security incidents and other data breaches incurred by Yahoo. Following the closing of the Sale, the excluded assets and retained liabilities will remain in Yahoo which will be renamed Altaba Inc. and will become an independent, publicly traded, management investment company registered under the Investment Company Act of 1940.

The closing of the Sale is subject to certain conditions, including, among others, the approval of the Sale by our stockholders, the closing of the Reorganization, and certain other customary closing conditions.

For additional detail, refer to "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations" in this Annual Report on Form 10-K.

User Offerings

Yahoo is focused on informing, connecting, and entertaining our users with our search (Yahoo Search), communications (including Yahoo Mail and Yahoo Messenger), and digital content products (including Tumblr, and our four core verticals: Yahoo News, Yahoo Sports, Yahoo Finance, and Yahoo Lifestyle).

Our user offerings include:

Search

Yahoo Search serves as a guide for users to discover the information on the Internet that matters to them the most. In 2016, Yahoo continued to invest in platform enhancements; in acquiring new users through default search set and home page sets through our network and through partners; and in building out compelling search experiences for major events, such as the Summer Olympics and the 2016 U.S. Presidential election.

We plan to continue investing in a differentiated mobile and desktop search experience by allocating additional resources to develop new search advertising technology through our Yahoo Gemini platform that provides personalized, commercial results for the user and anticipates the user's needs.

Under our Search and Advertising Services and Sales Agreement ("Search Agreement") with Microsoft Corporation ("Microsoft"), Microsoft provides algorithmic and paid search advertising

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services on a non-exclusive basis for Yahoo Properties on mobile, desktop, and Affiliate sites. This agreement is subject to a volume commitment by the Company to request paid search results from Microsoft for 51 percent of its search queries originating from desktop computers accessing Yahoo Properties and its Affiliate sites and to display only Microsoft's paid search results on such search result pages. In October 2015, Yahoo entered into the Google Services Agreement (the "Services Agreement") with Google Inc. ("Google") that provides Yahoo with additional flexibility to choose among suppliers of search results and ads. Google's offerings complement the search services provided by Microsoft and Yahoo Gemini (Yahoo's platform for search and native advertising). See "Advertiser Products" and "Advertising Formats" below for further information about our Yahoo Gemini platform. Yahoo continues to develop and launch features around the results to enhance the search experience for our users.

Communications

Yahoo Mail is a primary driver of engagement across our user offerings. Yahoo Mail connects users to the people and content most important to them across mobile and desktop. We support connecting external mail providers (such as Gmail, AOL, and Outlook) for users to manage multiple accounts from the Yahoo Mail client. Each Yahoo Mail account comes with one terabyte of free storage and is integrated with contacts, calendar, and messaging (see Yahoo Messenger section below). The Yahoo Mail mobile app includes user-centric features such as account key, compose assistant, document preview, and smart contacts.

Yahoo Messenger, our instant messaging service, provides an interactive and personalized way for users to connect, communicate, and share experiences in real-time. It incorporates many of our existing platforms including Tumblr and Xobni, with features like GIF search, "hearting" messages, and unsend. Yahoo Messenger is available as a mobile app, on the web, and also integrated directly into Yahoo Mail on desktop to drive deeper engagement with users.

Digital Content

Our Digital Content offerings include: Tumblr, our global social platform, and our four core verticals: Yahoo News, Yahoo Sports, Yahoo Finance, and Yahoo Lifestyle. Our Digital Content is available on mobile or desktop.

Yahoo News, which can be accessed through the Yahoo App and the Yahoo homepage at *Yahoo.com*, gives users access to discover, consume, and engage around the news, content, and video they care about all in one place. We continue to provide current and trending news and information from Yahoo original editorial and partner content. Yahoo News is optimized to provide a consistent, easy-to-use content discovery experience across mobile and desktop with breaking news, local weather, a personalized content stream, and social sharing capabilities.

Yahoo Sports serves one of the largest audiences of sports enthusiasts in the world and delivers experiences for every fan, every day. Yahoo Sports provides users access to Fantasy Sports.

Yahoo Finance provides a comprehensive set of financial data, information, and tools that helps users make informed financial decisions. The robust content on Yahoo Finance is a mix of Yahoo original editorial and syndicated news via relationships with several third-party partners.

Yahoo Lifestyle brings together content, commerce, and community to engage users passionate about style, fashion, and entertainment. Yahoo's Lifestyle features Yahoo's original editorial voice to deliver authoritative and authentic style and beauty content. With Polyvore, users have access to discover and publish their own style trends, and to buy items featured in articles and sets through

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direct integration with commerce sites. And as part of Yahoo's long-standing distribution partnership with Hulu, Yahoo View gives users access to watch episodes of their favorite TV shows across mobile and desktop, and go beyond the episode with clips, recaps, and content from Tumblr.

Tumblr offers a web platform and mobile applications on iOS and Android that allow users to create, share, and curate content. Tumblr messaging enables users to engage with other users that share their same interests and passions.

Advertiser Offerings

Yahoo has two core advertiser products: Gemini and BrightRoll, which includes the BrightRoll Demand Side Platform and BrightRoll Exchange. Advertisers benefit from our comprehensive approach to digital advertising across search and display advertising, which includes native, video, premium, and audience ads. Gemini and BrightRoll are supported by Yahoo's technology platform, data, and analytical tools.

Advertiser Products

Yahoo Gemini is Yahoo's proprietary marketplace for search and native advertising across devices. Yahoo Gemini helps marketers achieve measurable results with intent-driven advertising. By leveraging Yahoo's proprietary data, Gemini helps advertisers target the audiences they are interested in reaching across Yahoo Properties and third-party publishers and engage those audiences through search and native ads. Gemini search is focused on helping advertisers reach their target audiences at the moment the user has made a relevant search query. Gemini native ads are built to match the content that a user is exploring. By using the surrounding content to establish relevancy for targeting, Gemini native ads drive higher audience engagement and brand awareness for the advertiser.

BrightRoll is Yahoo's unified brand for programmatic advertising technology, offering a suite of media-agnostic tools to help advertisers, publishers, and partners connect with users across ad formats and devices. The *BrightRoll Demand Side Platform ("BrightRoll DSP")* is technology that enables brand and performance advertisers to plan, execute, optimize, and measure programmatic digital advertising campaigns. Our targeting solutions allow advertisers to reach users across Yahoo, exclusive publishing partners, and a wide variety of sites and mobile apps with the scale and efficiency of programmatic buying. BrightRoll DSP offers advertisers greater control and transparency with advanced programmatic buying capabilities and access to Yahoo's proprietary data. Advertisers can reach the right people with custom audience definition and manage frequency on any device with independent campaign measurement and insights. The *BrightRoll Exchange* connects display, video, and native inventory from the top publishers and ad exchanges with demand from the top DSPs, agencies, ad networks, and advertisers. The BrightRoll Exchange delivers revenue to publishers with the goal of maximizing yield and offers buyers access to a variety of premium digital advertising inventory and unique data with the goal of enabling them to efficiently value supply.

Advertising Formats

Search Advertising. Yahoo Gemini connects advertisers with the audiences across our network, with the support of strategic account teams, reporting, analytics, and extensive campaign controls. Yahoo continues to focus on developing new search ad formats, features, and capabilities to engage users and optimize performance across devices, including click-to-call functionality, sitelink extensions, location extensions, and product ads. To provide the richest possible experience for our users, Yahoo also serves search ads from partners, including Microsoft and Google.

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Display Advertising. Yahoo display ads leverage a comprehensive set of proprietary data signals to identify and engage the right users on Yahoo and across the web. With display ads, Yahoo can help brands make meaningful connections with the right users at the right time, across devices.

Native Advertising. Yahoo native ads are a seamless part of a user's experience on Yahoo sites across devices, as well as third-party partner publisher sites and mobile apps. This natural integration helps advertisers connect with people in a compelling and impactful way, driving awareness and performance, especially on mobile where native ads are the predominant ad format. Yahoo native ads are visually rich and come in a variety of formats, like text, image, and video that deliver measurable branding and sales results. Yahoo offers native ads through Yahoo Gemini and the BrightRoll DSP.

Video Advertising. Yahoo video ads enable brands to align with premium, contextually relevant video programming across our properties and third party publisher partners. In addition, we leverage Yahoo's unique user data to connect brands to their target audiences at scale across devices.

Premium Advertising. Yahoo premium ads offer a unique and engaging canvas for brand storytelling. We offer high-impact advertising opportunities on Yahoo.com, Yahoo Mail, and program sponsorships of major events. Brands have the ability to anchor buys within premium content and scale programmatically, while applying unique data strategies to reach their target audience.

Audience Advertising. Yahoo audience ads leverage a comprehensive set of proprietary data signals to identify and engage the right users on Yahoo and across the web. With audience ads, Yahoo can help brands make meaningful connections with the right users at the right time, across ad formats and devices.

Developer Offerings

The Yahoo Mobile Developer Suite gives developers the ability to measure, monetize, advertise, and improve their apps with Yahoo tools.

Flurry Analytics is a free mobile app analytics solution that is implemented in applications on more than 2 billion devices worldwide. Flurry is integrated in third-party applications via a lightweight software developer kit ("SDK"). Flurry provides mobile app developers insight into the actions their users are taking in-app, as well as their audience's interests and demographics. Additionally, Flurry Pulse allows users to share data with partners and comScore for data validation.

Yahoo App Publishing ("YAP") enables third-party app developers to monetize their app experiences with native and video advertising from Yahoo Gemini, Flurry, and BrightRoll advertisers. Developers can integrate YAP through the Flurry SDK.

Yahoo App Marketing gives third-party app developers the ability to advertise their apps through targeted native and video advertising on Yahoo, Tumblr, and across our app network. Yahoo App Marketing ads are powered by Yahoo Gemini and priced on a cost-per-click basis.

Tumblr In-App Sharing allows developers to integrate a Tumblr sharing button into their app experiences to enable their users to share content directly to Tumblr without leaving their app. When a user shares content from a developer's app, it will be posted to the user's Tumblr blog along with a deep-link back to the developer's app. By clicking this deep-link, users will be directed to the developer's app, and if the user does not have the developer's app, they will see a prompt to install it.

Product Development

Yahoo continually launches, improves, and scales products and features to meet evolving user, advertiser, and publisher needs. Most of our software products and features are developed internally.

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In some instances, however, we might purchase technology and license intellectual property rights if the opportunity is strategically aligned, operationally compatible, and economically advantageous. While it may be necessary in the future to seek or renew licenses relating to various aspects of our products, we believe based on past experience and industry practice that such licenses generally could be obtained on commercially-reasonable terms. We believe our continuing innovation and product development are not materially dependent upon any single license or other agreement with a third-party relating to the development of our products.

Yahoo's product teams, which include a broad array of engineering and product talent, support a large portion of the Yahoo product portfolio and technology infrastructure. Our product teams have expertise in web and mobile user applications, scalable software platforms, information retrieval, machine learning and science, editorial, networking/communications technologies, and presentation layer frameworks. We take security and privacy very seriously, and continuously innovate to protect our users and their data.

Our engineering and production teams are primarily located in our Sunnyvale, California headquarters. Product development expenses for 2014, 2015, and 2016 totaled approximately \$1,156 million, \$1,178 million, and \$1,055 million, respectively, which included stock-based compensation expense of \$139 million, \$190 million, and \$213 million, respectively.

Global Operations

We manage our business geographically. The primary areas of measurement and decision-making are Americas, EMEA (Europe, Middle East, and Africa), and Asia Pacific. Additional information required by this item is incorporated herein by reference to Note 18—"Segments" of the Notes to our consolidated financial statements, which appears in Part II, Item 8 of this Annual Report on Form 10-K.

We own a majority or 100 percent of all of these international operations (except in Australia, New Zealand, and Japan where we have joint ventures and/or noncontrolling interests). We support these businesses through a network of offices worldwide.

Revenue is primarily attributed to individual countries according to the international online property that generated the revenue.

Information regarding risks involving our international operations is included in Part I, Item 1A "Risk Factors" of this Annual Report on Form 10-K and is incorporated herein by reference.

Sales

We sell our advertising services through four primary channels: field, mid-market, reseller/small business, and platform and exchange. Our field advertising sales team sells display advertising in all markets and search advertising to both premium and non-premium advertisers using Yahoo Gemini. Previously under the Search Agreement, Yahoo had sales exclusivity for both the Company's and Microsoft's premium advertisers. Pursuant to the current terms of the Search Agreement, as amended on April 15, 2015 by the Eleventh Amendment to the Search Agreement (the "Eleventh Amendment"), this sales exclusivity terminated on July 1, 2015. In 2016, the Company and Microsoft completed the transition of premium advertisers for Microsoft's paid search services to Microsoft on a market-by-market basis (other than Taiwan and Hong Kong which will not transition). Our mid-market channel sells our advertising services to medium-sized businesses, while our reseller/small business channel allows us to sell advertising services to additional regional and small business

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advertisers. Our platform sales team sells display, video and native advertising through the BrightRoll DSP, Yahoo's demand side platform to agencies and agency trading desks. Our exchange sales team sells display, video and native advertising through the BrightRoll Exchange, Yahoo's ad marketplace, to demand side platforms, agency trading desks and brands. Our U.S. sales force is structured vertically, allowing us to offer customers integrated customer-centric solutions. We believe this approach allows us to provide the best solutions across all of our products based on a deeper understanding of our customers' businesses.

In the U.S., we employ sales professionals in multiple locations, including Atlanta, Boston, Chicago, Dallas, Detroit, Hillsboro, the Los Angeles area, Miami, New York, Omaha, San Francisco, and Sunnyvale as of December 31, 2016. In international markets, we either have our own internal sales professionals or rely on our established sales agency relationships in 35 countries, regions, and territories as of December 31, 2016.

Revenue under the Search Agreement represented approximately 35 percent, 35 percent, and 37 percent of our revenue for the years ended December 31, 2014, 2015, and 2016, respectively, and no other individual customer represented more than 10 percent of our revenue in 2014, 2015, or 2016.

Internet usage is subject to seasonal fluctuations, typically declining during customary summer vacation periods and increasing during the fourth quarter holiday period due to higher online retail activity. These seasonal patterns have affected, and we expect will continue to affect, our business and quarterly sequential revenue growth rates.

Marketing

Yahoo is one of the most recognized brands in the world. Our products, services, and content enable us to attract, retain, and engage users, advertisers, and publishers. Our marketing team will help shape our offerings to better market them to our potential and existing users.

Competition

Our industry is characterized by rapid evolution and innovation through disruptive technologies. We face significant competition from a wide range of businesses, particularly companies that seek to connect people with digital content and with each other. We compete on a global scale for audience share, marketers, and talent. Our competition includes:

- General purpose search engines and information services such as Alphabet's Google and Microsoft's Bing.
- Companies such as Facebook and Twitter that provide mail, photo sharing, blogging, microblogging, and other social or communication services. These areas are attracting an increasing share of users, users' online time (across mobile and desktop), and advertising dollars.
- Companies that offer an integrated variety of Internet products, advertising services, technologies, online services, and/or content in a manner similar to us that compete for the attention of our users, advertisers, developers, and third-party website publishers. We also compete with these companies to obtain agreements with third parties to promote or distribute our services.
- Digital, broadcast, and print media companies with which we compete for the attention of consumer audiences and share of advertising dollars. This area has become increasingly competitive as traditional media companies make the shift online to compete for users, users' time, and advertising dollars across mobile and desktop.

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- Advertising networks, exchanges, demand side and supply side platforms, and traditional media companies, with which we compete for a share of advertisers' marketing budgets and in the development of the tools and systems for managing and optimizing advertising campaigns.
- Companies that provide analytics, monetization and marketing tools for mobile and desktop developers.
- In a number of international markets, especially those in Asia, Europe, Middle East and Latin America, we face substantial competition from local Internet service providers and other entities that offer search, communications, and other commercial services and often have a competitive advantage due to dominant market share in their territories, greater local brand recognition, focus on a single market, familiarity with local tastes and preferences, or greater regulatory and operational flexibility.

As we introduce new products and our existing products evolve, we may become subject to additional competition.

We believe our principal competitive strengths relating to attracting users include the usefulness, accessibility, integration, and personalization of the online services that we offer; the quality, personalization, and presentation of our search results; and the overall user experience on our premium properties. Our principal competitive strengths relating to attracting advertisers and publishers are the reach, effectiveness, and efficiency of our marketing services as well as the creativity of the marketing solutions that we offer.

Additional information regarding competition is included in Part I, Item 1A "Risk Factors" of this Annual Report on Form 10-K and is incorporated herein by reference.

Intellectual Property

We create, own, and maintain a wide array of intellectual property assets that we believe are among our most valuable assets. Our intellectual property assets include patents and patent applications related to our innovations, products and services; trademarks related to our brands, products and services; copyrights in software and creative content; trade secrets; and other intellectual property rights and licenses of various kinds. We seek to protect our intellectual property assets through patents, copyrights, trade secrets, trademarks and laws of the U.S. and other countries, and through contractual provisions. We enter into confidentiality and invention assignment agreements with our employees and contractors, and utilize non-disclosure agreements with third parties with whom we conduct business in order to secure and protect our proprietary rights and to limit access to, and disclosure of, our proprietary information. We consider the Yahoo! trademark and our many related company brands to be among our most valuable assets, and we have registered these trademarks in the U.S. and other countries throughout the world and actively seek to protect them. We have licensed in the past, and expect that we may license in the future, certain of our technology and proprietary rights, such as trademark, patent, copyright, and trade secret rights, to third parties. In addition, Excalibur, our wholly owned subsidiary, owns a portfolio of patent assets that are not core to our operating business (the "Excalibur IP Assets"). Upon completion of the Sale transaction with Verizon, (i) Excalibur will remain an asset of Altaba Inc., and (ii) Verizon will receive, for its benefit and that of its current and certain of its future affiliates, a non-exclusive, worldwide, perpetual, royalty-free license to the Excalibur IP Assets.

Additional information regarding certain risks related to our intellectual property is included in Part I, Item 1A "Risk Factors" of this Annual Report on Form 10-K and is incorporated herein by reference.

Employees

As of December 31, 2016, we had approximately 8,500 full-time employees and 600 contractors. Our future success is substantially dependent on the performance of our senior management and key technical personnel, as well as our continuing ability to attract, maintain the caliber of, and retain highly qualified technical, executive, and managerial personnel. We remain committed to our talented employees and providing the best possible workplace culture for them. Additional information regarding certain risks related to our employees is included in Part I, Item 1A "Risk Factors" of this Annual Report on Form 10-K and is incorporated herein by reference.

Available Information

Our website is located at <https://www.yahoo.com>. Our investor relations website is located at <https://investor.yahoo.net>. We make available free of charge on our investor relations website under "Financial Info" our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and any amendments to those reports as soon as reasonably practicable after we electronically file or furnish such materials to the U.S. Securities and Exchange Commission ("SEC"). The SEC maintains a website that contains reports, proxy and information statements, and other information regarding our filings at <http://www.sec.gov>.

Item 1A. Risk Factors

We face significant competition for users, advertisers, publishers, developers, and distributors.

We face significant competition from online search engines, sites offering integrated internet products and services, social media and networking sites, e-commerce sites, companies providing analytics, monetization and marketing and publishing tools for mobile and desktop advertisers, publishers, developers and distributors, and digital, broadcast and print media. In a number of international markets, especially those in Asia, Europe, the Middle East and Latin America, we face substantial competition from local Internet service providers and other entities that offer search, communications, and other commercial services.

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, developers, and third-party website publishers as participants in our Affiliate network, and to obtain agreements with third parties to promote or distribute our services. We also compete with social media and networking sites which are increasingly used to communicate and share information, and which are attracting a substantial and increasing share of users, users' online time, content, and online advertising dollars.

A key element of our strategy is increasing revenue growth. As part of this strategy, we are focusing on mobile products and mobile advertising formats, as well as increasing our revenue from mobile. A number of our competitors also have devoted significant resources to the development of products, services and apps for mobile devices. Several of our competitors have mobile revenue significantly greater than ours. If we are unable to develop products for mobile devices that users find engaging and that help us grow our mobile revenue, our competitive position, our financial condition and our operating results could be harmed.

In addition, a number of competitors offer products, services and apps that directly compete for users with our offerings, including e-mail, search, video, social, sports, news, finance, micro-blogging,

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and messaging. Similarly, our competitors or other participants in the online advertising marketplace offer advertising exchanges, ad networks, demand side platforms, ad serving technologies, sponsored search offerings, and other services that directly compete for advertisers with our offerings. Additionally, as the use of programmatic advertising continues to increase, we compete with companies that have also invested in programmatic platform offerings. We also compete with traditional print and broadcast media companies to attract domestic and international advertising spending. Some of our existing competitors and possible entrants have greater brand recognition for certain products, services and apps, more expertise in particular market segments, 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, services and apps faster than we can. In addition, competitors may consolidate or collaborate with each other, and new competitors may enter the market. Some of our competitors in international markets have a substantial competitive advantage over us because they have dominant market share in their territories, have greater local 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.

We generate the majority of our revenue from search and display advertising, and the reduction in spending by or loss of current or potential advertisers would cause our revenue and operating results to decline.

For the twelve months ended December 31, 2016, 90 percent of our total revenue came from search and display advertising. Our ability to retain and grow search and display revenue depends upon:

- maintaining and increasing our daily active users, logged in users, page views and engagement;
- introducing engaging new products that are popular with users and advertisers and are distributable on mobile and other alternative devices and platforms;
- maintaining and expanding our advertiser base on desktop computers and mobile devices;
- achieving a better traffic mix from our Yahoo Properties and Affiliates and improving our monetization rates on such traffic;
- broadening our relationships with advertisers to small- and medium-sized businesses;
- successfully implementing changes and improvements to our advertising management platforms and formats and obtaining the acceptance of our advertising management platforms by advertisers, website publishers, and online advertising networks;
- successfully acquiring, investing in, and implementing new technologies;
- successfully implementing changes in our sales force, sales development teams, and sales strategy;
- continuing to innovate and improve the monetization capabilities of our display and native advertising and our mobile products;
- effectively monetizing mobile and other search queries;

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- improving the quality of our user and advertiser products;
- continuing to innovate and improve users' search experiences;
- maintaining and expanding our Affiliate program for search and display advertising services; and
- deriving better demographic and other information about our users to enable us to offer better, more personalized and targeted experiences to both our users and advertisers.

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. Payments under our agreements with advertisers often depend upon performance and click-through levels. Accordingly, it is difficult to forecast search and display revenue accurately. In addition, our expense levels are based in part on expectations of future revenue, including any guaranteed minimum payments and other traffic acquisition costs to our Affiliates in connection with search and/or display advertising, and in some cases, the expenses could exceed the revenue that we generate. The state of the global economy, growth rate of the online advertising market, and availability of capital impacts the advertising spending patterns of our 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.

As more people access our products via mobile devices rather than desktop computers and mobile advertising continues to evolve, if we do not continue to attract and retain mobile users and grow mobile revenue, our financial results will be adversely impacted.

The number of people who access the Internet through mobile devices rather than a desktop computer, including mobile telephones, smartphones and tablets, is increasing and will likely continue to increase dramatically. More than 650 million of our monthly users (including Tumblr users) are now accessing us on mobile devices. In addition, search queries are increasingly being undertaken through mobile devices. As a result, our ability to grow advertising revenue increasingly depends on our ability to generate revenue from ads displayed on mobile devices.

A key element of our strategy is focusing on mobile devices, and we expect to continue to devote significant resources to the creation and support of developing new and innovative mobile products, services and apps. However, if our new mobile products, services and apps, including new forms of Internet advertising for mobile devices, do not continue to attract and retain mobile users, advertisers and device manufacturers and to generate and grow mobile revenue, our operating and financial results will be adversely impacted. We are dependent on the interoperability of our products and services with mobile operating systems we do not control and we may not be successful in maintaining relationships with the key participants in the mobile industry that control such mobile operating systems. The manufacturer or access provider might promote a competitor's or its own products and services, impair users' access to our services by blocking access through their devices, make it hard for users to readily discover, install, update or access our products on their devices, or charge us for delivery of ads, or limit our ability to deliver ads or measure their effectiveness. If distributors impair access to or refuse to distribute our services or apps, or charge for or limit our ability to deliver ads or measure the effectiveness of our ads, then our user engagement and revenue could decline.

If we do not manage our operating expenses effectively, our profitability could fail to improve and could decline.

We plan to continue to seek to operate efficiently and to manage our costs effectively. However, we are also investing in areas we believe will grow revenue and our operating expenses might increase

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as a result of these investments. We have also incurred significant costs in connection with the Sale transaction with Verizon and in connection with the Security Incidents, and we expect these costs will continue in the foreseeable future. If our operating expenses or other expenses increase at a greater pace than our revenue grows, or if we fail to manage costs effectively, our profitability could fail to improve and could decline.

Risks and uncertainties associated with the pending Sale transaction with Verizon may adversely affect our business, financial performance and stock price.

There is no assurance that the Sale transaction will be consummated in a timely manner or at all. In addition, the anticipated benefits of the Sale transaction may not be realized. Potential risks and uncertainties related to the Sale transaction include, among others:

- the inability to consummate the transaction in a timely manner or at all, due to the inability to obtain or delays in obtaining the approval of our stockholders, the necessary regulatory approvals, or satisfaction of other conditions to the closing of the Sale transaction;
- the existence or occurrence of any event, change, or other circumstance that could give rise to the termination of the Amended Stock Purchase Agreement, which, in addition to other adverse consequences, could result in the Company incurring substantial fees, including, in certain circumstances, the payment of a termination fee to Verizon under the Amended Stock Purchase Agreement;
- potential adverse effects on our relationships with our existing and potential advertisers, suppliers, customers, vendors, distributors, landlords, licensors, licensees, joint venture partners, and other business partners;
- the implementation of the Sale transaction will require significant time, attention, and resources of our senior management and others within the Company, potentially diverting their attention from the conduct of our business;
- risks related to our ability to retain or recruit key talent;
- costs, fees, expenses and charges related to or triggered by the Sale transaction;
- the net proceeds that the Company will receive from Verizon is subject to uncertainties as a result of the purchase price adjustments in the Amended Stock Purchase Agreement;
- restrictions on the conduct of our business, including the ability to make certain acquisitions and divestitures, enter into certain contracts, and incur certain indebtedness and expenditures until the earlier of the completion of the Sale transaction or the termination of the Amended Stock Purchase Agreement;
- potential adverse effects on our business, properties or operations caused by us implementing the Sale transaction or foregoing opportunities that we might otherwise pursue absent the pending Sale transaction;
- the initiation or outcome of any legal proceedings or regulatory proceedings that may be instituted against us and our directors and/or officers relating to the Sale transaction as well as certain liabilities arising out of governmental or third party investigations, litigation or claims related to certain data security incidents for which the Company will retain liability following the closing; and
- following the closing of the Sale transaction, the Company will be required to register and be regulated as an investment company under the Investment Company Act of 1940, which will result in, among other things, the Company having to comply with the regulations thereunder, certain stockholders potentially being prohibited from holding or acquiring shares of the

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Company, and the Company likely being removed from the Standard and Poor's 500 Index and other indices which could have an adverse impact on the Company's share price following the Sale transaction.

All of these risks and uncertainties could potentially have an adverse impact on our business and financial performance, and could cause our stock price to decline.

We are still in the process of assessing the full extent of the impact of the Security Incidents and the related government investigations and civil litigation on our results of operations, which could be material.

We are still in the process of assessing the financial and other effects of the Security Incidents (See Item 7—"Management's Discussion and Analysis of Financial Condition and Results of Operations—Security Incidents"), which may have an adverse impact on our business, results of operations and reputation. As a result of the Security Incidents, we are facing approximately 43 putative consumer class action lawsuits, four stockholder derivative actions and one putative stockholder class action, and other lawsuits and claims may be asserted by or on behalf of users, partners, shareholders, or others seeking damages or other related relief, allegedly arising out of the Security Incidents. We are also facing investigations by a number of federal, state, and foreign governmental officials and agencies. These claims and investigations may adversely affect how we operate our business, divert the attention of management from the operation of the business, and result in additional costs and potential fines. In addition, the governmental agencies investigating the Security Incidents may seek to impose injunctive relief, consent decrees, or other civil or criminal penalties which could, among other things, materially increase our data security costs, and affect how we operate our systems and collect and use customer and user information.

Our security measures may be breached as they were in the Security Incidents and user data accessed, which may cause users and customers to curtail or stop using our products and services, and may cause us to incur significant legal and financial exposure.

Our products and services involve the storage and transmission of Yahoo's users' and customers' personal and proprietary information in our facilities and on our equipment, networks, and corporate systems. Yahoo is routinely targeted by outside third parties, including technically sophisticated and well-resourced state-sponsored actors, attempting to access or steal our user and customer data or otherwise compromise user accounts. We believe such a state-sponsored actor was responsible for the theft involved in the 2014 Security Incident and for at least some of the Cookie Forging Activity. Security breaches or other unauthorized access or actions expose us to a risk of theft of user data, regulatory actions, litigation, investigations, remediation costs, damage to our reputation and brand, loss of user and partner confidence in the security of our products and services and resulting fees, costs, and expenses, loss of revenue, damage to our reputation, and other potential liability. Outside parties may attempt to fraudulently induce our employees, users, partners, customers, or other parties to disclose sensitive information or take other actions to gain access to our data or our users' or customers' data, and such unauthorized access may continue undetected for an extended period of time. In addition, hardware, software, or applications we procure from third parties may contain defects in design or manufacture or other problems that could unexpectedly compromise network and data security. In addition, systems and software implemented by us or our partners may contain security vulnerabilities, or may be implemented improperly due to human error or limitations in affected systems. Additionally, some third parties, such as our distribution partners, service providers, vendors, and app developers, may receive, transmit, process, access or store information provided by us or by our users through systems and applications that are integrated with Yahoo systems, properties and services. If these third parties fail to adopt or adhere to adequate data security practices, or in the event of a breach of their networks, our data or our users' data may be improperly

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accessed, used, or disclosed. Security breaches or other unauthorized data disclosure, acquisition or access (such as the Security Incidents) have resulted in, and may in the future result in, a combination of significant legal and financial exposure, increased remediation and other costs, damage to our reputation, and a loss of confidence in the security of our products, services, and networks that could have a significantly adverse effect on our business. We take steps to prevent unauthorized data disclosure or access to our systems; however, because the techniques used to obtain unauthorized access, disable or degrade service, or sabotage systems change frequently or may be disguised or difficult to detect, or designed to remain dormant until a triggering event, we may be unable to anticipate these techniques or implement adequate preventative measures. Breaches of our security measures, such as the Security Incidents, or perceived breaches, have caused and may in the future cause, the market perception of the effectiveness of our security measures to be harmed and could cause us to lose users and customers, or detrimentally affect our relationships with distribution partners, service providers, vendors and app developers.

Changes in regulations or user concerns regarding privacy and protection of user data, or any failure to comply with such laws, could adversely affect our business.

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. 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. Many states have passed laws requiring notification to users where there is a security breach for personal data, such as California's Information Practices Act. We face similar risks in international markets where our products, services and apps are offered. Any failure, or perceived failure, by us to comply with or to make effective modifications to our policies, or to comply with any applicable federal, state, or international privacy, data-retention or data-protection-related laws, regulations, orders or industry self-regulatory principles could result in proceedings or actions against us by governmental entities or others, a loss of user confidence, damage to the Yahoo brands, and a loss of users, advertising partners, or Affiliates, any of which could potentially have an adverse effect on our business.

In addition, various federal, state and foreign legislative or regulatory bodies may enact new or additional laws and regulations concerning privacy, data retention, data transfer and data protection issues, including laws or regulations mandating disclosure to domestic or international law enforcement bodies, which could adversely impact our business, our brand or our reputation with users. For example, some countries are considering or have enacted laws mandating that user data regarding users in their country be maintained in their country. Having to maintain local data centers in individual countries could increase our operating costs significantly. In addition, there currently is a data protection regulation, known as the General Data Protection Regulation, which has been finalized and is pending implementation by the member states of the European Union by May 2018 that includes operational and compliance requirements that are different than those currently in place and that also includes significant penalties for non-compliance. The European Union is also considering an update to its Privacy and Electronic Communications (e-Privacy) Directive to, among other things, amend the current directive's rules on the use of cookies.

The European Court of Justice invalidated the European Commission's 2000 Safe Harbor Decision that we had previously relied on for data transfers between the European Union and United States. The model contractual clauses and other mechanisms that we currently rely on to address European Union data protection requirements for transfers of data are subject to uncertainty and legal challenges. The European Union and United States recently agreed to the Privacy Shield Framework, an alternative mechanism to comply with European Union data protection requirements. We are not currently relying on the Privacy Shield Framework. Challenges to our existing data transfer mechanisms, and any future legal challenges to data transfer mechanisms that we may adopt, could

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cause us to incur additional costs, require us to change business practices in a manner adverse to our business, or affect the manner in which we provide our services.

The interpretation and application of privacy, data protection, data transfer and data retention laws and regulations are often uncertain and in flux in the United States and internationally. These laws may be interpreted and applied inconsistently from country to country and inconsistently with our current policies and practices, complicating long-range business planning decisions. If privacy, data protection, data transfer or data retention laws are interpreted and applied in a manner inconsistent with our current policies and practices we may be fined or ordered to change our business practices in a manner that adversely impacts our operating results. Complying with these varying international requirements could cause us to incur substantial costs or require us to change our business practices in a manner adverse to our business and operating results.

We are regularly involved in claims, suits, government investigations, and other proceedings that may result in adverse outcomes.

We are regularly involved in claims, suits, government investigations, and proceedings arising from the ordinary course of our business, including actions with respect to intellectual property claims, privacy, consumer protection, information security, data protection or law enforcement matters, tax matters, labor and employment claims, commercial claims, as well as actions involving content generated by our users, stockholder derivative actions, purported class action and class action lawsuits, and other matters. Such claims, suits, government investigations, and proceedings are inherently uncertain and their results cannot be predicted with certainty. Regardless of the outcome, such legal proceedings can have an adverse impact on us because of legal costs, diversion of management and other personnel, and other factors. In addition, it is possible that a resolution of one or more such proceedings could result in reputational harm, liability, penalties, or sanctions, as well as judgments, consent decrees, or orders preventing us from offering certain features, functionalities, products, or services, or requiring a change in our business practices, products or technologies, which could in the future materially and adversely affect our business, operating results, and financial condition. See Note 12—“Commitments and Contingencies” in the Notes to our consolidated financial statements.

Risks associated with our Search Agreement with Microsoft may adversely affect our business and operating results.

Under our Search Agreement with Microsoft, Microsoft was the exclusive provider of algorithmic and paid search services for Yahoo Properties and Affiliate sites on personal computers and the non-exclusive provider of such services on mobile devices. As of April 15, 2015, Microsoft became the non-exclusive provider of such services on all devices. Commencing on May 1, 2015, the Company is required to request paid search results from Microsoft for 51 percent of its search queries originating from personal computers accessing Yahoo Properties and its Affiliate sites (the “Volume Commitment”) and will display only Microsoft’s paid search results on such search result pages. Approximately 37 percent, 35 percent, and 35 percent, of our revenue for 2016, 2015, and 2014, respectively, were attributable to the Microsoft Search Agreement (or approximately 25 percent for 2016 after excluding the impact of the change in revenue presentation related to the implementation of the Eleventh Amendment to the Microsoft Search Agreement during the second quarter of 2016). Our business and operating results would be adversely affected by a significant decline in or loss of this revenue if we are not able to successfully replace this revenue with revenue from search results displayed through our Yahoo Gemini platform or our Services Agreement with Google.

As a result of the Volume Commitment, we continue to be dependent on Microsoft continuing to invest and innovate to maintain and improve its algorithmic and paid search services and to be

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competitive with other search providers. If Microsoft fails to do this, our revenue and profitability could decline and our ability to maintain and expand our relationships with Affiliates for search and paid search advertising could be negatively impacted. Further, our competitors may continue to increase revenue, profitability, and market share at a higher rate than we do.

The term of the Microsoft Search Agreement is 10 years from its commencement date, February 23, 2010, subject to earlier termination as provided in the Microsoft Search Agreement. On or after October 1, 2015, either the Company or Microsoft may terminate the Microsoft Search Agreement by delivering a written notice of termination to the other party. The Microsoft Search Agreement will remain in effect for four months from the date of a termination notice to provide for a transition period. If Microsoft terminated the Microsoft Search Agreement and the Company was unable to rely on its own services or the Services Agreement with Google, the termination could have an adverse impact on our business, revenue and operating results.

Risks associated with our Services Agreement with Google may adversely affect our business and operating results.

Under our Services Agreement with Google, Google will provide us with search advertisements through Google's AdSense for Search service, web algorithmic search services through Google's Websearch Service, and image search services. We entered into the Services Agreement with Google in the fourth quarter of 2015. In addition, if Microsoft were to terminate its Search Agreement with us, we would be required to rely on the Services Agreement and our Yahoo Gemini platform to replace the search revenue we currently receive under the Microsoft Search Agreement.

We are dependent on Google continuing to invest and innovate to maintain and improve its algorithmic and paid search services and to be competitive with other search providers. If Google fails to do this, our revenue and profitability could decline. Further, Google has a number of termination rights under the Services Agreement. If Google terminated the Services Agreement and we were unable to rely on our Yahoo Gemini platform or the Microsoft Search Agreement, the termination could have an adverse impact on our business, revenue and operating results.

If we are unable to provide innovative search experiences and other products and services that differentiate our services and generate significant traffic to our websites, our business could be harmed, causing our revenue to decline.

Internet search is characterized by rapidly changing technology, significant competition, evolving industry standards, and frequent product and service enhancements. Although we have agreements with Microsoft and Google to use their paid search platforms, we still need to continue to invest in our Yahoo Gemini search platform and to innovate to improve our users' search experience (especially on mobile) to continue to differentiate our services and attract, retain, and expand our user base and paid search advertiser base. We also generate revenue through other online products, services and apps, and continue to innovate the products, services and apps in our portfolio. The research and development of new, technologically advanced products is a complex process that requires significant levels of innovation and investment, as well as accurate anticipation of technology, market and consumer trends.

If we are unable to provide innovative search experiences and other products and services which differentiate our services, gain user acceptance and generate significant traffic to our websites, or if we are unable to effectively monetize the traffic from such products and services, our business could be harmed, causing our revenue to decline.

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Our business depends on a strong brand, and failing to maintain or enhance the Yahoo brands in a cost-effective manner could harm our operating results.

Maintaining and enhancing our brands is an important aspect of our efforts to attract and expand our user, advertiser, and Affiliate base. We believe that the importance of brand recognition will increase due to the relatively low barriers to entry in certain portions of the Internet market. Maintaining and enhancing our brands will depend largely on our ability to provide high-quality, innovative products, and services, which we might not do successfully. We have spent and expect to spend considerable money and resources on the establishment and maintenance of our brands, as well as advertising, marketing, and other brand-building efforts to preserve and enhance consumer awareness of our brands. Our brands may be negatively impacted by a number of factors such as service outages, product malfunctions, data protection and security issues, exploitation of our trademarks by others without permission, and poor presentation or integration of our search marketing offerings by Affiliates on their sites or in their software and services.

Further, while we attempt to ensure that the quality of our brands is maintained by our licensees, our licensees might take actions that could impair the value of our brands, our proprietary rights, or the reputation of our products and media properties. If we are unable to maintain or enhance our brands in a cost-effective manner, or if we incur excessive expenses in these efforts, our business, operating results and financial condition could be harmed.

If we are unable to attract, sustain, and renew distribution arrangements on favorable terms, our revenue may decline.

We enter into distribution arrangements with third parties to promote or supply our services to their users. For example:

- We maintain search and display advertising relationships with Affiliate sites, which integrate our advertising offerings into their websites.
- We enter into distribution alliances with Internet service providers (including providers of cable and broadband Internet access) and software distributors to promote our services to their users.
- We enter into agreements with mobile phone, tablet, television, and other device manufacturers, electronics companies and carriers to promote our software and services on their devices.

In some markets, we depend on a limited number of distribution arrangements for a significant percentage of our user, publisher, and advertiser activity. A failure by our distributors to attract or retain their user bases would negatively impact our user activity and, in turn, reduce our revenue. For mobile app distribution, we depend on a limited number of distributors, primarily the developers of the operating systems or device manufacturers. If we are unable to reach agreements with these distributors for distribution of our mobile apps or they refuse to distribute or block our mobile apps, our operating results will be harmed. In the future, as new methods for accessing the Internet and our services become available, including through alternative devices, we may need to enter into amended distribution agreements with existing access providers, distributors, and manufacturers to cover the new devices and new arrangements. We face a risk that existing and potential new access providers, distributors, and manufacturers may decide not to offer distribution of our services on reasonable terms, or at all.

Distribution agreements often involve revenue sharing. Competition to enter into distribution arrangements has caused and may in the future cause our traffic acquisition costs to increase. In some cases, we guarantee distributors a minimum level of revenue and, as a result, run a risk that the distributors' performance (in terms of ad impressions, toolbar installations, etc.) might not be sufficient to otherwise earn their minimum payments, in which case our payments could exceed the

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revenue that we receive. In other cases, we agree that if the distributor does not realize specified minimum revenue we will adjust the distributor's revenue-share percentage or provide make-whole arrangements.

Some of our distribution agreements are not exclusive, have a short term, are terminable at will, or are subject to early termination provisions. The loss of distributors, increased distribution costs, or the renewal of distribution agreements on significantly less favorable terms may cause our revenue to decline.

If we are unable to license, acquire, create or aggregate compelling content and services at reasonable cost, or receive compelling content, the number of users of our services may not grow as anticipated, or may decline, or users' level of engagement with our services may decline, all of which could harm our operating results.

Our future success depends in part on our ability to aggregate compelling content and deliver that content through our online properties. We license from third parties much of the content and services on our online properties, such as news, stock quotes, weather, sports, video, and photos. In addition, our users also contribute content to us, and our employees and contractors produce unique content for us. We believe that users will increasingly demand high-quality content and services. We may need to make substantial payments to third parties from whom we license or acquire such content or services. Our ability to maintain and build relationships with such third-party providers is critical to our success. In addition, as users increasingly access the Internet via mobile and other alternative devices, we may need to enter into amended agreements with existing third-party providers to cover new devices. 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, stop offering their content or services to us, or offer their content and services on terms that are not agreeable to us. An increase in the prices charged to us by third-party providers or in the costs we incur to produce our own content could harm our operating results and financial condition. Further, because many of our licenses for our content and services with third parties are non-exclusive, other media providers may be able to offer similar or identical content. This increases the importance of our ability to deliver compelling editorial content and personalization of this content for users in order to differentiate Yahoo from other businesses. If we are unable to license or acquire compelling content at reasonable cost, if other companies distribute content or services that are similar to or the same as that provided by us, or if we do not receive compelling content from our users, the number of users of our services may not grow as anticipated, or may decline, users' level of engagement with our services may decline, clicks on our ads may decrease, or advertisers may reduce future purchases of our ads, all or any of which could harm our operating results.

Interruptions, delays, or failures in the provision of our services could damage our reputation and harm our operating results.

Delays or disruptions to our service, or the loss or compromise of data, could result from a variety of causes, including the following:

- Our operations are susceptible to outages and interruptions due to fire, flood, earthquake, tsunami, other natural disasters, power loss, equipment or telecommunications failures, cyber attacks, terrorist attacks, political or social unrest, and other events over which we have little or no control. We do not have multiple site capacity for all of our services and some of our systems are not fully redundant in the event of delays or disruptions to service, so some data or systems may not be fully recoverable after such events.

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- The systems through which we provide our products and services are highly technical, complex, and interdependent. Design errors might exist in these systems, or might be introduced when we make modifications, which might cause service malfunctions or require services to be taken offline while corrective responses are developed.
- Despite our implementation of security measures, our servers and platforms are vulnerable to computer viruses, malware, worms, hacking, physical and electronic break-ins, router disruption, sabotage or espionage, and other disruptions from unauthorized access and tampering (including through social engineering such as phishing attacks), as well as coordinated denial-of-service attacks. We may not be in a position to promptly address attacks or to implement adequate preventative measures if we are unable to immediately detect such attacks. Such events could result in large expenditures to investigate or remediate, to recover data, to repair or replace networks, information systems, or platforms, including changes to security measures, to deploy additional personnel, to defend litigation or regulatory actions or to protect against similar future events, and may cause damage to our reputation or loss of revenue.
- We rely on third-party providers over which we have little or no control for our principal Internet connections and co-location of a significant portion of our data servers, as well as for our payment processing capabilities and key components or features of certain of our products and services. Any disruption of the services they provide us or any failure of these third-party providers to handle higher volumes of use could, in turn, cause delays or disruptions in our services and loss of revenue. In addition, if our agreements with these third-party providers are terminated for any reason, we might not have a readily available alternative.

Prolonged delays or disruptions to our service could result in a loss of users, damage to our brands, legal costs or liability, and harm to our operating results.

Technologies, tools, software, and applications could block our advertisements, impair our ability to deliver interest-based advertising, or shift the location in which advertising appears, which could harm our operating results.

Technologies, tools, software, and applications (including new and enhanced browsers) have been developed and are likely to continue to be developed that can block or allow users to opt out of display, search, and interest-based advertising and content, delete or block the cookies used to deliver such advertising, or shift the location in which advertising appears on pages so that our advertisements do not show up in the most monetizable places on our pages or are obscured. Most of our revenue is derived from fees paid by advertisers in connection with the display of graphical and non-graphical advertisements or clicks on search advertisements on web pages. As a result, the adoption of such technologies, tools, software, and applications could reduce the number of search and display advertisements that we are able to deliver and/or our ability to deliver interest-based advertising and this, in turn, could reduce our advertising revenue and operating results.

If we are unable to recruit, hire, motivate, and retain key personnel, we may not be able to execute our business plan.

Our business is dependent on our ability to recruit, hire, motivate, and retain talented, highly skilled personnel. Achieving this objective may be difficult due to many factors, including the pending Sale transaction with Verizon; the intense competition for such highly skilled personnel in the San Francisco Bay Area and other metropolitan areas where our offices are located; competitors' hiring practices; the effectiveness of our compensation and retention programs; and fluctuations in global economic and industry conditions. If we do not succeed in retaining and motivating our existing key employees, and in attracting new key personnel, we may be unable to meet our business plan and as a result, our revenue and profitability may decline.

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Our intellectual property rights are valuable, and any failure or inability to sufficiently protect them could harm our business and our operating results.

We create, own, and maintain a wide array of copyrights, patents, trademarks, trade dress, trade secrets, rights to domain names and other intellectual property assets which we believe are collectively among our most valuable assets. We seek to protect our intellectual property assets through patent, copyright, trade secret, trademark, and other laws of the U.S. and other countries of the world, and through contractual provisions. However, the efforts we have taken to protect our intellectual property and proprietary rights might not be sufficient or effective at stopping unauthorized use of those rights. Protection of the distinctive elements of Yahoo might not always be available under copyright law or trademark law, or we might not discover or determine the full extent of any unauthorized use of our copyrights and trademarks in order to protect our rights. In addition, effective trademark, patent, copyright, and trade secret protection might not be available or cost-effective in every country in which our products and media properties are distributed or made available through the Internet. Changes in patent law, such as changes in the law regarding patentable subject matter, could also impact our ability to obtain patent protection for our innovations. In particular, recent amendments to the U.S. patent law may affect our ability to protect our innovations and defend against claims of patent infringement. Further, given the costs of obtaining patent protection, we might choose not to protect (or not to protect in some jurisdictions) certain innovations that later turn out to be important. There is also a risk that the scope of protection under our patents may not be sufficient in some cases or that existing patents may be deemed invalid or unenforceable. To help maintain our trade secrets, we have entered into confidentiality agreements with most of our employees and contractors, and confidentiality agreements with many of the parties with whom we conduct business, in order to limit access to and disclosure of our proprietary information. If these confidentiality agreements are breached it could compromise our trade secrets and cause us to lose any competitive advantage provided by those trade secrets.

If we are unable to protect our proprietary rights from unauthorized use, the value of our intellectual property assets may be reduced. In addition, protecting our intellectual property and other proprietary rights is expensive and time consuming. Any increase in the unauthorized use of our intellectual property could make it more expensive to do business and consequently harm our operating results.

We are, and may in the future be, subject to intellectual property infringement or other third-party claims, which are costly to defend, could result in significant damage awards, and could limit our ability to provide certain content or use certain technologies in the future.

Internet, technology, media, and patent holding companies often possess a significant number of patents. Further, many of these companies and other parties are actively developing or purchasing search, indexing, e-commerce, and other Internet-related technologies, as well as a variety of online business models and methods.

We believe that these parties will continue to take steps such as seeking patent protection to protect these technologies. In addition, patent holding companies may continue to seek to monetize patents they have purchased or otherwise obtained. As a result, disputes regarding the ownership of technologies and rights associated with online businesses are likely to continue to arise in the future. From time to time, parties assert patent infringement claims against us. Currently, we are engaged in a number of lawsuits regarding patent issues and have been notified of a number of other potential disputes.

In addition to patent claims, third parties have asserted, and are likely in the future to assert, claims against us alleging infringement of copyrights, trademark rights, trade secret rights or other proprietary rights, or alleging unfair competition, violation of federal or state statutes or other claims,

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including alleged violation of international statutory and common law. In addition, third parties have made, and may continue to make, infringement and other claims against us over the display of content or search results triggered by search terms.

As we develop new technologies, products and services, we may become increasingly subject to intellectual property infringement and other claims, including those that may arise under international laws. In the event that there is a determination that we have infringed third-party proprietary rights such as patents, copyrights, trademark rights, trade secret rights, or other third-party rights such as publicity and privacy rights, we could incur substantial monetary liability, or be required to enter into costly royalty or licensing agreements or be prevented from using such rights, which could require us to change our business practices in the future, hinder us from offering certain features, functionalities, products or services, require us to develop non-infringing products or technologies, and limit our ability to compete effectively. We may also incur substantial expenses in defending against third-party claims regardless of the merit of such claims. In addition, many of our agreements with our customers or Affiliates require us to indemnify them for some types of third-party intellectual property infringement claims, which could increase our costs in defending such claims and our damages. Furthermore, such customers and Affiliates may discontinue the use of our products, services, and technologies either as a result of injunctions or otherwise. The occurrence of any of these results could harm our brands or have an adverse effect on our business, financial position, operating results, and cash flows.

We may be required to record a significant charge to earnings if our goodwill, intangible assets, investments in equity interests, or other investments become impaired.

We have previously recorded charges to earnings when our goodwill, intangible assets, investments in equity interests, including investments held by any equity method investee, and other investments became impaired. For example, we recorded a \$4.461 billion non-cash goodwill impairment charge during the fourth quarter of 2015 and a non-cash goodwill impairment charge of \$395 million and a non-cash intangible assets impairment charge of \$87 million during the second quarter of 2016. We are required under generally accepted accounting principles to test goodwill for impairment at least annually and to review our intangible assets, investments in equity interests (including investments held by any equity method investee), and our other investments, for impairment when events or changes in circumstance indicate the carrying value may not be recoverable. Factors that could lead to impairment of goodwill, intangible assets (including goodwill or assets acquired via acquisitions) and other investments include significant adverse changes in the business climate and actual or projected operating results (affecting our company as a whole or affecting any particular reporting unit) and declines in the financial condition of our business. Factors that could lead to impairment of investments in equity interests include a prolonged period of decline in the stock price or operating performance of, or an announcement of adverse changes or events by, the companies in which we invested or the investments held by those companies. Factors that could lead to an impairment of U.S. government securities, which constitute a significant portion of our current assets, include any downgrade of U.S. government debt or concern about the creditworthiness of the U.S. government. We may be required in the future to record additional charges to earnings if our goodwill, intangible assets, investments in equity interests, including investments held by any equity method investee, or other investments become impaired. Any such charge would adversely impact our financial results.

Fluctuations in foreign currency exchange rates may adversely affect our operating results and financial condition.

Revenue generated and expenses incurred by our international subsidiaries and any equity method investee are often denominated in the currencies of the local countries. As a result, our consolidated U.S. dollar financial statements are subject to fluctuations due to changes in exchange rates as the financial results of our international subsidiaries and any equity method investee are translated from

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local currencies into U.S. dollars. Our financial results are also subject to changes in exchange rates that impact the settlement of transactions in non-local currencies. The carrying values of our equity investments in any equity investee are also subject to fluctuations in the exchange rates of foreign currencies.

We use derivative instruments, such as foreign currency forward contracts, to partially offset certain exposures to fluctuations in foreign currency exchange rates. The use of such instruments may not offset any, or more than a portion, of the adverse financial effects of unfavorable movements in foreign currency exchange rates. Any losses on these instruments that we experience may adversely impact our financial results, cash flows and financial condition. Further, we hedge a portion of our net investment in Yahoo Japan Corporation (“Yahoo Japan”) with currency forward contracts. If the Japanese yen has appreciated at maturity beyond the contract execution rate, we would be required to settle the contract by making a cash payment which could be material and could adversely impact our cash flows and financial condition. See Part II, Item 7A—“Quantitative and Qualitative Disclosures About Market Risk” of this Annual Report.

Acquisitions and strategic investments could result in adverse impacts on our operations and in unanticipated liabilities.

We have acquired, and have made strategic investments in, a number of companies (including through joint ventures). Such acquisitions and strategic investments to date were accompanied by a number of risks, including:

- the difficulty of integrating the operations, personnel, systems, and controls of acquired companies as a result of cultural, regulatory, systems, and operational differences;
- the potential disruption of our ongoing business and distraction of management;
- the incurrence of additional operating losses and operating expenses of the businesses we acquired or in which we invested;
- the difficulty of integrating acquired technology and rights into our services and unanticipated expenses related to such integration;
- the failure to successfully further develop an acquired business or technology and any resulting impairment of amounts currently capitalized as intangible assets;
- the failure of strategic investments to perform as expected or to meet financial projections;
- the potential for patent and trademark infringement and data privacy and security claims against the acquired companies, or companies in which we have invested;
- litigation or other claims in connection with acquisitions, acquired companies, or companies in which we have invested;
- the impairment or loss of relationships with customers and partners of the companies we acquired or in which we invested or with our customers and partners as a result of the integration of acquired operations;
- the impairment of relationships with, or failure to retain, employees of acquired companies or our existing employees as a result of integration of new personnel;
- the impairment of goodwill and/or purchased long-lived assets;
- our lack of, or limitations on our, control over the operations of our joint venture companies;
- in the case of foreign acquisitions and investments, the impact of particular economic, tax, currency, political, legal and regulatory risks associated with specific countries; and

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- the impact of known potential liabilities or liabilities that may be unknown, including as a result of inadequate internal controls, associated with the companies we acquired or in which we invested.

Our failure to be successful in addressing these risks or other problems encountered in connection with our acquisitions and strategic investments could cause us to fail to realize the anticipated benefits of such acquisitions or investments, incur unanticipated liabilities, and harm our business generally.

A variety of new and existing U.S. and foreign government laws and regulations could subject us to claims, judgments, monetary liabilities and other remedies, and to limitations on our business practices.

We are subject to numerous U.S. and foreign laws and regulations covering a wide variety of subject matters. New laws and regulations, changes in existing laws and regulations or the interpretation of them, our introduction of new products or forms of advertising (such as native advertising), or an extension of our business into new areas, could increase our future compliance costs, make our products and services less attractive to our users, or cause us to change or limit our business practices. We may incur substantial expenses to comply with laws and regulations or defend against a claim that we have not complied with them. Further, any failure on our part to comply with any relevant laws or regulations may subject us to significant civil or criminal liabilities, penalties, and negative publicity.

The application of existing domestic and international laws and regulations to us relating to issues such as user privacy and data protection, data transfer, data localization, security, defamation, pricing, advertising, taxation, gambling, sweepstakes, promotions, billing, real estate, fantasy sports, consumer protection, accessibility, content regulation, quality of services, law enforcement demands, telecommunications, mobile, television, and intellectual property ownership and infringement in many instances is unclear or unsettled. Further, the application to us or our subsidiaries of existing laws regulating or requiring licenses for certain businesses of our advertisers can be unclear. For example, paid fantasy sports contests are an area of current regulatory uncertainty, with various government authorities having taken positions that some types of contests are unlawful and/or subject to licensing requirements. Similarly, there are a number of legislative proposals in the European Union and its member states that could impose new obligations in areas affecting our business, including, but not limited to, copyright. U.S. export control laws and regulations also impose requirements and restrictions on exports to certain nations and persons and on our business. 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.

The Digital Millennium Copyright Act ("DMCA") is intended, in part, to limit the liability of eligible online service providers for caching, hosting, listing or linking to, third-party websites or user content that include materials that give rise to copyright infringement. 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, and may be adversely impacted by future legislation and future judicial decisions altering these safe harbors or if international jurisdictions refuse to apply similar protections.

Various U.S. and international laws restrict the distribution of materials considered harmful to children and impose additional restrictions on the ability of online services to collect information from minors. These laws currently impose restrictions and requirements on our business, and future federal, state or international laws and legislative efforts designed to protect children on the Internet may impose additional requirements on us.

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Our international operations expose us to additional risks that could harm our business, operating results, and financial condition.

In addition to uncertainty about our ability to continue to generate revenue from our foreign operations, there are additional risks inherent in doing business internationally (including through our international joint ventures), including:

- tariffs, trade barriers, customs classifications and changes in trade regulations;
- difficulties in developing, staffing, and simultaneously managing a large number of varying foreign operations as a result of distance, language, and cultural differences;
- stringent local labor laws and regulations;
- longer payment cycles;
- credit risk and higher levels of payment fraud;
- profit repatriation restrictions and foreign currency exchange restrictions;
- political or social unrest, economic instability, repression, or human rights issues;
- geopolitical events, including natural disasters, acts of war and terrorism;
- import or export regulations;
- compliance with U.S. laws such as the Foreign Corrupt Practices Act, and local laws prohibiting bribery and corrupt payments to government officials;
- antitrust and competition regulations;
- potentially adverse tax developments;
- seasonal volatility in business activity and local economic conditions;
- economic uncertainties relating to volatility in emerging markets and global economic uncertainty;
- laws, regulations, licensing requirements, and business practices that favor local competitors or prohibit foreign ownership or investments;
- different, uncertain or more stringent user protection, content, data protection, privacy, intellectual property and other laws; and
- risks related to other government regulation (including actions restricting access to our products or services), required compliance with local laws or lack of legal precedent.

The recent advisory referendum on the United Kingdom's membership in the European Union, and any resulting changes to UK or EU policies, may, among other things, adversely affect business activity and economic conditions, cause unfavorable exchange rate fluctuations, create uncertainty regarding international data protection and transfer, government requests for information, advertising regulations, and tax rates, and affect our ability to recruit and retain employees.

We are subject to numerous and sometimes conflicting U.S. and foreign laws and regulations which increase our cost of doing business. Violations of these complex laws and regulations that apply to our international operations could result in damage awards, fines, criminal actions, sanctions, or penalties against us, our officers or our employees, prohibitions on the conduct of our business and our ability to offer products and services, and damage to our reputation. Although we have implemented policies and procedures designed to promote compliance with these laws, there can be no assurance that our employees, contractors, or agents will not violate our policies. These risks inherent in our international operations and expansion increase our costs of doing business internationally and could result in harm to our business, operating results, and financial condition.

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We may be subject to legal liability associated with providing online services or content.

We host and provide a wide variety of services and technology products that enable and encourage individuals and businesses to exchange information; upload or otherwise generate photos, videos, text, and other content; advertise products and services; conduct business; and engage in various online activities both domestically and internationally. The law relating to the liability of providers of online services and products for activities of their users is currently unsettled both within the United States and internationally. As a publisher, producer, and distributor of content, we may be subject to claims such as copyright, libel, defamation or improper use of publicity rights, as well as other infringement claims such as plagiarism. Claims have been threatened and brought against us for defamation, negligence, breaches of contract, plagiarism, copyright and trademark infringement, unfair competition, unlawful activity, tort, including personal injury, fraud, or other theories based on the nature and content of information which we publish or to which we provide links or that may be posted online or generated by us or by third parties, including our users. In addition, we have been and may again in the future be subject to domestic or international actions alleging that certain content we have generated or third-party content that we have made available within our services violates laws in domestic and international jurisdictions. We could also face restrictions or blocking of our services in particular countries as a result of content hosted on our services. We arrange for the distribution of third-party advertisements to third-party publishers and advertising networks, and we offer third-party products, services, or content, such as stock quotes and trading information or search results, under the Yahoo brand or via distribution on Yahoo Properties. We may be subject to claims concerning these products, services, or content by virtue of our involvement in marketing, branding, broadcasting, or providing access to them, even if we do not ourselves host, operate, provide, or provide access to these products, services, or content. While our agreements with respect to these products, services, and content may provide that we will be indemnified against such liabilities, the ability to receive such indemnification may be disputed, could result in substantial costs to enforce or defend, and depends on the financial resources of the other party to the agreement, and any amounts received might not be adequate to cover our liabilities or the costs associated with defense of such proceedings. Defense of any such actions could be costly and involve significant time and attention of our management and other resources, may result in monetary liabilities or penalties, and may require us to change our business in an adverse manner.

It is also possible that if any information provided directly by us contains errors or is otherwise wrongfully provided to users, third parties could make claims against us. For example, we offer web-based e-mail services, which expose us to potential risks, such as liabilities or claims, by our users and third parties, resulting from unsolicited e-mail, lost or misdirected messages, illegal or fraudulent use of e-mail, alleged violations of policies, property interests, or privacy protections, including civil or criminal laws, or interruptions or delays in e-mail service. We may also face purported consumer class actions or state actions relating to our online services, including our fee-based services (particularly in connection with any decision to discontinue a fee-based service). In addition, our customers, third parties, or government entities may assert claims or actions against us if our online services or technologies are used to spread or facilitate malicious or harmful code or applications.

Investigating and defending these types of claims are expensive, even if the claims are without merit or do not ultimately result in liability, and could subject us to significant monetary liability or cause a change in business practices that could negatively impact our ability to compete.

Certain of our metrics are subject to inherent challenges in measurement, and real or perceived inaccuracies in such metrics may harm our reputation and negatively affect our business.

We present key metrics such as unique users, number of Ads Sold, number of Paid Clicks, Search click-driven revenue, Price-per-Click, Price-per-Ad, page views, mail messages sent and read, and searches that are calculated using unaudited internal company data. We periodically review, refine

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and update our methodologies for monitoring, gathering, and calculating these metrics. In addition, from time to time we provide, or rely on, certain other metrics, including those relating to the reach and effectiveness of our ads.

While our metrics are based on what we believe to be reasonable measurements and methodologies, there are inherent challenges in deriving our metrics across large online and mobile populations around the world. In addition, our user metrics may differ from estimates published by third parties or from similar metrics of our competitors due to differences in methodology. Furthermore, over time we may revise or cease reporting certain metrics that we no longer believe are useful or meaningful measures of our performance and add new metrics which we believe are better measurements of performance.

If advertisers, publishers or partners do not perceive our metrics to be accurate, or if we discover material inaccuracies in our metrics, it could negatively affect our reputation, business and financial results.

Any failure to scale and adapt our existing technology architecture to manage expansion of user-facing services and to respond to rapid technological change could adversely affect our business.

As some of the most visited sites on the Internet, Yahoo Properties deliver a significant number of products, services, page views, and advertising impressions to users around the world. We expect our products and services to continue to expand and change significantly and rapidly in the future to accommodate new technologies, new devices, new Internet advertising solutions, and new means of content delivery.

In addition, widespread adoption of new Internet, networking or telecommunications technologies, or other technological or platform changes, could require substantial expenditures to modify or adapt our services or infrastructure. The technology architectures and platforms utilized for our services are highly complex and may not provide satisfactory security features or support in the future, as usage increases and products and services expand, change, and become more complex. In the future, we may make additional changes to our existing, or move to completely new, architectures, platforms and systems, such as the changes we have made in response to the increased use of mobile devices such as tablets and smartphones. Such changes may be technologically challenging to develop and implement, may take time to test and deploy, may cause us to incur substantial costs or data loss, and may cause changes, delays or interruptions in service. These changes, delays, or interruptions in our service may cause our users, Affiliates and other advertising platform participants to become dissatisfied with our service or to move to competing providers or seek remedial actions or compensation. Further, to the extent that demands for our services increase, we will need to expand our infrastructure, including the capacity of our hardware servers and the sophistication of our software. This expansion is likely to be expensive and complex and require additional technical expertise. As we acquire users who rely upon us for a wide variety of services, it becomes more technologically complex and costly to retrieve, store, and integrate data that will enable us to track each user's preferences. Any difficulties experienced in adapting our architectures, platforms and infrastructure to accommodate increased traffic, to store user data, and track user preferences, together with the associated costs and potential loss of traffic, could harm our operating results, cash flows from operations, and financial condition.

We rely on third parties to provide the technologies necessary to deliver content, advertising, and services to our users, and any change in the licensing terms, costs, availability, or acceptance of these formats and technologies could adversely affect our business.

We rely on third parties to provide the technologies that we use to deliver the majority of the content, advertising, and services to our users. There can be no assurance that these providers will

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continue to license their technologies or intellectual property to us on reasonable terms, or at all. Providers may change the fees they charge users or otherwise change their business model in a manner that slows the widespread acceptance of their technologies. In order for our services to be successful, there must be a large base of users of the technologies necessary to deliver our content, advertising, and services. We have limited or no control over the availability or acceptance of those technologies, and any change in the licensing terms, costs, availability, or user acceptance of these technologies could adversely affect our business.

Our business depends on continued and unimpeded access to the Internet by us and our users. Internet access providers may be able to block, degrade, or charge for access to certain of our products and services, which could lead to additional expenses and the loss of users and advertisers.

Our products and services depend on the ability of our users to access the Internet, and certain of our products require significant bandwidth to work effectively. Currently, this access is provided by companies that have significant market power in the broadband and internet access marketplace, including incumbent telephone companies, cable companies, mobile communications companies, and government-owned service providers. Some of these providers may take, or have stated that they may take, measures that could degrade, disrupt, or increase the cost of user access to certain of our products by restricting or prohibiting the use of their infrastructure to support or facilitate our offerings, or by charging increased fees to us or our users to provide our offerings. Such interference could result in a loss of existing users and advertisers, and increased costs, and could impair our ability to attract new users and advertisers, thereby harming our revenues and growth. The adoption of any laws or regulations that limit access to the Internet by blocking, degrading or charging access fees to us or our users for certain services could decrease the demand for, or the usage of, our products, services and apps, increase our cost of doing business and adversely affect our operating results.

Any failure to manage changes to our business could adversely affect our operating results.

If we are unable to effectively manage a large and geographically dispersed group of employees, our business may be adversely affected. Our business relies on data systems, billing systems, and financial reporting and control systems, among others. All of these systems have become increasingly complex in the recent past due to the growing complexity of our business, acquisitions of new businesses with different systems, and increased regulation over controls and procedures. To manage our business in a cost-effective manner, we will need to continue to upgrade and improve our data systems, billing systems, and other operational and financial systems, procedures, and controls. In some cases, we are outsourcing administrative functions to lower-cost providers. These upgrades, improvements and outsourcing changes will require a dedication of resources and in some cases are likely to be complex. If we are unable to adapt our systems and put adequate controls in place in a timely manner, our business may be adversely affected. In particular, sustained failures of our billing systems to accommodate increasing numbers of transactions, to accurately bill users and advertisers, or to accurately compensate Affiliates could adversely affect the viability of our business model.

We have dedicated resources to provide a variety of premium enhancements to our products, services and apps, which might not prove to be successful in generating significant revenue for us.

We offer fee-based enhancements for many of our free services. The development cycles for these technologies are long and generally require investment by us. We have invested and will continue to invest in premium products, services and apps. Some of these premium products, services and apps might not generate anticipated revenue or might not meet anticipated user adoption rates. We have previously discontinued some non-profitable premium services and may discontinue others. General economic conditions as well as the rapidly evolving competitive landscape may affect users' willingness to pay for such premium services. If we cannot generate revenue from our premium

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services that are greater than the cost of providing such services, our operating results could be harmed.

We may have exposure to additional tax liabilities which could negatively impact our income tax provision, net income, and cash flow.

We are subject to income taxes and other taxes in both the United States and the foreign jurisdictions in which we currently operate or have historically operated. The determination of our worldwide provision for income taxes and current and deferred tax assets and liabilities requires judgment and estimation. Our income taxes could be adversely affected by earnings being lower than anticipated in jurisdictions that have lower statutory tax rates and higher than anticipated in jurisdictions that have higher statutory tax rates, by changes in the valuation of our deferred tax assets and liabilities, or by changes in tax laws, regulations, or accounting principles.

In the ordinary course of our business, there are many transactions and calculations where the ultimate tax determination is uncertain. As a U.S. multinational corporation, we are subject to changing tax laws both within and outside of the United States. We cannot predict the form or timing of potential legislative changes, but any newly enacted tax law could have a material adverse impact on our tax expense and cash flow. For example, several jurisdictions have sought to increase revenues by imposing new taxes on internet advertising or increasing general business taxes. In addition, the Organization for Economic Co-operation and Development ("OECD"), which represents a coalition of member countries, is supporting changes to numerous long-standing tax principles through its base erosion and profit shifting (BEPS) project, which is focused on a number of issues, including the shifting of profits between affiliated entities in different tax jurisdictions. To the extent any of these proposals are enacted into legislation by OECD member countries, or if other international, consensus-based tax policies and principles are amended or implemented, they could adversely affect the amount of tax we pay and thereby our financial position and results of operations.

We earn a material amount of our income from outside the United States. As of December 31, 2016, we had undistributed foreign earnings of approximately \$3.3 billion, related to our equity method investment in Yahoo Japan. While we do not currently anticipate repatriating these earnings, any repatriation of funds in foreign jurisdictions to the United States could result in higher effective tax rates for us and subject us to significant additional U.S. income tax liabilities.

We are subject to regular review and audit by both domestic and foreign tax authorities as well as subject to the prospective and retrospective effects of changing tax regulations and legislation. Although we believe our tax estimates are reasonable, the ultimate tax outcome may materially differ from the tax amounts recorded in our consolidated financial statements and may materially affect our income tax provision, net income, or cash flows in the period or periods for which such determination and settlement is made.

The pending transaction with Verizon requires significant legal entity restructuring and realignment of corporate assets. While the restructuring and realignment are intended to be performed in the most tax efficient manner, there is no assurance that the anticipated benefits will be realized and that additional cash taxes won't become due.

Proprietary document formats may limit the effectiveness of our search technology by preventing our technology from accessing the content of documents in such formats, which could limit the effectiveness of our products and services.

A large amount of information on the Internet is provided in proprietary document formats. These proprietary document formats may limit the effectiveness of search technology by preventing the

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technology from accessing the content of such documents. The providers of the software applications used to create these documents could engineer the document format to prevent or interfere with the process of indexing the document contents with search technology. This would mean that the document contents would not be included in search results even if the contents were directly relevant to a search. The software providers may also seek to require us to pay them royalties in exchange for giving us the ability to search documents in their format. If the search platform technology we employ is unable to index proprietary format web documents as effectively as our competitors' technology, usage of our search services might decline, which could cause our revenue to fall.

Adverse macroeconomic conditions could cause decreases or delays in spending by our advertisers and could harm our ability to generate revenue and our results of operations.

Advertising expenditures tend to be cyclical, reflecting overall economic conditions and budgeting and buying patterns. Since we derive most of our revenue from advertising, adverse macroeconomic conditions have caused, and future adverse macroeconomic conditions could cause, decreases or delays in advertising spending and negatively impact our advertising revenue and short-term ability to grow our revenue. Further, any decreased collectability of accounts receivable or early termination of agreements, whether resulting from customer bankruptcies or otherwise due to adverse macroeconomic conditions, could negatively impact our results of operations.

Our stock price has been volatile historically and may continue to be volatile regardless of our operating performance.

The trading price of our common stock has been and may continue to be subject to broad fluctuations. During the twelve months ended December 31, 2016, the closing sale price of our common stock on the NASDAQ Global Select Market ranged from \$26.76 to \$44.71 per share and the closing sale price on February 10, 2017 was \$45.03 per share. Our stock price may fluctuate in response to a number of events and factors, such as variations in quarterly operating results or announcements of technological innovations, significant transactions, or new features, products or services by us or our competitors; changes in financial estimates and recommendations by securities analysts; the operating and stock price performance of, or other developments involving, other companies that investors may deem comparable to us; trends in our industry; general economic conditions; and the operating performance and market valuation of Alibaba Group Holding Limited ("Alibaba Group") and Yahoo Japan in which we have investments. Following the closing of the Sale transaction with Verizon, our stock price will be materially impacted by the operating performance and market valuation of Alibaba Group and Yahoo Japan. The equity valuation of our investment in Yahoo Japan may be impacted due to fluctuations in foreign currency exchange rates. We present our investment in Alibaba Group on our consolidated balance sheet as an available-for-sale marketable security. Consequently, the carrying value of this investment on our consolidated balance sheet will vary over time and fluctuations in its valuation may cause our stock price to fluctuate.

In addition, the stock market in general, and the market prices for companies in our industry, have experienced volatility that often has been unrelated to operating performance. These broad market and industry fluctuations may adversely affect the price of our stock, regardless of our operating performance. A decrease in the market price of our common stock would likely adversely impact the trading price of the 0.00% Convertible Senior Notes due 2018 that we issued in November 2013 (the "Notes"). Volatility or a lack of positive performance in our stock price may also adversely affect our ability to retain key employees who have been granted stock options or other stock-based awards. A sustained decline in our stock price and market capitalization could lead to an impairment charge to our long-lived assets.

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Delaware statutes and certain provisions in our charter documents could make it more difficult for a third-party to acquire us.

Our Board has the authority to issue up to 10 million shares of preferred stock and to determine the price, rights, preferences, privileges and restrictions, including voting rights, of those shares without any further vote or action by the stockholders. The rights of the holders of our common stock may be subject to, and may be adversely affected by, the rights of the holders of any preferred stock that may be issued in the future. The issuance of preferred stock may have the effect of delaying, deterring or preventing a change in control of Yahoo without further action by the stockholders and may adversely affect the voting and other rights of the holders of our common stock.

Some provisions of our charter documents, including provisions eliminating the ability of stockholders to take action by written consent and limiting the ability of stockholders to raise matters at a meeting of stockholders without giving advance notice, may have the effect of delaying or preventing changes in control or changes in our management, which could have an adverse effect on the market price of our stock and the value of the \$1.4375 billion aggregate principal amount of the Notes we issued in November 2013. In addition, our charter documents do not permit cumulative voting, which may make it more difficult for a third-party to gain control of our Board. Further, we are subject to the anti-takeover provisions of Section 203 of the Delaware General Corporation Law, which will prohibit us from engaging in a “business combination” with an “interested stockholder” for a period of three years after the date of the transaction in which the person became an interested stockholder, even if such combination is favored by a majority of stockholders, unless the business combination is approved in a prescribed manner. The application of Section 203 also could have the effect of delaying or preventing a change in control of us.

Any of these provisions could, under certain circumstances, depress the market price of our common stock and the Notes.

Risks Relating to the Notes

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

In the event the conditional conversion feature of the Notes is triggered, holders of Notes will be entitled to convert the Notes at any time during specified periods at their option. If one or more holders elect to convert their 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 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.

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

Holders of the Notes will have the right to require us to repurchase all or a portion of their Notes upon the occurrence of a fundamental change at a repurchase price equal to 100% of the principal amount of the Notes to be repurchased, plus accrued and unpaid special interest, if any. We may not have enough available cash or be able to obtain financing at the time we are required to make repurchases of Notes surrendered therefore, or pay cash with respect to Notes being converted if we elect not to issue shares, which could harm our reputation and affect the trading price of our common stock.

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The note hedge and warrant transactions may affect the value of the Notes and our common stock.

In connection with the pricing of the Notes, we entered into note hedge transactions with the option counterparties. The note hedge transactions are generally expected to reduce the potential dilution upon conversion of the Notes and/or offset any cash payments we are required to make in excess of the principal amount of converted Notes, as the case may be. We also entered into warrant transactions with the option counterparties. However, the warrant transactions could separately have a dilutive effect to the extent that the market price per share of our common stock exceeds the applicable strike price of the warrants. The initial strike price of the warrants was \$71.24. Counterparties to the warrants may make adjustments to certain terms of the warrants upon the occurrence of specified events, including the announcement of the Stock Purchase Agreement, if the event results in a material change to the trading price of our common stock or the value of the warrants. To date, two counterparties have given us notices of adjustments reducing their warrant exercise prices.

In connection with establishing their initial hedge of the note hedge and warrant transactions, the option counterparties or their respective affiliates have purchased shares of our common stock and/or entered into various derivative transactions with respect to our common stock concurrently with or shortly after the pricing of the Notes. In addition, the option counterparties or their respective affiliates may modify their hedge positions by entering into or unwinding various derivatives with respect to our common stock and/or purchasing or selling our common stock or other securities of ours in secondary market transactions prior to the maturity of the Notes (and are likely to do so during any observation period related to a conversion of Notes or following any repurchase of Notes by us on any fundamental repurchase date or otherwise). This activity could cause or avoid an increase or a decrease in the market price of our common stock or the Notes.

Any adverse change in the rating of the Notes or the Company may cause their trading price to decline.

While we did not solicit a credit rating on the Company or on the Notes, one rating service has rated both the Notes and the Company. If that rating service announces its intention to put the Company or the Notes on credit watch or lowers its rating on the Company or the Notes below any rating initially assigned to the Company or the Notes, the trading price of the Notes could decline.

The accounting method for convertible debt securities that may be settled in cash, such as the Notes, could have a material effect on our reported financial results.

In May 2008, the Financial Accounting Standards Board ("FASB") issued FASB Staff Position No. APB 14-1, Accounting for Convertible Debt Instruments That May Be Settled in Cash Upon Conversion (Including Partial Cash Settlement), which has subsequently been codified as Accounting Standards Codification ("ASC") 470-20, Debt with Conversion and Other Options, which we refer to as ASC 470-20. Under ASC 470-20, an entity must separately account for the liability and equity components of the convertible debt instruments (such as the Notes) that may be settled entirely or partially in cash upon conversion in a manner that reflects the issuer's economic interest cost. The effect of ASC 470-20 on the accounting for the Notes is that the equity component is required to be included in the additional paid-in capital section of stockholders' equity on our consolidated balance sheet, and the value of the equity component would be treated as debt discount for purposes of accounting for the debt component of the Notes. As a result, we will be required to record a greater amount of non-cash interest expense in current periods presented as a result of the amortization of the discounted carrying value of the Notes to their face amount over the term of the Notes. We will report lower net income in our financial results because ASC 470-20 will require interest to include the current period's amortization of the debt discount, which could adversely affect our reported or future financial results, the trading price of our common stock and the trading price of the Notes.

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In addition, under certain circumstances, convertible debt instruments (such as the Notes) that may be settled entirely or partly in cash are currently accounted for utilizing the treasury stock method, the effect of which is that the shares issuable upon conversion of the Notes are not included in the calculation of diluted earnings per share except to the extent that the conversion value of the Notes exceeds their principal amount. Under the treasury stock method, for diluted earnings per share purposes, the transaction is accounted for as if the number of shares of common stock that would be necessary to settle such excess, if we elected to settle such excess in shares, are issued. We cannot be sure that the accounting standards in the future will continue to permit the use of the treasury stock method. If we are unable to use the treasury stock method in accounting for the shares issuable upon conversion of the Notes, then our diluted earnings per share would be adversely affected.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

Our headquarters is located in Sunnyvale, California and consists of owned space aggregating approximately one million square feet. We lease office space in Australia, Brazil, Canada, France, Germany, Hong Kong, India, Ireland, Israel, Japan, New Zealand, Norway, Singapore, Taiwan, and the United Kingdom. In the United States, we lease offices in various locations, including Atlanta, Beaverton, Boston, Champaign, Chicago, Dallas, Detroit, Hillsboro, the Los Angeles Area, Miami, Mountain View, New York, Omaha, San Francisco, and Washington, D.C. Our data centers are operated in locations in the United States, Brazil, Europe, and Asia. In connection with our strategic plan, we are exploring contract terminations and subleases where we feel we no longer need office space.

We believe that our existing facilities will be adequate to meet current requirements, and that suitable additional or substitute space will be available as needed to accommodate any further physical expansion of operations and for any additional sales offices.

Item 3. Legal Proceedings

For a description of our material legal proceedings, see "Legal Contingencies" in Note 12—"Commitments and Contingencies" in the Notes to our consolidated financial statements, which is incorporated herein by reference.

Item 4. Mine Safety Disclosures

Not applicable.

PART II

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

Market Information for Common Stock

Yahoo! Inc. common stock is quoted on the NASDAQ Global Select Market under the symbol "YHOO." The following table sets forth the range of high and low per share sales prices as reported for each period indicated:

	2015		2016	
	High	Low	High	Low
First quarter	\$ 50.78	\$ 41.80	\$ 37.28	\$ 26.15
Second quarter	\$ 46.17	\$ 38.85	\$ 38.19	\$ 35.05
Third quarter	\$ 39.98	\$ 27.20	\$ 44.92	\$ 37.06
Fourth quarter	\$ 36.39	\$ 28.43	\$ 44.08	\$ 38.24

Stockholders

We had 8,672 stockholders of record as of February 10, 2017.

Dividends

We have not declared or paid any cash dividends on our common stock. We presently do not have plans to pay any cash dividends in the near future.

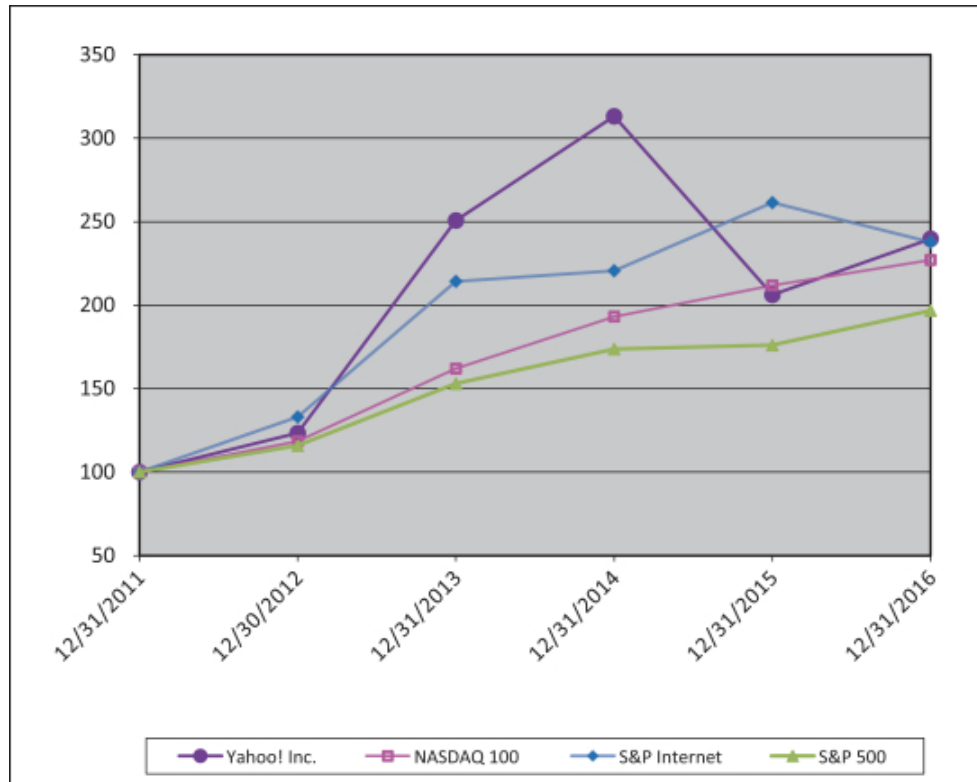
Issuer Repurchases of Equity Securities

We did not purchase any shares of our common stock during the fourth quarter of 2016.

Performance Graph

This performance graph shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or otherwise subject to the liabilities under that section and shall not be deemed to be incorporated by reference into any filing of Yahoo! Inc. under the Securities Act or the Exchange Act.

The following graph compares, for the five-year period ended December 31, 2016, the cumulative total stockholder return for Yahoo's common stock, the NASDAQ 100 Index, the Standard & Poor's North American Technology-Internet Index (the "S&P Internet"), and the Standard & Poor's 500 Stock Index (the "S&P 500"). Measurement points are the last trading day of each of Yahoo's fiscal years ended December 31, 2012, 2013, 2014, 2015, and 2016. The graph assumes that \$100 was invested at the market close on December 31, 2011 in the common stock of Yahoo, the NASDAQ 100 Index, the S&P Internet, and the S&P 500 and assumes reinvestment of any dividends. The stock price performance on the following graph is not necessarily indicative of future stock price performance.



Item 6. Selected Financial Data

The following selected consolidated financial data should be read in conjunction with the consolidated financial statements and notes thereto and "Management's Discussion and Analysis of Financial Condition and Results of Operations" appearing elsewhere in this Annual Report on Form 10-K. The consolidated statements of operations data and the consolidated balance sheets data for the years ended, and as of, December 31, 2012, 2013, 2014, 2015, and 2016 are derived from our audited consolidated financial statements.

Consolidated Statements of Operations Data:

	Years Ended December 31,				
	2012 ⁽³⁾	2013 ⁽⁴⁾	2014 ⁽⁵⁾	2015 ⁽⁶⁾	2016 ⁽⁷⁾⁽⁸⁾
	(in thousands, except per share amounts)				
Revenue	\$ 4,986,566	\$ 4,680,380	\$ 4,618,133	\$ 4,968,301	\$ 5,169,135
Total operating expenses	\$ 4,420,198	\$ 4,090,454	\$ 4,475,191	\$ 9,716,795	\$ 5,814,193
Income (loss) from operations ⁽¹⁾	\$ 566,368	\$ 589,926	\$ 142,942	\$ (4,748,494)	\$ (645,058)
Other income (expense), net ⁽²⁾	\$ 4,647,839	\$ 43,357	\$ 10,369,439	\$ (75,782)	\$ (53,916)
(Provision) benefit for income taxes	\$ (1,940,043)	\$ (153,392)	\$ (4,038,102)	\$ 89,598	\$ 126,228
Earnings in equity interests	\$ 676,438	\$ 896,675	\$ 1,057,863	\$ 383,571	\$ 363,283
Net income (loss) attributable to Yahoo! Inc.	\$ 3,945,479	\$ 1,366,281	\$ 7,521,731	\$ (4,359,082)	\$ (214,321)
Net income (loss) attributable to Yahoo! Inc. common stockholders per share—basic	\$ 3.31	\$ 1.30	\$ 7.61	\$ (4.64)	\$ (0.23)
Net income (loss) attributable to Yahoo! Inc. common stockholders per share—diluted	\$ 3.28	\$ 1.26	\$ 7.45	\$ (4.64)	\$ (0.23)
Shares used in per share calculation—basic	1,192,775	1,052,705	987,819	939,141	949,843
Shares used in per share calculation—diluted	1,202,906	1,070,811	1,004,108	939,141	949,843
(1) Includes:					
Stock-based compensation expense	\$ 224,365	\$ 278,220	\$ 420,174	\$ 457,153	\$ 491,902
Restructuring charges, net	\$ 236,170	\$ 3,766	\$ 103,450	\$ 104,019	\$ 88,629
(2) Includes:					
Gain on sale of Alibaba Group shares	\$ 4,603,322	\$ —	\$ —	\$ —	\$ —
Gain on sale of Alibaba Group ADSs	\$ —	\$ —	\$ 10,319,437	\$ —	\$ —

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- (3) Our net income attributable to Yahoo! Inc. for the year ended December 31, 2012 included a pre-tax gain of approximately \$4.6 billion and an after-tax gain of \$2.8 billion related to our sale to Alibaba Group of 523 million ordinary shares of Alibaba Group (“Alibaba Group shares”). In addition, in the year ended December 31, 2012, we recorded net restructuring charges of \$236 million related to our cost reduction initiatives. In the aggregate, these items had a net positive impact of \$2.6 billion on net income attributable to Yahoo! Inc., or \$2.15 per basic share and \$2.13 per diluted share, for the year ended December 31, 2012.
- (4) Our net income attributable to Yahoo! Inc. for the year ended December 31, 2013 included pre-tax gains of approximately \$80 million related to sales of patents and a goodwill impairment charge of \$64 million. In the year ended December 31, 2013, we recorded net restructuring charges of \$4 million related to our cost reduction initiatives. The tax impact of these items was \$22 million, and in the aggregate, these items had a net negative impact of \$10 million on net income attributable to Yahoo! Inc., or \$0.01 per both basic and diluted share, for the year ended December 31, 2013.
- (5) Our net income attributable to Yahoo! Inc. for the year ended December 31, 2014 included a pre-tax gain of approximately \$10.3 billion and an after-tax gain of \$6.3 billion related to our sale of American Depositary Shares (“ADSs”) of Alibaba Group in Alibaba Group’s initial public offering (the “Alibaba Group IPO”) in September 2014. In addition, in the year ended December 31, 2014, we recorded gains of approximately \$98 million related to sales of patents, a gain on the Hortonworks Inc. (“Hortonworks”) warrants of \$98 million, a goodwill impairment charge of \$88 million, and net restructuring charges of \$103 million related to our cost reduction initiatives. The tax impact of these items was \$3.9 billion, and in the aggregate, these items had a net positive impact of \$6 billion on net income attributable to Yahoo! Inc., or \$6.04 per basic share and \$5.94 per diluted share, for the year ended December 31, 2014.
- (6) Our net loss attributable to Yahoo! Inc. for the year ended December 31, 2015 included a goodwill impairment charge of \$4,461 million, net restructuring charges of \$104 million related to our cost reduction initiatives, an asset impairment charge of \$44 million related to originally developed and acquired content, a loss on the Hortonworks warrants of \$19 million, an intangible assets impairment charge of \$15 million and gains of approximately \$11 million related to sales of patents. The tax impact of these items was a \$129 million benefit, and in the aggregate, these items had a net negative impact of \$4,503 million on net income attributable to Yahoo! Inc., or \$4.79 per both basic share and diluted share, for the year ended December 31, 2015.
- (7) Our net loss attributable to Yahoo! Inc. for the year ended December 31, 2016 included a goodwill impairment charge of \$395 million, net restructuring charges of \$89 million related to our cost reduction initiatives, a loss on the Hortonworks warrants of \$50 million, an intangible assets impairment charge of \$87 million, a gain on sale of land of \$120 million and gains of approximately \$2 million related to sales of patents. The tax impact of these items was a \$25 million benefit, and in the aggregate, these items had a net negative impact of \$474 million on net loss attributable to Yahoo! Inc., or \$0.50 per both basic share and diluted share, for the year ended December 31, 2016.
- (8) Commencing in the second quarter of 2016, TAC payments related to the Microsoft Search Agreement, which previously would have been recorded as a reduction to revenue, began to be recorded as cost of revenue—TAC due to a required change in revenue presentation.

	Years Ended December 31,		
	2014	2015	2016
Cost of revenue - TAC in transitioned markets	\$ —	\$ —	\$ 812,105
Reduction to revenue in transitioned markets	\$ 1,319,242	\$ 1,269,134	\$ 273,705

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See Note 1—"The Company and Summary of Significant Accounting Policies" and Note 19—"Microsoft Search Agreement" in the Notes to our consolidated financial statements for additional information.

Consolidated Balance Sheets Data:

	December 31,				
	2012 ⁽¹⁾	2013 ⁽²⁾	2014 ⁽³⁾	2015 ⁽⁴⁾	2016
	(In thousands)				
Cash and cash equivalents	\$ 2,667,778	\$ 2,077,590	\$ 2,664,098	\$ 1,631,911	\$ 1,119,469
Marketable securities	\$ 3,354,600	\$ 2,919,804	\$ 7,558,304	\$ 5,201,073	\$ 6,790,632
Alibaba Group equity securities	\$ —	\$ —	\$ 39,867,789	\$ 31,172,361	\$ 33,680,879
Alibaba Group Preference Shares	\$ 816,261	\$ —	\$ —	\$ —	\$ —
Working capital	\$ 4,362,481	\$ 3,685,545	\$ 4,929,438	\$ 6,229,939	\$ 6,838,736
Goodwill	\$ 3,826,749	\$ 4,679,648	\$ 5,152,570	\$ 808,114	\$ 415,809
Investments in equity interests	\$ 2,840,157	\$ 3,426,347	\$ 2,489,578	\$ 2,503,229	\$ 3,192,884
Total assets	\$ 17,103,253	\$ 16,804,959	\$ 61,707,336	\$ 45,203,966	\$ 48,083,079
Income taxes payable related to the sale of Alibaba Group ADSs	\$ —	\$ —	\$ 3,282,293	\$ —	\$ —
Long-term deferred tax liabilities related to Alibaba Group equity securities	\$ —	\$ —	\$ 16,154,906	\$ 12,611,867	\$ 13,633,988
Long-term liabilities	\$ 1,207,418	\$ 2,334,050	\$ 2,251,855	\$ 2,235,299	\$ 2,077,591
Total Yahoo! Inc. stockholders' equity	\$ 14,560,200	\$ 13,074,909	\$ 38,741,837	\$ 29,043,537	\$ 31,049,283

- (1) During the year ended December 31, 2012, we received \$13.54 per Alibaba Group share, or approximately \$7.1 billion in total consideration, for the 523 million Alibaba Group shares we sold back to Alibaba Group. Approximately \$6.3 billion of the consideration was received in cash and \$800 million was received in Alibaba Group Preference Shares. We paid cash taxes of \$2.3 billion related to the transaction.
- (2) During the year ended December 31, 2013, we received net proceeds of \$1.4 billion from the issuance of the \$1.4375 billion of 0.00% Convertible Notes due 2018 (the "Notes") issued in November 2013. See Note 11—"Convertible Notes" in the Notes to our consolidated financial statements for additional information.
- (3) During the year ended December 31, 2014, we received net proceeds of \$9.4 billion from the sale of Alibaba Group ADSs in Alibaba Group's IPO. As a result of the Alibaba Group IPO, we no longer account for Alibaba Group using the equity method of accounting, and reflect our remaining investment as an equity security rather than in investments in equity interests.
- (4) During the year ended December 31, 2015, we satisfied the \$3.3 billion income tax liability related to the sale of ADSs in Alibaba Group's IPO in September 2014.

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

Overview

Yahoo! Inc., together with its consolidated subsidiaries (“Yahoo,” the “Company,” “we,” or “us”), is a guide to digital information discovery, focused on informing, connecting, and entertaining our users through our search, communications, and digital content products. By creating highly personalized experiences, we help users discover the information that matters most to them around the world—on mobile or desktop. We create value for advertisers with a streamlined, simple advertising technology that leverages Yahoo’s data, content, and technology to connect advertisers with their target audiences. Advertisers can build their businesses through advertising to targeted audiences on our online properties and services (“Yahoo Properties”) and a distribution network of third party entities (“Affiliates”) who integrate our advertising offerings into their websites or other offerings (“Affiliate sites”). Our revenue is generated principally from search and display advertising. We continue to manage and measure our business geographically, principally in the Americas, EMEA (Europe, Middle East, and Africa), and Asia Pacific.

In the following Management’s Discussion and Analysis, we provide information regarding the following areas:

- Recent Developments;
- Significant Transactions;
- Key Financial Metrics;
- Results of Operations;
- Segment Reporting;
- Liquidity and Capital Resources;
- Critical Accounting Policies and Estimates; and
- Recent Accounting Pronouncements.

Recent Developments

Pending Sale of the Operating Business to Verizon Communications Inc.

On July 23, 2016, we entered into a Stock Purchase Agreement (the “Original Stock Purchase Agreement”) with Verizon Communications Inc. (“Verizon”), pursuant to which we have agreed to sell, and Verizon has agreed to purchase (the “Sale”), all of the outstanding shares of Yahoo Holdings, Inc., a newly formed wholly-owned subsidiary of Yahoo (“Yahoo Holdings”) (and prior to the sale of Yahoo Holdings, to cause Yahoo Holdings to sell to a foreign subsidiary of Verizon all of the equity interests in a foreign subsidiary of Yahoo Holdings that will hold certain foreign subsidiaries relating to our operating business), which, immediately prior to the consummation of the Sale, will own our operating business. Under the Original Stock Purchase Agreement, the aggregate consideration to be paid to us by Verizon in connection with the Sale was \$4,825,800,000 in cash, subject to certain adjustments as provided in the Original Stock Purchase Agreement.

Concurrently with the execution of the Original Stock Purchase Agreement, we entered into a Reorganization Agreement (the “Original Reorganization Agreement”) with Yahoo Holdings,

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pursuant to which we will transfer to Yahoo Holdings prior to the consummation of the Sale all of our assets and liabilities relating to our operating business, other than specified excluded assets and retained liabilities (the "Reorganization").

On February 20, 2017, Yahoo and Verizon entered into an Amendment to Stock Purchase Agreement amending the Original Stock Purchase Agreement (the "SPA Amendment" and, together with the Original Stock Purchase Agreement, the "Amended Stock Purchase Agreement"), and, concurrently with the execution of the SPA Amendment, Yahoo and Yahoo Holdings entered into an Amendment to Reorganization Agreement amending the Original Reorganization Agreement (the "RA Amendment"). Additionally, concurrently with the execution of the SPA Amendment and the RA Amendment, Yahoo, Yahoo Holdings, and Verizon entered into a Settlement and Release Agreement (the "Settlement and Release Agreement").

The SPA Amendment, among other things, (i) reduced the consideration to be paid by Verizon to Yahoo in connection with the Sale by \$350,000,000 to \$4,475,800,000, (ii) provided that certain data security incidents to which Yahoo has been subject will be disregarded for purposes of determining whether certain closing conditions have been satisfied and in determining whether a "Business Material Adverse Effect" has occurred, and (iii) provided that the date after which each of Yahoo and Verizon may terminate the Amended Stock Purchase Agreement if the Closing (as defined in the Amended Stock Purchase Agreement) has not occurred has been extended to July 24, 2017.

The RA Amendment provides, among other things, that Yahoo and Verizon will each be responsible for 50 percent of certain post-closing cash liabilities related to certain data security incidents and other data breaches incurred by the Company.

Under the terms of the Settlement and Release Agreement, among other things, Verizon released certain claims, subject to certain exceptions, it (and its affiliates and representatives) may have against the Company (or its affiliates and representatives) relating to certain data security incidents and other data breaches incurred by the Company.

Upon completion of the Sale, Verizon will also receive for its benefit and that of its current and certain of its future affiliates, a non-exclusive, worldwide, perpetual, royalty-free license to certain intellectual property not core to the operating business held by Excalibur IP, LLC, a wholly-owned subsidiary of the Company ("Excalibur"), that is not being transferred to Yahoo Holdings with the operating business.

The excluded assets include our cash and marketable securities as of the closing of the Sale, our shares in Alibaba Group Holding Limited ("Alibaba Group") and Yahoo Japan Corporation ("Yahoo Japan"), certain other minority equity investments, and all of the equity in Excalibur. The retained liabilities will include the 0.00% Convertible Senior Notes due 2018 ("Notes") we issued in November 2013, securityholder litigation, certain director and officer indemnification obligations, and, pursuant to the RA Amendment, 50 percent of certain post-closing cash liabilities related to certain data security incidents and other data breaches incurred by Yahoo. Following the closing of the Sale, the excluded assets and retained liabilities will remain in Yahoo which will be renamed Altaba Inc. and will become an independent, publicly traded, management investment company registered under the Investment Company Act of 1940.

The closing of the Sale is subject to certain conditions, including, among others, the approval of the Sale by our stockholders, the closing of the Reorganization, and certain other customary closing conditions.

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The Amended Stock Purchase Agreement may be terminated by us or Verizon in certain circumstances. If the Amended Stock Purchase Agreement is terminated, we may be required to pay Verizon a termination fee of \$134,274,000 (which was reduced from \$144,744,000 pursuant to the SPA Amendment) in certain circumstances, including if we terminate the Amended Stock Purchase Agreement to enter into a superior proposal satisfying certain requirements.

Under the terms of the Amended Stock Purchase Agreement, each of our stock options outstanding immediately prior to the closing will, if not already vested, become fully vested as of the closing and will remain outstanding in accordance with its terms, and we will retain all liabilities and obligations with respect to such outstanding stock options. Each restricted stock unit (an "RSU") of the Company that is outstanding immediately prior to the closing generally will be replaced with a cash-settled Verizon RSU award, and will be subject to the same vesting and other terms and conditions as the Yahoo RSUs.

The Sale is expected to close in the second quarter of 2017.

We filed a preliminary proxy statement regarding the Sale with the U.S. Securities and Exchange Commission on September 9, 2016.

Security Incidents

Description of Events

On September 22, 2016, we disclosed that a copy of certain user account information for approximately 500 million user accounts was stolen from Yahoo's network in late 2014 (the "2014 Security Incident"). The Company believes the user account information was stolen by a state-sponsored actor. The user account information taken included names, email addresses, telephone numbers, dates of birth, hashed passwords (the vast majority with the "bcrypt" hashing algorithm) and, in some cases, encrypted or unencrypted security questions and answers. Our forensic investigation indicates that the stolen information did not include unprotected passwords, payment card data, or bank account information. Payment card data and bank account information are not stored in the system that the investigation found to be affected. We have no evidence that the state-sponsored actor is currently in or accessing the Company's network.

On December 14, 2016, we disclosed that, based on our outside forensic expert's analysis of data files provided to the Company in November 2016 by law enforcement, we believe an unauthorized third party stole data associated with more than one billion user accounts in August 2013 (the "2013 Security Incident"). We have not been able to identify the intrusion associated with this theft, and we believe this incident is likely distinct from the 2014 Security Incident. For potentially affected accounts, the user account information stolen included names, email addresses, telephone numbers, dates of birth, hashed passwords (using the MD5 algorithm) and, in some cases, encrypted or unencrypted security questions and answers. The stolen information did not include passwords in clear text, payment card data, or bank account information.

In November and December 2016, we disclosed that our outside forensic experts were investigating the creation of forged cookies that could allow an intruder to access users' accounts without a password. Based on the investigation, we believe an unauthorized third party accessed the Company's proprietary code to learn how to forge certain cookies. The outside forensic experts have identified approximately 32 million user accounts for which they believe forged cookies were used or taken in 2015 and 2016 (the "Cookie Forging Activity"). We believe that some of this activity is connected to the same state-sponsored actor believed to be responsible for the 2014 Security Incident. The forged cookies have been invalidated by the Company so they cannot be used to access user accounts.

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The 2013 Security Incident, the 2014 Security Incident, and the Cookie Forging Activity are collectively referred to herein as the “Security Incidents.” With respect to each of the Security Incidents, the impacted users and appropriate regulatory and law enforcement agencies have been notified.

The Company, with the assistance of outside forensic experts, has concluded its investigation of the Security Incidents. The Company continues to work with U.S. law enforcement authorities on these matters.

Current and Future Expenses and Losses

We recorded expenses of \$16 million related to the Security Incidents in the year ended December 31, 2016, of which \$5 million was associated with the ongoing forensic investigation and remediation activities and \$11 million was associated with nonrecurring legal costs. The Security Incidents did not have a material adverse impact on our business, cash flows, financial condition, or results of operations for the year ended December 31, 2016. However, we have subsequently incurred additional expenses related to the Security Incidents to investigate and take remedial actions to notify and protect our users and systems, and expect to continue to incur investigation, remediation, legal, and other expenses associated with the Security Incidents in the foreseeable future. We will recognize and include these expenses as part of our operating expenses as they are incurred. The Company does not have cybersecurity liability insurance.

Litigation, Claims, and Governmental Investigations

To date, approximately 43 putative consumer class action lawsuits have been filed against the Company in U.S. federal and state courts, and in foreign courts, relating to the Security Incidents. The plaintiffs, who purport to represent various classes of users, generally claim to have been harmed by the Company’s alleged actions and/or omissions in connection with the Security Incidents and assert a variety of common law and statutory claims seeking monetary damages or other related relief. In addition, a putative stockholder class action has been filed against the Company, and certain current officers of the Company, asserting claims under Sections 10(b) and 20(a) of the Securities Exchange Act of 1934 and seeking class certification, unspecified damages, interest, and an award of attorney’s fees and costs. Four stockholder derivative actions have also been filed purportedly on behalf of the Company against current and former directors and officers. See Note 12—“Commitments and Contingencies” in the Notes to our consolidated financial statements for additional information. Additional lawsuits and claims related to the Security Incidents may be asserted by or on behalf of users, partners, shareholders, or others seeking damages or other related relief.

In addition, the Company is cooperating with federal, state, and foreign governmental officials and agencies seeking information and/or documents about the Security Incidents and related matters, including the U.S. Securities and Exchange Commission (“SEC”), the U.S. Federal Trade Commission, the U.S. Attorney’s Office for the Southern District of New York, and two State Attorneys General.

Independent Committee Investigation

As previously disclosed, an independent committee (the “Independent Committee”) of the Board of Directors (the “Board”) has investigated the Security Incidents and related matters, including the scope of knowledge within the Company in 2014 of access to Yahoo’s network by the state-sponsored actor responsible for the theft and related incidents, the Company’s internal and external reporting processes and remediation efforts related to the 2014 Security Incident and related incidents. The Independent Committee has concluded its investigation, although it will continue to review developments regarding the Security Incidents and report to the Board on these issues, and cooperate with various government entities. The Independent Committee was assisted by independent counsel,

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Sidley Austin LLP, and a forensic expert. The Board has separately been advised by other outside counsel regarding the Security Incidents and recommendations regarding remedial actions.

Based on its investigation, the Independent Committee concluded that the Company's information security team had contemporaneous knowledge of the 2014 compromise of user accounts, as well as incidents by the same attacker involving cookie forging in 2015 and 2016. In late 2014, senior executives and relevant legal staff were aware that a state-sponsored actor had accessed certain user accounts by exploiting the Company's account management tool. The Company took certain remedial actions, notifying 26 specifically targeted users and consulting with law enforcement. While significant additional security measures were implemented in response to those incidents, it appears certain senior executives did not properly comprehend or investigate, and therefore failed to act sufficiently upon, the full extent of knowledge known internally by the Company's information security team. Specifically, as of December 2014, the information security team understood that the attacker had exfiltrated copies of user database backup files containing the personal data of Yahoo users but it is unclear whether and to what extent such evidence of exfiltration was effectively communicated and understood outside the information security team. However, the Independent Committee did not conclude that there was an intentional suppression of relevant information.

Nonetheless, the Committee found that the relevant legal team had sufficient information to warrant substantial further inquiry in 2014, and they did not sufficiently pursue it. As a result, the 2014 Security Incident was not properly investigated and analyzed at the time, and the Company was not adequately advised with respect to the legal and business risks associated with the 2014 Security Incident. The Independent Committee found that failures in communication, management, inquiry and internal reporting contributed to the lack of proper comprehension and handling of the 2014 Security Incident. The Independent Committee also found that the Audit and Finance Committee and the full Board were not adequately informed of the full severity, risks, and potential impacts of the 2014 Security Incident and related matters.

Actions the Company is Taking in Response to the Independent Committee's Findings

Based on the Independent Committee's findings, the Board has taken the management related actions described below, adopted certain process and structure changes to address the Company's issues with respect to the Security Incidents, and taken certain other disciplinary actions.

Management Changes

In response to the Independent Committee's findings related to the 2014 Security Incident, the Board determined not to award to the Chief Executive Officer a cash bonus for 2016 that was otherwise expected to be paid to her. In addition, in discussions with the Board, the Chief Executive Officer offered to forgo any 2017 annual equity award given that the 2014 Security Incident occurred during her tenure and the Board accepted her offer.

On March 1, 2017, Ronald S. Bell resigned as the Company's General Counsel and Secretary and from all other positions with the Company. No payments are being made to Mr. Bell in connection with his resignation.

Other Remedial Actions

Additionally, in response to the Independent Committee's findings and recommendations, the Board has directed the Company to implement or enhance a number of corrective actions, including revision of its technical and legal information security incident response protocols to help ensure: escalation of cybersecurity incidents to senior executives and the Board of Directors; rigorous investigation of cybersecurity incidents and engagement of forensic experts as appropriate; rigorous assessment of

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and documenting any legal reporting obligations and engagement of outside counsel as appropriate; comprehensive risk assessments with respect to cybersecurity events; effective cross-functional communication regarding cybersecurity events; appropriate and timely disclosure of material cybersecurity incidents; and enhanced training and oversight to help ensure processes are followed.

Significant Transactions

Microsoft Search Agreement

The term of the Search and Advertising Services and Sales Agreement (“Microsoft Search Agreement”) with Microsoft Corporation (“Microsoft”) is 10 years from its commencement date, February 23, 2010, subject to earlier termination as provided in the Microsoft Search Agreement. Under the current terms of the Microsoft Search Agreement, as amended on April 15, 2015 by the Eleventh Amendment to the Microsoft Search Agreement (the “Eleventh Amendment”), we are entitled to receive a percentage of the revenue (the “Revenue Share Rate”) generated from Microsoft’s services on Yahoo Properties and on Affiliate sites equal to 93 percent. Microsoft receives its 7 percent revenue share before deduction of the Affiliate site’s share of revenue. Yahoo is responsible for paying the Affiliate for the Affiliate site’s share of revenue. Pursuant to the Eleventh Amendment, commencing on May 1, 2015, we also agreed to request paid search results from Microsoft for 51 percent of our search queries originating from personal computers accessing Yahoo Properties and our Affiliate sites and will display only Microsoft’s paid search results on such search result pages.

Traffic acquisition costs (“TAC”) related to our Microsoft Search Agreement were recorded as a reduction to revenue through March 31, 2016. Pursuant to the Eleventh Amendment to the Microsoft Search Agreement, we completed the transition of our exclusive sales responsibilities to Microsoft for Microsoft’s paid search services to premium advertisers in the United States, Canada, and Europe on April 1, 2016 and in the remaining markets (other than Taiwan and Hong Kong) on June 1, 2016. Following the transition in each respective market, we are considered the principal in the sale of traffic to Microsoft and other customers because we are the primary obligor in our arrangements with Microsoft and have discretion in how search queries from Affiliate sites will be fulfilled and monetized. As a result, amounts paid to Affiliates under the Microsoft Search Agreement in the transitioned markets are recorded as cost of revenue—TAC rather than as a reduction to revenue, resulting in GAAP revenue from the Microsoft Search Agreement being reported on a gross rather than a net basis.

Effective June 3, 2016, Yahoo and Microsoft further amended the Microsoft Search Agreement to provide that sales responsibilities for premium advertisers in Taiwan and Hong Kong will not be transitioned. TAC in those markets will continue to be reported as a reduction to revenue.

The table below presents how we accounted for amounts paid to Affiliates related to the Microsoft Search Agreement in transitioned markets, and shows the impact of the implementation of the Eleventh Amendment in transitioned markets (in thousands):

	Years Ended December 31,		
	2014	2015	2016
Cost of revenue—TAC in transitioned markets(*)	\$ —	\$ —	\$ 812,105
Reduction to revenue in transitioned markets	\$ 1,319,242	\$ 1,269,134	\$ 273,705

(*) Includes \$701 million in the Americas segment, \$106 million in the EMEA segment, and \$5 million in the Asia Pacific segment.

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Revenue under the Search Agreement represented approximately 35 percent, 35 percent, and 37 percent of our revenue for the years ended December 31, 2014, 2015, and 2016, respectively. The increase in revenue from Microsoft from 2015 to 2016 was due to the change in revenue presentation related to the Eleventh Amendment that took place in the second quarter of 2016 for which we now account for amounts paid to Affiliates in transitioned markets as cost of revenue—TAC rather than as a reduction to GAAP revenue, resulting in revenue from the Microsoft Search Agreement being reported on a gross rather than net basis. Excluding the impact of the change in revenue presentation related to the Eleventh Amendment, revenue under the Search Agreement represented approximately 25 percent of our revenue for the year ended December 31, 2016. This was partially offset by a shift in composition of revenue due to the use of Google and Yahoo Gemini (our unified marketplace for search and native advertising on Yahoo Properties and Affiliate sites) to source search results and advertisements as allowed by the Eleventh Amendment. See Note 19—“Microsoft Search Agreement” in the Notes to our consolidated financial statements for additional information.

Key Financial Metrics

The key financial metrics we use are as follows: revenue; revenue less traffic acquisition costs (“TAC”), or revenue ex-TAC; income (loss) from operations; net income (loss) attributable to Yahoo! Inc.; adjusted EBITDA; net cash provided by (used in) operating activities; and free cash flow. Revenue ex-TAC, adjusted EBITDA, and free cash flow are financial measures that are not defined in accordance with U.S. generally accepted accounting principles (“GAAP”). We use these non-GAAP financial measures for internal managerial purposes and to facilitate period-to-period comparisons. See “Non-GAAP Financial Measures” below for a description of, and limitations specific to, each of these non-GAAP financial measures.

	Years Ended December 31,		
	2014	2015	2016
	(in thousands)		
Revenue	\$ 4,618,133	\$ 4,968,301	\$ 5,169,135
Revenue ex-TAC	\$ 4,400,602	\$ 4,090,787	\$ 3,518,349
Income (loss) from operations(1)	\$ 142,942	\$ (4,748,494)	\$ (645,058)
Net income (loss) attributable to Yahoo! Inc.	\$ 7,521,731	\$ (4,359,082)	\$ (214,321)
Adjusted EBITDA	\$ 1,361,548	\$ 951,740	\$ 872,672
Net cash provided by (used in) operating activities	\$ 916,350	\$ (2,383,422)	\$ 1,248,863
Free cash flow(2)(3)	\$ 586,632	\$ (3,010,172)	\$ 1,120,580
(1) Includes:			
Stock-based compensation expense	\$ 420,174	\$ 457,153	\$ 491,902
Restructuring charges, net	\$ 103,450	\$ 104,019	\$ 88,629
Asset impairment charge	\$ —	\$ 44,381	\$ —
Goodwill impairment charge	\$ 88,414	\$ 4,460,837	\$ 394,901
Intangible assets impairment charge	\$ —	\$ 15,423	\$ 87,335

(2) During the year ended December 31, 2015, we satisfied the \$3.3 billion income tax liability related to the sale of Alibaba Group American Depositary Shares (“ADSS”) in Alibaba Group’s initial public offering (“Alibaba Group IPO”) in September 2014.

(3) During the year ended December 31, 2016, we received net cash proceeds from the sale of land of \$246 million and a cash tax refund of \$190 million associated with our claim to carry back our 2015 losses and tax attributes to earlier taxable years.

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Revenue ex-TAC. Revenue ex-TAC is a non-GAAP financial measure defined as GAAP revenue less TAC that has been recorded as a cost of revenue. TAC consists of payments made to Affiliates and payments made to companies that direct consumer and business traffic to Yahoo Properties. TAC is recorded either as a reduction to revenue or as cost of revenue.

We present revenue ex-TAC to provide investors a metric used by us for evaluation and decision-making purposes and to provide investors with comparable revenue numbers when comparing to our historical reported financial information. A limitation of revenue ex-TAC is that it is a measure we defined for internal and investor purposes that may be unique to us, and therefore it may not enhance the comparability of our results to those of other companies in our industry who have similar business arrangements but address the impact of TAC differently. Management compensates for these limitations by also relying on the comparable GAAP financial measures of revenue and cost of revenue—TAC.

Adjusted EBITDA. Adjusted EBITDA is a non-GAAP financial measure defined as net income (loss) attributable to Yahoo! Inc. before taxes, depreciation, amortization of intangible assets, stock-based compensation expense, other income (expense), net (which includes interest), earnings in equity interests, net income attributable to noncontrolling interests, and other gains, losses, and expenses that we do not believe are indicative of our ongoing results.

We present adjusted EBITDA because the exclusion of certain gains, losses, and expenses facilitates comparisons of the operating performance of our Company on a period-to-period basis. Adjusted EBITDA has limitations as an analytical tool and should not be considered in isolation or as a substitute for results reported under GAAP. These limitations include: adjusted EBITDA does not reflect tax payments and such payments reflect a reduction in cash available to us; adjusted EBITDA does not reflect the periodic costs of certain capitalized tangible and intangible assets used in generating revenues in our businesses; adjusted EBITDA does not include stock-based compensation expense related to our workforce; adjusted EBITDA also excludes other income (expense), net (which includes interest), earnings in equity interests, net income attributable to noncontrolling interests and other gains, losses, and expenses that we do not believe are indicative of our ongoing results, and these items may represent a reduction or increase in cash available to us; and adjusted EBITDA is a measure that may be unique to us, and therefore it may not enhance the comparability of our results to other companies in our industry. Management compensates for these limitations by also relying on the comparable GAAP financial measure of net income (loss) attributable to Yahoo! Inc., which includes taxes, depreciation, amortization, stock-based compensation expense, other income (expense), net (which includes interest), earnings in equity interests, net income attributable to noncontrolling interests and the other gains, losses and expenses that are excluded from adjusted EBITDA.

Free Cash Flow. Free cash flow is a non-GAAP financial measure defined as net cash provided by (used in) operating activities (adjusted to include excess tax benefits from stock-based awards), less acquisition of property and equipment, net (i.e., acquisition of property and equipment less proceeds received from disposition of property and equipment including land) and dividends received from equity investees.

We consider free cash flow to be a liquidity measure which provides useful information to management and investors about the amount of cash generated by business operations, after deducting our net payments for acquisitions and dispositions of property and equipment, which cash can then be used for strategic opportunities or other business purposes including, among others, investing in our business, making strategic acquisitions, strengthening the balance sheet, and repurchasing stock. A limitation of free cash flow is that it does not represent the total increase or decrease in the cash balance for the period. Management compensates for this limitation by also

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relying on the net change in cash and cash equivalents as presented in our consolidated statements of cash flows prepared in accordance with GAAP which incorporates all cash movements during the period.

In this Management's Discussion and Analysis, we also present adjusted GAAP revenue and cost of revenue—TAC amounts for the year ended December 31, 2016 that exclude the effect of the change in revenue presentation related to implementation of the Eleventh Amendment to the Microsoft Search Agreement. We believe providing this additional information to investors is useful because it provides investors with comparable revenue and cost of revenue—TAC measures for comparison to our historical reported financial information.

Revenue and Revenue ex-TAC (a non-GAAP Financial Measure)

	Years Ended December 31,			2014-2015 % Change	2015-2016 % Change
	2014	2015	2016		
	(dollars in thousands)				
Revenue	\$4,618,133	\$4,968,301	\$5,169,135	8%	4%
Less: TAC	<u>217,531</u>	<u>877,514</u>	<u>1,650,786</u>	303%	88%
Revenue ex-TAC	<u>\$4,400,602</u>	<u>\$4,090,787</u>	<u>\$3,518,349</u>	(7)%	(14)%

For the year ended December 31, 2016, revenue and TAC increased \$201 million and \$773 million, respectively, or 4 percent and 88 percent, compared to 2015. For the year ended December 31, 2016, revenue ex-TAC (a non-GAAP financial measure) decreased \$572 million, or 14 percent, compared to 2015. The increase in revenue for the year ended December 31, 2016 was primarily attributable to an increase in search revenue of \$559 million, partially offset by declines in other revenue and display revenue of \$254 million and \$104 million, respectively.

The increase in search revenue was primarily due to the change in revenue presentation related to the implementation of the Eleventh Amendment to the Microsoft Search Agreement, as noted above. The revenue and TAC increase from the change in revenue presentation was \$812 million for the year ended December 31, 2016. Excluding the impact of the change in revenue presentation, search revenue declined \$253 million, or 12 percent, primarily in the Americas segment due to a decline in Paid Clicks on Yahoo Properties and Affiliate sites driven by a decline in traffic, partially offset by an increase in Affiliate site revenue due to improved pricing.

The decline in display revenue was primarily associated with a decline in revenue on Affiliate sites due to a decline in video advertising and, to a lesser extent, audience advertising, partially offset by an increase in native advertising. This was partially offset by an increase in display revenue from Yahoo Properties for the year ended December 31, 2016. The increase in display revenue from Yahoo Properties was primarily due to an increase in audience advertising, and to a lesser extent, video advertising, partially offset by a decline in premium advertising and, to a lesser extent, native advertising.

The decline in other revenue was primarily attributable to the completion of recognition of deferred revenue under the Technology and Intellectual Property License Agreement ("TIPLA") with Alibaba Group pursuant to which we recognized \$199 million in the year ended December 31, 2015 (for which no similar revenue was recognized in 2016), and a decline in listings-based revenue of \$36 million due to a decline in e-commerce revenue and a directory product shut down in 2015.

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Total revenue and TAC noted above included declines of \$77 million and \$40 million, respectively, for the year ended December 31, 2016 as compared to the same period of 2015, associated with the agreement we entered into with Mozilla Corporation ("Mozilla") in November 2014 to compensate Mozilla for making us the default search provider on certain of Mozilla's products in the United States. The decline in total revenue was due to a decline in Firefox browser search volume, while the decline in TAC was associated with an amendment to the Mozilla Agreement in the third quarter of 2016.

For the year ended December 31, 2015, revenue and TAC increased \$350 million and \$660 million, respectively, or 8 percent and 303 percent, compared to 2014. For the year ended December 31, 2015, revenue ex-TAC (a non-GAAP financial measure) decreased \$310 million, or 7 percent, compared to 2014. The increase in revenue for the year ended December 31, 2015 was primarily attributable to an increase in search and display revenue resulting from an increase in revenue from distribution partners, including Mozilla, revenue from mobile devices and incremental revenue from the BrightRoll acquisition, a programmatic video advertising platform that we acquired in December 2014. This growth was partially offset by declines in our legacy desktop display business, search revenue driven by a decline in Yahoo search traffic, and a decline in other revenue associated with Alibaba Group royalty revenue pursuant to the TIPLA, for which we ceased recognizing fees revenue in September 2014 due to our sale of American Depositary Shares ("ADSs") of Alibaba Group in the Alibaba Group's initial public offering (the "Alibaba Group IPO"). The increase in TAC for the year ended December 31, 2015, which exceeded the revenue increases for the same period resulting in a decline in revenue ex-TAC, was primarily driven by higher payments to distribution partners, including Mozilla, TAC increase associated with Yahoo Gemini, and incremental TAC related to the BrightRoll acquisition. Yahoo Gemini is our unified marketplace for search and native advertising on Yahoo Properties and Affiliate sites. Gemini ads appear on search results pages in response to queries and also as native ads alongside display content. Advertisers place ads on the Gemini platform through our simple self-serve interface, as well as through Yahoo's traditional sales force; we do not source Gemini ads from Microsoft or other third-party providers. Because we are the primary obligor to Gemini advertisers, we recognize Gemini revenue gross of the related TAC paid to Affiliates.

Of the \$350 million increase in revenue and \$660 million increase in TAC for the year ended December 31, 2015, \$394 million and \$375 million were attributable to the agreement we entered into in November 2014 to compensate Mozilla for making us the default search provider on certain of Mozilla's products in the United States.

See "Results of Operations" for a more detailed discussion of the factors that contributed to the changes in revenue and TAC during this period.

Mavens Revenue

One of our primary strategies is to invest in and grow our Mavens offerings. Revenue from our Mavens offerings is generated from, without duplication, (i) mobile (as defined below), (ii) video ads and video ad packages, (iii) native ads, and (iv) Tumblr and Polyvore ads and fees.

Mavens revenue for the year ended December 31, 2016 increased to \$2,010 million, compared to \$1,660 million for the year ended December 31, 2015. The change in revenue presentation associated with the Eleventh Amendment to the Microsoft Search Agreement contributed \$386 million to Mavens revenue in the year ended December 31, 2016. Excluding the impact of the revenue presentation noted above, Mavens revenue would have been \$1,624 million for the year ended December 31, 2016, a decline of \$36 million, or 2 percent, compared to the same period of 2015. The decline in Mavens revenue for the year ended December 31, 2016 was primarily attributable to a decline in video advertising on Affiliate sites associated with pricing and demand, partially offset by an increase in mobile advertising and, to a lesser extent, social advertising.

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Mavens revenue for the year ended December 31, 2015 increased 45 percent to \$1,660 million, compared to \$1,148 million for the year ended December 31, 2014. The increase in Mavens revenue for the year ended December 31, 2015 was primarily related to growth in mobile advertising, and to a lesser extent, growth in native and video advertising.

Mobile Revenue

With the significant platform shift to mobile devices, including smartphones and tablets, we continue to focus on mobile products and mobile ad formats. We have continued to refresh the user experience on mobile with the launch of Yahoo Newsroom, Yahoo Fantasy Sports, Yahoo Sports, Yahoo Finance and Yahoo View apps. As of December 31, 2016, we had more than 650 million monthly mobile users (including mobile Tumblr users).

Mobile revenue is generated in connection with user activity on mobile devices, including smartphones and tablets (a “device-based” approach), regardless of whether the device is accessing a mobile-optimized service. Mobile revenue is primarily generated by search and display advertising. Mobile search revenue is generated from clicks on text-based links to advertisers’ websites that appear primarily on search results pages. Search revenue is recognized based on Paid Clicks. A Paid Click occurs when an end-user clicks on a sponsored listing on Yahoo Properties or Affiliate sites for which an advertiser pays on a per click basis. Mobile display revenue is generated from the display of graphical, non-graphical, and video advertisements on mobile devices. The Company recognizes revenue from display advertising on Yahoo Properties and Affiliate sites as impressions of or clicks on display advertisements are delivered. Impressions are delivered when a sold advertisement appears in pages viewed by users. Clicks are delivered when a user clicks on a native advertisement. Mobile revenue also includes leads, listings and fees revenue and e-commerce revenue allocated to user activity on mobile devices. Mobile revenue is included within Search, Display, and Other revenue that we have reported.

Mobile revenue for the year ended December 31, 2016 increased to \$1,494 million, compared to \$1,048 million for the year ended December 31, 2015. The change in revenue presentation associated with the Eleventh Amendment to the Microsoft Search Agreement contributed \$386 million to mobile revenue in the year ended December 31, 2016. Excluding the impact of the revenue presentation, noted above, mobile revenue would have been \$1,107 million for the year ended December 31, 2016, an increase of \$60 million, or 6 percent, compared to the same period of 2015. The increase in mobile revenue for the year ended December 31, 2016 was primarily attributable to growth in graphical display advertising revenue as well as an increase in search advertising revenue (excluding the impact of the change in revenue presentation) driven by Yahoo Gemini search.

Mobile revenue for the year ended December 31, 2015 increased 36 percent to \$1,048 million, compared to \$768 million for the year ended December 31, 2014. The increase in mobile revenue for the year ended December 31, 2015 was primarily attributable to growth in display revenue on mobile devices driven by native advertising and growth in search revenue on mobile devices driven by mobile search advertising on our Yahoo Gemini platform.

TAC rates that we pay to Affiliates for Mavens and mobile are substantially consistent with our TAC rates for our other revenue streams.

Results of Operations

	Years Ended December 31,		
	2014	2015	2016
	(dollars in thousands)		
Total revenue	\$ 4,618,133	\$ 4,968,301	\$ 5,169,135
Total operating expenses ⁽¹⁾	4,475,191	9,716,795	5,814,193
Income (loss) from operations	<u>\$ 142,942</u>	<u>\$ (4,748,494)</u>	<u>\$ (645,058)</u>
(1)Includes:			
Stock-based compensation expense	\$ 420,174	\$ 457,153	\$ 491,902
Restructuring charges, net	\$ 103,450	\$ 104,019	\$ 88,629
Asset impairment charge	\$ —	\$ 44,381	\$ —
Goodwill impairment charge	\$ 88,414	\$ 4,460,837	\$ 394,901
Intangible assets impairment charge	\$ —	\$ 15,423	\$ 87,335
Items as a percentage of revenue			
Total revenue	100%	100%	100%
Total operating expenses	97%	196%	112%
Income (loss) from operations	<u>3%</u>	<u>(96)%</u>	<u>(12)%</u>
Includes:			
Stock-based compensation expense	9%	9%	10%

Revenue

We generate revenue principally from search and display advertising on Yahoo Properties and Affiliate sites, with the majority of our revenue coming from advertising on Yahoo Properties. Our margins on revenue from advertising on Yahoo Properties are higher than our margins on revenue from advertising on Affiliate sites, as we pay TAC to our Affiliates. Additionally, we generate revenue from other sources including listings-based services, e-commerce transactions, royalties, patent licenses, and consumer and business fee-based services.

In the first quarter of 2016, we reclassified certain amounts from other revenue to either search or display revenue. To conform to the current presentation, we reclassified \$29.7 million and \$11.6 million to search and display revenue, respectively, previously included in other revenue for the year ended December 31, 2015, and we reclassified \$39.1 million and \$12.1 million to search and display revenue, respectively, previously included in other revenue for the year ended December 31, 2014.

Search Revenue

Search revenue is generated from mobile and desktop clicks on text-based links to advertisers' websites that appear primarily on search results pages ("search advertising"). We recognize revenue from search advertising on Yahoo Properties and Affiliate sites. Search revenue is recognized based on Paid Clicks. A Paid Click occurs when an end-user clicks on a sponsored listing on Yahoo Properties or Affiliate sites for which an advertiser pays on a per click basis. In October 2015, we reached an agreement with Google that provides us with additional flexibility to choose among suppliers of search results and ads. Google's offerings complement the search services provided by Microsoft and Yahoo Gemini. We are considered the principal in the sale of traffic to Microsoft (in markets that have transitioned pursuant to the Eleventh Amendment to the Microsoft Search

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Agreement) and Google because we are the primary obligor in our arrangements with Microsoft (in transitioned markets) and Google and have discretion in how search queries from Affiliate sites will be fulfilled and monetized. We perform the search service for mobile ads served through Yahoo Gemini, and, accordingly, we are considered the primary obligor to the advertisers who are the customers of the search advertising service. Revenue from Affiliates is reported gross of TAC payments for Microsoft (in markets that have transitioned pursuant to the Eleventh Amendment to the Microsoft Search Agreement), Google and Yahoo Gemini. We also generate search revenue from a revenue sharing arrangement with Yahoo Japan for search technology and services as reported.

The following table presents search revenue and search revenue as a percentage of total revenue for the periods presented (dollars in thousands):

	Years Ended December 31,		
	2014	2015	2016
Search			
Yahoo Properties	\$ 1,557,159	\$ 1,839,420	\$ 1,802,546
Affiliate sites	274,826	274,428	870,554
Total search revenue	<u>\$ 1,831,985</u>	<u>\$ 2,113,848</u>	<u>\$ 2,673,100</u>
Search as a percentage of total revenue			
Yahoo Properties	34%	37%	35%
Affiliate sites	6%	6%	17%
Total search revenue	<u>40%</u>	<u>43%</u>	<u>52%</u>

Search revenue for the year ended December 31, 2016 increased \$559 million, compared to 2015. The increase in search revenue was primarily due to the change in the revenue presentation associated with the Eleventh Amendment to the Microsoft Search Agreement that took place in the second quarter of 2016 for which we now record amounts paid to Affiliates in transitioned markets as cost of revenue—TAC rather than as a reduction to GAAP revenue, resulting in revenue from the Microsoft Search Agreement being reported on a gross rather than net basis. The revenue and TAC increase from the change in revenue presentation was \$812 million for the year ended December 31, 2016. See “Significant Transactions—Microsoft Search Agreement,” above, for further detail. Excluding the impact of the change in revenue presentation, noted above, search revenue for the year ended December 31, 2016 declined \$253 million, or 12 percent, primarily in the Americas segment due to a decline in Paid Clicks on Yahoo Properties and Affiliate sites driven by a decline in traffic. A decline in revenue of \$77 million associated with the Mozilla Agreement also contributed to the decline in search revenue on Yahoo Properties. For the year ended December 31, 2016, despite the decline in Paid Clicks on Affiliate sites, advertising revenue on Affiliate sites grew by \$112 million (excluding the impact of the change in revenue presentation) primarily from improved Price-per-Click in the Americas segment due to a significant reduction in lower monetizing Affiliate clicks as compared to the same period of 2015.

Search revenue for the year ended December 31, 2015 increased \$282 million, or 15 percent, compared to 2014, which was attributable to growth in revenue generated on Yahoo Properties in the Americas segment. This increase resulted from higher search volume on desktop due primarily to the Mozilla Agreement, which contributed \$394 million, as well as an increase in revenue from search advertising on mobile devices. The increase was partially offset by a decline in click volume on other visits to Yahoo Properties. Affiliate search revenue overall remained flat but consisted of declines in the Asia Pacific and EMEA segments of \$30 million and \$13 million, respectively, partially offset by an increase in the Americas segment of \$42 million.

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The total increase in search revenue for the year ended December 31, 2015 described above included the impact of unfavorable foreign exchange fluctuations of \$41 million using the foreign currency exchange rates from the year ended December 31, 2014.

Display Revenue

Display revenue is generated from the display of graphical, non-graphical, and video advertisements (“display advertising”). We earn revenue from guaranteed or “premium” display advertising by delivering advertisements according to advertisers’ specified criteria, such as number of impressions during a fixed period targeted to a specific audience or on a specific placement. Also, we earn revenue from non-guaranteed display advertising, which includes native advertising, by delivering advertisements on a preemptible basis.

We recognize revenue from display advertising on Yahoo Properties and Affiliate sites as impressions of or clicks on display advertisements, including native advertising, are delivered. Impressions are delivered when a sold advertisement appears in pages viewed by users. Clicks are delivered when a user clicks on an advertisement. Arrangements for these services generally have terms of up to one year. For display advertising on Affiliate sites, we pay TAC to Affiliates for the revenue generated from the display of these advertisements on the Affiliate sites. The display revenue derived from these arrangements that involve traffic supplied by Affiliates is reported on a gross basis (before deducting the TAC paid to Affiliates as cost of revenue—TAC) when we are the primary obligor to the advertisers who are the customers of the display advertising service.

The following table presents display revenue and display revenue as a percentage of total revenue for the periods presented (dollars in thousands):

	Years Ended December 31,		
	2014	2015	2016
Display			
Yahoo Properties	\$ 1,702,787	\$ 1,490,650	\$ 1,530,094
Affiliate sites	<u>177,330</u>	<u>595,104</u>	<u>451,441</u>
Total display revenue	<u>\$ 1,880,117</u>	<u>\$ 2,085,754</u>	<u>\$ 1,981,535</u>
Display as a percentage of total revenue			
Yahoo Properties	37%	30%	29%
Affiliate sites	<u>4%</u>	<u>12%</u>	<u>9%</u>
Total display revenue	<u>41%</u>	<u>42%</u>	<u>38%</u>

During the first quarter of 2016, we changed the account coding for certain transactions to properly reflect the allocation of display revenue between Yahoo Properties and Affiliate sites. Prior period amounts have been revised to conform to the current presentation.

Display revenue for the year ended December 31, 2016 decreased \$104 million, or 5 percent, compared to 2015, due to a decline in advertising revenue from Affiliate sites of \$144 million, partially offset by an increase in advertising revenue from Yahoo Properties of \$39 million. The decline in display revenue on Affiliate sites was attributable to a decline in video advertising driven by volume and pricing declines. The increase in display revenue on Yahoo Properties was primarily due to an increase in audience advertising driven by increases in volume and pricing, partially offset by a decline in volume and pricing of premium advertising.

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The total decrease in display revenue for the year ended December 31, 2016 described above included the impact of unfavorable foreign exchange fluctuations of \$22 million using the foreign currency exchange rates from the year ended December 31, 2015.

Display revenue for the year ended December 31, 2015 increased \$206 million, or 11 percent, compared to 2014. For the year ended December 31, 2015, the increase in display revenue was driven by increased Affiliate revenue in the Americas, EMEA and Asia Pacific segments of \$335 million, \$48 million and \$34 million, respectively. This was partially offset by declines in display revenue on Yahoo Properties in the Americas, EMEA and Asia Pacific segments of \$97 million, \$57 million and \$59 million, respectively. The increase in Affiliate display revenue for the year ended December 31, 2015 resulted primarily from an increase in video and native advertising, including incremental revenue from the BrightRoll acquisition and an increase in revenue from native advertising on mobile devices. The decrease in display revenue on Yahoo Properties in the Americas segment for the year ended December 31, 2015 was primarily due to a decline in volume of premium advertising as well as a decline in pricing and volume of audience advertising, partially offset by an increase in native advertising. The decrease in display revenue on Yahoo Properties in the EMEA and Asia Pacific segments for the year ended December 31, 2015 was primarily driven by declines in volume and pricing of premium and audience advertising, partially offset by an increase in volume of native advertising.

The total increase in display revenue for the year ended December 31, 2015 described above included the impact of unfavorable foreign exchange fluctuations of \$68 million using the foreign currency exchange rates from the year ended December 31, 2014.

Other Revenue

Other revenue includes listings-based services revenue, transaction revenue, royalties, patent licenses and fees revenue. Listings-based services revenue is generated from a variety of consumer and business listings-based services, including classified advertising, such as Yahoo Local and other services. We recognize listings-based services revenue when the services are performed. Transaction revenue is generated from facilitating commercial transactions through Yahoo Properties, principally from Yahoo Small Business, Yahoo Travel, and Yahoo Shopping. We recognize transaction revenue when there is evidence that qualifying transactions have occurred. We also receive royalties from Yahoo Japan that are recognized when earned. We received royalties from Alibaba Group through the third quarter of 2015 that were recognized when earned. See Note 8—"Investments in Equity Interests Accounted for Using the Equity Method of Accounting" in the Notes to our consolidated financial statements for additional information on revenue earned from Yahoo Japan and Alibaba Group. Fees revenue consists of revenue generated from a variety of consumer and business fee-based services as well as services for small businesses. We recognize fees revenue when the services are performed.

The following table presents other revenue and other revenue as a percentage of total revenue for the periods presented (dollars in thousands):

	Years Ended December 31,		
	2014	2015	2016
Other revenue	\$ 906,031	\$ 768,699	\$ 514,500
Other revenue as a percentage of total revenue	19%	15%	10%

Other revenue for the year ended December 31, 2016 decreased \$254 million, or 33 percent, compared to 2015, primarily attributable to a decline in fees and listings-based revenue of

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\$218 million and \$36 million, respectively. The decline in fees revenue was primarily due to the completion of recognition of deferred revenue under the TIPLA with Alibaba Group pursuant to which we recognized \$199 million in the year ended December 31, 2015. The decline in listings-based revenue for the year ended December 31, 2016 was primarily attributable to a decline in e-commerce revenue and a directory product that we shut down in 2015.

Other revenue for the year ended December 31, 2015 decreased \$137 million, or 15 percent, compared to 2014, primarily attributable to a decline in fees and listings-based revenue of \$79 million and \$59 million, respectively. The decline in fees revenue was primarily attributable to a decline in Alibaba Group royalty revenue pursuant to the TIPLA, for which we ceased recognizing fees revenue in September 2014 due to the Alibaba Group IPO. The decline in listings-based revenue was attributable to a decline in auction and exchange fees, shopping traffic, and expiration of a partner agreement. The decline in fees and listings-based revenue was also attributable to declines in Yahoo Small Business associated with a reduction in its subscriber base.

The decline in other revenue for the year ended December 31, 2015 described above included the impact of unfavorable foreign exchange fluctuations of \$10 million using the foreign currency exchange rates from the year ended December 31, 2014.

Search and Display Metrics

We present information below regarding the number of "Paid Clicks" and "Price-per-Click" for search and the number of "Ads Sold" and "Price-per-Ad" for display. This information is derived from internal data.

"Paid Clicks" are defined as clicks by end-users on sponsored search listings (excluding native ad units, which are defined as display ads that appear in the content streams viewed by users) on Yahoo Properties and Affiliate sites. Advertisers generally pay for sponsored search listings on a per-click basis. "Search click-driven revenue" is gross search revenue (GAAP search revenue plus the related revenue share with third parties), excluding search revenue from Yahoo Japan. "Price-per-Click" is defined as search click-driven revenue divided by our total number of Paid Clicks.

"Ads Sold" consist of display ad impressions for paying advertisers on Yahoo Properties and Affiliate sites. "Price-per-Ad" is defined as display revenue from Yahoo Properties and Affiliate sites divided by our total number of Ads Sold. Our price and volume metrics for display are based on display revenue which we report on a gross basis (before TAC), and include data for graphical, sponsorship, and native ad units on Yahoo Properties and Affiliate sites.

We periodically review, refine and update our methodologies for monitoring, gathering, and counting number of Paid Clicks and Ads Sold and for calculating search click-driven revenue, Price-per-Click, and Price-per-Ad. Commencing in the first quarter 2015, our display price and volume metrics (Price-per-Ad and Ads Sold) include (a) results from Yahoo Properties worldwide (other than Japan, where Yahoo branded sites are operated by third-party licensees), whereas previously those metrics excluded countries and regions where historical data was not previously retained in a manner that would support period-to-period comparisons; (b) results from Affiliate sites (including Affiliates of Flurry and BrightRoll) and (c) historical Tumblr data. Prior period amounts have been updated to conform to the current presentation.

Search Metrics

For the year ended December 31, 2016, Paid Clicks decreased 22 percent and Price-per-Click increased 10 percent, compared to 2015. The decline in Paid Clicks was primarily due to a decline in

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Paid Clicks on Affiliate sites and Yahoo Properties, including on desktop, due to a decline in traffic. The increase in Price-per-Click was due to a mix shift toward Yahoo Properties and higher monetizing Affiliate clicks, which resulted from a significant reduction in lower monetizing Affiliate clicks. Search click-driven revenue declined 14 percent for the year ended December 31, 2016, as compared to the same period of 2015, driven by the decline in traffic on Yahoo Properties and Affiliate sites.

For the year ended December 31, 2015, Paid Clicks increased 6 percent and Price-per-Click increased 2 percent, compared to 2014. The increase in Paid Clicks for the year ended December 31, 2015 was primarily attributable to an increase in Paid Clicks on Yahoo Properties in the Americas segment, attributable to our agreements with Mozilla and other distribution partners, partially offset by a decline in Paid Clicks from Affiliate and Yahoo traffic. The increase in Price-per-Click for year ended December 31, 2015 was attributable to a higher mix of traffic from the Americas segment, which is higher monetizing as compared to other segments, as well as improved pricing from Affiliate traffic. Improvements in the search metrics resulted in year-over-year growth of 9 percent in search click-driven revenue for the year ended December 31, 2015.

Display Metrics

For the year ended December 31, 2016, number of Ads Sold increased 4 percent and Price-per-Ad decreased 8 percent, compared to 2015. The increase in number of Ads Sold was primarily due to an increase in native and audience Ads Sold, partially offset by a decline in premium Ads Sold. Native ad units represented approximately 46 percent of total Ads Sold for the year ended December 31, 2016 compared to 44 percent of total Ads Sold for the year ended December 31, 2015. Native Ads Sold grew primarily due to our syndication (third-party, affiliate) business and an increase in native Ads Sold internationally. The decrease in Price-per-Ad was primarily due to a decline in overall pricing of premium, video and native Ads Sold, partially offset by an increase in pricing of audience Ads Sold on both Yahoo Properties and Affiliate sites.

For the year ended December 31, 2015, number of Ads Sold increased 12 percent and Price-per-Ad increased 2 percent, compared to 2014. The increase in Ads Sold year-over-year for the year ended December 31, 2015 was attributable to an increase in native and video ad units sold which was partially offset by a decline in premium ad units sold. The increase in native ad units sold was primarily attributable to growth internationally and growth in our network of mobile apps. Native ad units represented approximately 44 percent of total Ads Sold for the year ended December 31, 2015, as compared to 31 percent of total Ads Sold for the year ended December 31, 2014. The increase in Price-per-Ad was due to improved pricing for native advertising and video representing a larger share of the inventory mix, partially offset by a shift in the mix of Ads Sold from premium advertising to native advertising.

Operating Costs and Expenses

Cost of Revenue—TAC

Cost of revenue—TAC consists of payments made to third-party entities that have integrated our advertising offerings into their websites or other offerings and payments made to companies that direct consumer and business traffic to Yahoo Properties. We enter into agreements of varying duration that involve TAC. There are generally two economic structures of the Affiliate agreements: (i) variable payments based on a percentage of our revenue or based on a certain metric, such as number of searches or paid clicks, or (ii) fixed payments with or without a guaranteed minimum amount of traffic delivered. We expense TAC under two different methods. Agreements based on a percentage of revenue, number of searches, or other metrics are expensed based on the volume of the underlying activity or revenue multiplied by the agreed-upon price or rate. Agreements with fixed

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payments are expensed ratably over the term the fixed payment covers or as traffic is delivered. We have an agreement to compensate Mozilla for making us the default search provider on certain of Mozilla's products in the United States. We record those payments as cost of revenue—TAC. Additionally, pursuant to the Eleventh Amendment to the Microsoft Search Agreement, we now record amounts paid to Affiliates under the Microsoft Search Agreement in transitioned markets as cost of revenue—TAC rather than as a reduction to revenue.

The following table presents cost of revenue—TAC and those expenses as a percentage of revenue for the periods presented (dollars in thousands):

	Years Ended December 31,		
	2014	2015	2016
Cost of revenue—TAC	\$ 217,531	\$ 877,514	\$ 1,650,786
Cost of revenue—TAC as a percentage of revenue	5%	18%	32%

Cost of revenue—TAC for the year ended December 31, 2016 increased \$773 million, or 88 percent, compared to 2015, primarily due to the change in revenue presentation related to the implementation of the Eleventh Amendment to the Microsoft Search Agreement that took place in the second quarter of 2016 for which we now record amounts paid to Affiliates in transitioned markets as cost of revenue—TAC rather than as a reduction to GAAP revenue, resulting in revenue from the Microsoft Search Agreement being reported on a gross rather than net basis. The revenue and TAC increase from the change in revenue presentation was \$812 million for the year ended December 31, 2016. See "Significant Transactions—Microsoft Search Agreement" above for further detail. For the year ended December 31, 2016, excluding the impact of the change in revenue presentation, TAC decreased \$39 million or 4 percent. The decline in cost of revenue—TAC for the year ended December 31, 2016 was attributable to declines in display TAC of \$113 million and TAC associated with the Mozilla Agreement of \$40 million due to an amendment entered into in the third quarter of 2016. This was partially offset by an increase in search TAC primarily from Yahoo Gemini.

Cost of revenue—TAC for the year ended December 31, 2015 increased \$660 million, or 303 percent, compared to 2014, primarily due to increased payments to distribution partners (including Mozilla which contributed \$375 million) as well as increased TAC associated with Yahoo Gemini, and incremental TAC from the BrightRoll acquisition.

Cost of Revenue—Other

Cost of revenue—other consists of bandwidth costs, stock-based compensation, content and other expenses associated with the production and usage of Yahoo Properties, including content expense and amortization of developed technology and patents. Cost of revenue—other also includes costs for Yahoo's technology platforms and infrastructure, including depreciation expense and other operating costs, directly related to revenue generating activities.

The following table presents cost of revenue—other and those expenses as a percentage of revenue for the periods presented (dollars in thousands):

	Years Ended December 31,		
	2014	2015	2016
Cost of revenue—other	\$ 1,169,844	\$ 1,200,234	\$ 1,068,108
Cost of revenue—other as a percentage of revenue	25%	24%	21%

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Cost of revenue—other for the year ended December 31, 2016 decreased \$132 million, or 11 percent, compared to 2015, primarily due to declines in content expense of \$65 million, compensation costs of \$24 million, credit card costs of \$16 million, depreciation and amortization of \$13 million, maintenance contracts of \$5 million and outside service provider expense of \$4 million. The decline in content expense was primarily due to original content production costs in 2015 for which we have no similar costs in 2016.

Cost of revenue—other increased \$30 million, or 3 percent, for the year ended December 31, 2015, compared to 2014, primarily due to higher cost of revenue of \$48 million related to algorithmic serving costs, our e-commerce business in the Asia Pacific segment, BrightRoll video advertising fees, an increase in depreciation and amortization expense of \$16 million, and an increase in content expense of \$13 million. This increase in cost of revenue—other was partially offset by declines in bandwidth costs of \$21 million, stock-based compensation expense of \$10 million, and compensation costs of \$17 million.

Sales and Marketing

Sales and marketing expenses consist primarily of advertising and other marketing-related expenses, compensation-related expenses (including stock-based compensation expense), sales commissions, and travel costs.

The following table presents sales and marketing expenses and those expenses as a percentage of revenue for the periods presented (dollars in thousands):

	Years Ended December 31,		
	2014	2015	2016
Sales and marketing expenses	\$ 1,084,438	\$ 1,080,718	\$ 881,521
Sales and marketing expenses as a percentage of revenue	24%	22%	17%

Sales and marketing expenses for the year ended December 31, 2016 decreased \$199 million, or 18 percent, compared to 2015, primarily due to declines in compensation costs of \$88 million, marketing and public relations expense of \$58 million, bad debt expense of \$28 million, outside service provider expense of \$11 million, travel and entertainment expense of \$9 million, and facilities expense of \$3 million. The decline in compensation costs was primarily attributable to a 19 percent decrease in headcount year-over-year. The decline in marketing and public relations expense was primarily attributable to brand marketing campaigns in 2015 for which there were no similar campaigns in 2016. The decline in bad debt expense reflected improved collections of total and aged accounts receivable balances.

Sales and marketing expenses for the year ended December 31, 2015 decreased \$4 million compared to 2014, primarily attributable to declines in compensation costs of \$52 million, stock-based compensation expense of \$4 million and travel and entertainment expense of \$4 million, partially offset by increases in marketing expense of \$38 million, bad debt expense of \$14 million, and outside service provider expense of \$5 million. The decline in compensation costs was primarily attributable to a 17 percent decrease in headcount year-over-year. The increase in marketing expense was primarily due to costs associated with a partner deal entered into in 2015 and brand marketing campaigns in 2015 for which there were no similar campaigns in 2014.

Product Development

Product development expenses consist primarily of compensation-related expenses (including stock-based compensation expense) incurred for the development of, enhancements to and maintenance of

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Yahoo Properties, research and development, and Yahoo's technology platforms and infrastructure. Depreciation expense and other operating costs are also included in product development.

The following table presents product development expenses and those expenses as a percentage of revenue for the periods presented (dollars in thousands):

	Years Ended December 31,		
	2014	2015	2016
Product development expenses	\$ 1,156,386	\$ 1,177,923	\$ 1,055,462
Product development expenses as a percentage of revenue	24%	24%	20%

Product development expenses for the year ended December 31, 2016 decreased \$122 million, or 10 percent, compared to 2015, primarily attributable to declines in compensation costs of \$82 million, depreciation and amortization expense of \$63 million, facilities and equipment expense of \$17 million, and travel and entertainment expense of \$5 million. These declines were partially offset by an increase in stock-based compensation expense of \$23 million, an increase of \$10 million related to product initiatives to drive search volume, and an increase in outside service provider expense of \$5 million. The decline in compensation costs was primarily attributable to a 19 percent decline in headcount year-over-year. The decline in depreciation and amortization expense was primarily associated with a decrease in depreciation from capitalized labor. The decline in facilities and equipment expense was driven by lower telephone, data network, maintenance and building expenses. The increase in stock-based compensation expense was primarily due to higher expense in the current year related to retention grants and performance equity awards.

Product development expenses for the year ended December 31, 2015 increased \$22 million, or 2 percent, compared to 2014, primarily attributable to an increase of \$51 million in stock-based compensation expense, as well as an increase in investment activities supporting our search, communications and other product initiatives of \$35 million. This increase was partially offset by a decline in depreciation and amortization expense of \$37 million, facilities and equipment expense of \$15 million and compensation costs of \$11 million. The increase in stock-based compensation expense was due to an increase in the number of awards granted at a higher fair value. The decline in compensation costs is primarily attributable to a 17 percent decline in headcount year-over-year, as well as a decline in transition and relocation costs.

General and Administrative

General and administrative expenses consist primarily of compensation-related expenses (including stock-based compensation expense) related to other corporate departments and fees for professional services.

The following table presents general and administrative expenses and those expenses as a percentage of revenue for the periods presented (dollars in thousands):

	Years Ended December 31,		
	2014	2015	2016
General and administrative expenses	\$ 686,272	\$ 687,804	\$ 650,708
General and administrative expenses as a percentage of revenue	15%	14%	13%

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General and administrative expenses for the year ended December 31, 2016 decreased \$37 million, or 5 percent, compared to 2015, primarily attributable to declines in compensation costs of \$32 million, facilities and equipment expense of \$25 million, travel and entertainment expense of \$9 million, depreciation and amortization expense of \$3 million, and marketing and public relations expense of \$3 million, partially offset by an increase in outside service provider expense of \$36 million (including advisory fees) and an increase in stock-based compensation expense of \$8 million. The decline in compensation costs was primarily attributable to a 15 percent decline in headcount year-over-year. The decline in facilities and equipment expense was driven by lower building and moving expenses.

General and administrative expenses for the year ended December 31, 2015 increased \$2 million compared to 2014, primarily attributable to increases of \$26 million due to net gains on disposal of assets, business tax refunds received and legal settlements in 2014 for which there are no similar benefits in 2015, depreciation and amortization expense of \$14 million, travel and entertainment expense of \$4 million and marketing and public relations expense of \$4 million. These increases in general and administrative expenses were partially offset by declines in facilities and equipment expense of \$16 million, outside service provider expense of \$16 million and compensation costs of \$14 million. The decline in compensation costs was primarily attributable to a 19 percent decline in headcount year-over-year.

Amortization of Intangibles

We have purchased, and may continue purchasing, assets and/or businesses, which may include the purchase of intangible assets. Intangible assets include customer, affiliate, and advertiser-related relationships and tradenames, trademarks and domain names. Amortization of developed technology and patents is included in the cost of revenue—other, and not in amortization of intangibles.

The following table presents amortization of intangibles and those expenses as a percentage of revenue for the periods presented (dollars in thousands):

	Years Ended December 31,		
	2014	2015	2016
Amortization of intangibles	\$ 66,750	\$ 79,042	\$ 58,302
Amortization of intangibles as a percentage of revenue	2%	2%	1%

Amortization of intangibles for the year ended December 31, 2016 decreased \$21 million, or 26 percent, respectively, compared to 2015, driven primarily by a decline in amortizable Tumblr assets as a result of the impairment recorded in the second quarter of 2016.

Amortization of intangibles for the year ended December 31, 2015 increased \$12 million, or 18 percent, compared to 2014, primarily driven by incremental amortization of intangible assets related to BrightRoll, which we acquired in the fourth quarter of 2014, as well as incremental amortization of intangibles assets related to companies acquired in 2015.

Gain on Sale of Patents and Land

The following table presents gain on sale of patents and land and those gains as a percentage of revenue for the periods presented (dollars in thousands):

	Years Ended December 31,		
	2014	2015	2016
Gain on sale of patents and land	\$ (97,894)	\$ (11,100)	\$ (121,559)
Gain on sale of patents and land as a percentage of revenue	(2)%	0%	(2)%

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For the year ended December 31, 2016, we sold certain property located in Santa Clara, California and recorded a gain on sale of land of \$120 million. Also, during the year ended December 31, 2016, we sold certain patents and recorded a gain on sale of patents of approximately \$2 million.

For the year ended December 31, 2015, we sold certain patents and recorded a gain on sale of patents of approximately \$11 million.

For the year ended December 31, 2014, we sold certain patents and recorded a gain on sale of patents of approximately \$98 million. The gain on sale of patents include patents sold to a wholly-owned affiliate of Alibaba Group for a gain on sale of \$24 million and patents sold to Yahoo Japan for a gain on sale of \$12 million.

See Note 4—"Acquisitions and Dispositions" in the Notes to our consolidated financial statements for additional information.

Asset Impairment Charge

The following table presents asset impairment charge and those charges as a percentage of revenue for the periods presented (dollars in thousands):

	Years Ended December 31,		
	2014	2015	2016
Asset impairment charge	\$ —	\$44,381	\$ —
Asset impairment charge as a percentage of revenue	0%	1%	0%

During the year ended December 31, 2015, we recorded an asset impairment charge of \$16 million related to originally developed content equal to the amount by which the unamortized cost of the originally developed content exceeded its estimated fair value and \$28 million for acquired content equal to the amount by which the unamortized cost of the acquired content exceeded its net realizable value.

Goodwill Impairment Charge

The following table presents goodwill impairment charge and those charges as a percentage of revenue for the periods presented (dollars in thousands):

	Years Ended December 31,		
	2014	2015	2016
Goodwill impairment charge	\$ 88,414	\$ 4,460,837	\$ 394,901
Goodwill impairment charge as a percentage of revenue	2%	90%	8%

After recording the goodwill impairment charge for Tumblr during the fourth quarter of 2015 based on our assessment performed as of October 31, 2015, the fair value of the Tumblr reporting unit approximated its carrying value. As such, any significant unfavorable changes in the forecast would result in the fair value being less than the carrying value. Subsequent to the annual goodwill impairment assessment performed as of October 31, 2015, we continued to monitor the actual performance of our reporting units. During the three months ended June 30, 2016, we determined that there were indicators present to suggest that it was more likely than not that the fair value of the Tumblr reporting unit was less than its carrying amount. The significant changes for the Tumblr reporting unit subsequent to the annual goodwill impairment test performed as of October 31, 2015 included a decline in the 2016 and beyond forecasted revenue, operating income and cash flows.

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During the year ended December 31, 2016, we recorded a goodwill impairment charge of \$395 million, which was a result of the interim impairment analysis performed in the second quarter of 2016 related to our Tumblr reporting unit, as discussed above. We did not have any goodwill impairment as a result of the annual impairment test performed as of October 31, 2016.

During 2015, we recorded a \$4,461 million goodwill impairment charge. The impairments were a result of a combination of factors, including a sustained decrease in our market capitalization in the fourth quarter of 2015 and lower estimated projected revenue and profitability in the near term. We concluded that the carrying value of our U.S. & Canada, Europe, Tumblr, and Latin America reporting units exceeded their respective estimated fair values and recorded a goodwill impairment charge of approximately \$3,692 million, \$531 million, \$230 million and \$8 million, respectively.

During 2014, we recorded an \$88 million goodwill impairment charge for the Middle East and India & Southeast Asia reporting units. The impairment resulted from a decline in business conditions in the Middle East and India & Southeast Asia during the latter half of 2014.

It is reasonably possible that future changes in judgments, assumptions and estimates we made in assessing the fair value of goodwill could cause us to consider some portion or all of the remaining goodwill of the Tumblr reporting unit to become impaired. For example, a future decline in market conditions, changes in our market share, and/or other factors could negatively impact the estimated future cash flows and discount rates used in the income approach to determine the fair value of the Tumblr reporting unit and could result in one or more additional impairment charges in the future.

See Note 5—"Goodwill" in the Notes to our consolidated financial statements and "Critical Accounting Policies—Goodwill" within Management's Discussion and Analysis for additional information.

Intangible Assets Impairment Charge

The following table presents intangible assets impairment charge and those charges as a percentage of revenue for the periods presented (dollars in thousands):

	Years Ended December 31,		
	2014	2015	2016
Intangible assets impairment charge	\$ —	\$15,423	\$87,335
Intangible assets impairment charge as a percentage of revenue	0%	0%	2%

During the second quarter of 2016, we reviewed our Tumblr asset group for impairment as there were events and changes in circumstances that indicated that the carrying value of the long-lived assets may not be recoverable. As a result, we performed a quantitative test comparing the fair value of the Tumblr long-lived assets with the carrying amounts and recorded an impairment charge of \$87 million during the second quarter of 2016 associated with its definite-lived intangible assets, which were included within customer, affiliate, and advertiser related relationships and tradenames, trademarks, and domain names.

In the fourth quarter of 2015, we reviewed both definite-lived and indefinite-lived intangible assets for impairment. No impairment was identified for definite-lived intangibles. For indefinite-lived intangibles, we performed a quantitative test comparing the fair value of the indefinite-lived intangible assets with their carrying amount and recorded an impairment charge of \$15 million related to certain indefinite-lived intangible assets in the EMEA segment.

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See Intangible Assets within Note 1—"The Company and Summary of Significant Accounting Policies" and Note 6—"Intangible Assets, Net" in the Notes to our consolidated financial statements for additional information.

Restructuring Charges, Net

Restructuring charges, net was comprised of the following (in thousands):

	Year Ended December 31,		
	2014	2015	2016
Employee severance pay and related costs	\$ 30,749	\$ 69,042	\$ 57,940
Non-cancelable lease, contract termination, and other charges	79,317	36,526	26,126
Reversals of previous charges	(3,222)	(7,404)	(4,038)
Non-cash accelerations of stock-based compensation expense	—	2,705	7,374
Other non-cash (credits) charges, net	(3,394)	3,150	1,227
Restructuring charges, net	<u>\$ 103,450</u>	<u>\$ 104,019</u>	<u>\$ 88,629</u>

We have implemented various restructuring plans to reduce our cost structure, align resources with our product strategy and improve efficiency, which have resulted in workforce reductions and the consolidation of certain real estate facilities and data centers.

For the year ended December 31, 2016, we recorded expense of \$65 million, \$20 million, and \$4 million related to the Americas, EMEA, and Asia Pacific segments, respectively. The amounts recorded during the year ended December 31, 2016 were primarily related to the plan we announced in February 2016 to reduce our workforce by approximately 15 percent by the end of 2016 and exit six offices in Dubai, Mexico City, Buenos Aires, Madrid, Milan and Burbank, California, subject to applicable laws and consultation processes, as a part of the strategic plan to simplify our product portfolio. During the year ended December 31, 2016, in connection with this action, we incurred pre-tax cash charges of \$47 million for severance pay expenses and related cash expenditures, pre-tax cash charges of \$17 million related to the consolidation and exit of facilities related to non-cancelable lease costs and other related costs, pre-tax non-cash charges of \$7 million related to stock-based compensation expense and less than \$1 million related to impairment costs.

For the year ended December 31, 2015, we recorded expense of \$69 million, \$31 million, and \$4 million related to the Americas, EMEA, and Asia Pacific segments, respectively. The amounts recorded during the year ended December 31, 2015 were primarily related to severance, facility and other related costs pursuant to restructuring plans that we initiated in 2015.

For the year ended December 31, 2014, we recorded expense of \$76 million, \$25 million, and \$2 million related to the Americas, EMEA, and Asia Pacific segments, respectively. The amounts recorded during the year ended December 31, 2014 were primarily related to the consolidation of a data center as we ceased use of that facility pursuant to a restructuring plan we initiated in 2011 and severance charges related to restructuring plans that we initiated in 2014 as part of our location strategy and to align resources.

The \$43 million restructuring liability as of December 31, 2016 consists of \$3 million for employee severance expenses, which we expect to substantially pay out by the end of the second quarter of 2017, and \$40 million related to non-cancelable lease costs, which we expect to pay over the terms of the related obligations through the fourth quarter of 2025, less estimated sublease income.

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Other Income (Expense), Net

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

	Years Ended December 31,		
	2014	2015	2016
Interest and investment income	\$ 26,309	\$ 34,383	\$ 60,931
Interest expense	(68,851)	(71,865)	(73,783)
Gain on sale of Alibaba Group ADSs	10,319,437	—	—
Gain (loss) on Hortonworks warrants	98,062	(19,199)	(50,046)
Foreign exchange (loss) gain	(14,687)	(22,226)	4,282
Other	9,169	3,125	4,700
Total other income (expense), net	\$ 10,369,439	\$ (75,782)	\$ (53,916)

Interest and investment income consists of income earned from cash and cash equivalents in bank accounts and marketable debt securities. Interest and investment income increased \$27 million and \$8 million for the years ended December 31, 2016 and 2015, respectively, compared to 2015 and 2014, respectively. The increase for the year ended December 31, 2016 was primarily due to an increase in interest income on our portfolio of investments as a result of increases in short-term interest rates as well as a higher average invested balance.

Interest expense is related to the \$1.4375 billion of Notes we issued in November 2013, interest expense on notes payable related to building obligations, and capital lease obligations for data centers. Interest expense increased \$2 million and \$3 million for the years ended December 31, 2016 and 2015, respectively, compared to 2015 and 2014, respectively, primarily due to the accreted non-cash interest expense related to the Notes.

For the year ended December 31, 2014, we recorded a pre-tax gain of approximately \$10 billion related to the sale of Alibaba Group ADSs.

We hold warrants that vested upon the December 12, 2014 initial public offering of Hortonworks Inc. ("Hortonworks"), which entitle us to purchase an aggregate of 3.7 million shares of Hortonworks common stock upon exercise of the warrants. We hold 6.5 million preferred warrants that are exercisable for 3.25 million shares of common stock at an exercise price of \$0.01 per share, as well as 0.5 million common warrants that are exercisable for 0.5 million shares of common stock at an exercise price of \$8.46 per share. We determined the estimated fair value of the warrants using the Black-Scholes model. For the years ended December 31, 2016 and 2015, we recorded losses of \$50 million and \$19 million, respectively, due to the change in estimated fair value of the Hortonworks warrants during the period, which was recorded through other income (expense), net in our consolidated statements of operations. During the year ended December 31, 2014, we recorded a gain of \$57 million upon the initial public offering of Hortonworks and a \$41 million gain related to the mark to market of the warrants held as of December 31, 2014, which were included within other income (expense), net on the consolidated statements of operations.

Foreign exchange (loss) gain consists of foreign exchange gains and losses due to re-measurement of monetary assets and liabilities denominated in non-functional currencies, and unrealized and realized foreign currency transaction gains and losses, including gains and losses related to balance sheet hedges.

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Other consists of gains from other non-operational items.

Other income (expense), net may fluctuate in future periods due to changes in our average investment balances, changes in interest and foreign exchange rates, changes in the fair value of foreign currency forward contracts, realized gains and losses on investments, and impairments of investments.

Income Taxes

The benefit for income taxes for the year ended December 31, 2016 differs from the amount computed by applying the federal statutory income tax rate to income before benefit for income taxes and earnings in equity interests as follows (dollars in thousands):

	Years Ended December 31,					
	2014	(*)	2015	(*)	2016	(*)
Income tax provision (benefit) at the U.S. federal statutory rate of 35 percent ⁽¹⁾⁽²⁾	\$ 3,679,333	35%	\$ (1,688,496)	35%	\$ (244,641)	35%
State income taxes, net of federal benefit	400,824	4%	(7,912)	0%	2,514	0%
Stock-based compensation expense	8,132	0%	9,508	0%	10,482	(1)%
Research tax credits	(23,775)	0%	(15,659)	0%	(17,291)	2%
Effect of non-U.S. operations ⁽³⁾	(53,079)	(1)%	165,203	(3)%	(18,499)	3%
Settlement with tax authorities ⁽⁴⁾	(24,870)	0%	(1,981)	0%	(8,400)	1%
Remeasurement of prior year tax positions	—	0%	(5,286)	0%	—	0%
Acquisition related non-deductible expenses	16,881	0%	15,970	0%	13,059	(2)%
Tax liquidation of acquired entities	—	0%	(56,170)	1%	—	0%
Goodwill impairment charge ⁽²⁾	30,945	0%	1,486,792	(31)%	138,215	(20)%
Intangible assets impairment charge	—	0%	2,468	0%	—	0%
Other	3,711	0%	5,965	0%	(1,667)	0%
Provision (benefit) for income taxes	<u>\$ 4,038,102</u>	<u>38%</u>	<u>\$ (89,598)</u>	<u>2%</u>	<u>\$ (126,228)</u>	<u>18%</u>

(*) Percent of income before income taxes and earnings in equity interests.

Significant variances year-over-year as shown above are further explained as follows:

- (1) In 2014, Yahoo! Hong Kong Holdings Limited ("YHK") sold 140 million Alibaba Group ADSs in the Alibaba Group IPO at an initial public offering price of \$68.00 per ADS, which resulted in an increase in our provision for income taxes for 2014.
- (2) In 2015, our pre-tax loss included a goodwill impairment charge of \$4,461 million, of which \$213 million is tax deductible, while the rest is not deductible for income tax purposes. The provision for income taxes for the year ended December 31, 2015 reflects the benefit from impairment of the tax deductible goodwill. In 2016, our pre-tax loss included a goodwill impairment charge of \$395 million, which is not deductible for income tax purposes.
- (3) In 2014, a detriment of \$8 million was included in "effect of non-U.S. operations" to account for the corresponding adjustments from the IRS on foreign earnings available at the time of our

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2012 repatriation in which we made a one-time distribution of cash from certain of our consolidated foreign subsidiaries. In 2015, the tax effect of our non-U.S. operations is a detriment. This results primarily from our election to deduct foreign taxes for U.S. tax purposes rather than claim a tax credit. In 2016, we repatriated cumulative earnings from our wholly owned foreign subsidiaries. This resulted in a \$17 million tax expense (primarily related to \$172 million of dividend income recognizable in the U.S. with an associated \$67 million U.S. tax credit for foreign income taxes that have been paid on such earnings) related to this repatriation that is included in "effect of non-U.S. operations." This \$17 million tax expense is included as part of the total income tax benefit for the year ended December 31, 2016.

- (4) In 2014, we settled the IRS income tax examination for the 2007 through 2010 returns resulting in a benefit of approximately \$25 million. In 2015 and 2016, we settled states and foreign tax audits for various taxable years resulting in a benefit of \$2 million and \$8 million, respectively.

As of December 31, 2016, we repatriated cumulative earnings from our wholly-owned foreign subsidiaries and also intend to repatriate our future earnings from these foreign subsidiaries. As of December 31, 2016, we do not have a plan to repatriate approximately \$3.3 billion of earnings related to our equity method investment in Yahoo Japan. If those earnings were to be repatriated in the future, we may be subject to additional U.S. income taxes (subject to an adjustment for foreign tax credits). It is not practicable to determine the income tax liability that might be incurred if these earnings were to be repatriated.

In the first quarter of 2016, we received a cash tax refund of \$190 million associated with our claim to carry back 2015 losses and tax attributes to earlier taxable years.

Our gross amount of unrecognized tax benefits as of December 31, 2016 was \$1.1 billion, of which \$1.0 billion is recorded on our consolidated balance sheets. The gross unrecognized tax benefits as of December 31, 2016 increased by \$7 million from the recorded balance as of December 31, 2015 primarily related to transfer prices among entities in different tax jurisdictions.

We are in various stages of examination and appeal in connection with our taxes both in the U.S. and in foreign jurisdictions. Those audits generally span tax years 2005 through 2015. As of December 31, 2016, our 2011 through 2015 U.S. federal income tax returns are currently under examination. We have appealed the proposed California Franchise Tax Board's adjustments to the 2005 through 2008 returns, but no conclusions have been reached to date. Our 2009 through 2010 California tax returns are currently under examination. Our 2011 through 2015 tax years remain subject to examination by the California Franchise Tax Board for California tax purposes. While it is difficult to determine when the examinations will be settled or their final outcomes, certain audits in various jurisdictions are expected to be resolved in the foreseeable future. We believe that we have adequately provided for any reasonably foreseeable adverse adjustment to our tax returns and that any settlement will not have a material adverse effect on our consolidated financial position, results of operations, or cash flows. It is reasonably possible that our unrecognized tax benefits could be reduced by up to approximately \$20 million in the next twelve months.

In the first quarter of 2015, we satisfied the \$3.3 billion income tax liability related to the sale by YHK, our wholly-owned subsidiary, of Alibaba Group ADSs in the Alibaba Group IPO on September 24, 2014. As of December 31, 2016, we accrued deferred tax liabilities of \$13.6 billion associated with the Alibaba Group shares that we retained. Such deferred tax liabilities will be subject to periodic adjustments due to changes in the fair value of the Alibaba Group shares.

We may have additional tax liabilities in China related to the sale to Alibaba Group of 523 million Alibaba Group shares that took place during the year ended December 31, 2012 and related to the

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sale of 140 million Alibaba Group ADSs sold in the Alibaba Group IPO that took place during the year ended December 31, 2014. Any taxes assessed and paid in China are expected to be ultimately offset and recovered in the U.S. through the use of foreign tax credits.

Tax authorities from the Brazilian State of Sao Paulo have assessed certain indirect taxes against our Brazilian subsidiary, Yahoo! do Brasil Internet Ltda., related to online advertising services. The assessment is for calendar years 2008 through 2012 and as of December 31, 2016 totals approximately \$140 million. We currently believe the assessment is without merit. We believe the risk of loss is remote and have not recorded an accrual for the assessment.

Earnings in Equity Interests

We record our share of the results of earnings in equity interests, including tax impacts, one quarter in arrears, within earnings in equity interests in the consolidated statements of operations.

The following table presents earnings in equity interests for the periods presented (in thousands):

	Years Ended December 31,		
	2014	2015	2016
Earnings in equity interests	\$ 1,057,863	\$ 383,571	\$ 363,283

The decrease for the year ended December 31, 2016, compared to 2015, was due primarily to the financial performance of Yahoo Japan. The decrease for the year ended December 31, 2015, compared to 2014, was due primarily to the change in accounting for our investment in Alibaba Group, which we now record as a marketable equity security. Commencing with the Alibaba Group IPO in September 2014, we no longer use the equity method to account for our interest in Alibaba Group, and our earnings in equity interests and net income have been and will continue to be materially lower.

See Note 8—"Investments in Equity Interests Accounted for Using the Equity Method of Accounting" in the Notes to our consolidated financial statements for additional information.

Noncontrolling Interests

Noncontrolling interests represent the noncontrolling holders' percentage share of income or losses from the subsidiaries in which we hold a majority, but less than 100 percent, ownership interest and the results of which are consolidated in our consolidated financial statements. Noncontrolling interests were approximately \$5 million in 2016, compared to \$8 million in 2015 and \$10 million in 2014. Noncontrolling interests recorded in 2016, 2015, and 2014 were related to the Yahoo!7 venture in Australia and New Zealand.

Net Income (Loss) Attributable to Yahoo! Inc.

Net loss attributable to Yahoo! Inc. for the year ended December 31, 2016 was \$214 million compared to a loss of \$4.4 billion in 2015, a decline of \$4.1 billion year-over-year, primarily due to a significant decrease in goodwill and asset impairment charges, and to a lesser extent, a decrease in sales and marketing expense, product development expense, general and administrative expense, cost of revenue—other, a gain on sale of land in 2016, and a decline in TAC (excluding the impact of the change in revenue presentation associated with the Eleventh Amendment). This was partially offset by a decrease in revenue (excluding the impact of the change in revenue presentation associated with the Eleventh Amendment) and an increase in intangible assets impairment charge.

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Net loss attributable to Yahoo! Inc. for the year ended December 31, 2015 was \$4.4 billion compared to income of \$7.5 billion in 2014, a decline of \$11.9 billion year-over-year, primarily attributable to a decline in other income associated with a gain on sale of Alibaba Group shares in connection with the Alibaba Group IPO for which there was no similar activity in 2015, a goodwill impairment charge, an increase in cost of revenue—TAC, an asset impairment charge related to originally developed and acquired content, a decrease in earnings in equity interests and a decrease in gain on sale of patents. This was partially offset by an increase in revenue and an increase in benefit for income taxes.

Adjusted EBITDA (a non-GAAP financial measure)

	Years Ended December 31,		
	2014	2015	2016
	(dollars in thousands)		
Net income (loss) attributable to Yahoo! Inc.	\$ 7,521,731	\$ (4,359,082)	\$ (214,321)
Advisory fees	—	8,808	57,061
Security incidents costs	—	—	10,406
Gain on sale of land	—	—	(120,059)
Depreciation and amortization	606,568	609,613	507,555
Stock-based compensation expense	420,174	457,153	491,902
Asset impairment charge	—	44,381	—
Goodwill impairment charge	88,414	4,460,837	394,901
Intangible assets impairment charge	—	15,423	87,335
Restructuring charges, net	103,450	104,019	88,629
Other income (expense), net	(10,369,439)	75,782	53,916
(Provision) benefit for income taxes	4,038,102	(89,598)	(126,228)
Earnings in equity interests, net of tax	(1,057,863)	(383,571)	(363,283)
Net income attributable to noncontrolling interests	10,411	7,975	4,858
Adjusted EBITDA	<u>\$ 1,361,548</u>	<u>\$ 951,740</u>	<u>\$ 872,672</u>
Percentage of Revenue ex-TAC(*)	<u>31%</u>	<u>23%</u>	<u>25%</u>

(*) Net income (loss) attributable to Yahoo! Inc. as a percentage of GAAP revenue in 2014, 2015, and 2016 was 163 percent, (88) percent, and (4) percent, respectively.

For the year ended December 31, 2016, adjusted EBITDA decreased \$79 million, or 8 percent, compared to 2015, mainly due to a decline in revenue ex-TAC (as described above) partially offset by a decline in global operating costs as well as a decline in direct costs across the segments, as described in "Segment Reporting" below. Revenue ex-TAC, as noted above, was impacted by the completion of recognition of deferred revenue under the TIPLA with Alibaba Group in the third quarter of 2015 for which no similar revenue was recognized in the year ended December 31, 2016.

For the year ended December 31, 2015, adjusted EBITDA decreased \$410 million, or 30 percent, compared to 2014, mainly due to higher TAC payments to support our growth and partnership initiatives across Search, Communications and Digital Content, a lower benefit from patent sales year-over-year, and an increase in direct costs in the Americas segment, partially offset by a decline in global operating costs.

Segment Reporting

We continue to manage our business geographically. The primary areas of measurement and decision making are currently the Americas, EMEA and Asia Pacific. Management relies on an internal reporting process that provides revenue, revenue ex-TAC, direct costs excluding TAC by segment, and consolidated income (loss) from operations for making decisions related to the evaluation of the financial performance of, and allocating resources to, our segments.

	Year Ended December 31,			2014-2015 % Change	2015-2016 % Change
	2014	2015	2016		
(dollars in thousands)					
Revenue by segment(1):					
Americas	\$3,517,861	\$ 3,976,770	\$4,172,836	13%	5%
EMEA	374,833	343,646	397,768	(8)%	16%
Asia Pacific	725,439	647,885	598,531	(11)%	(8)%
Total revenue	<u>\$4,618,133</u>	<u>\$ 4,968,301</u>	<u>\$5,169,135</u>	8%	4%
TAC by segment(1):					
Americas	\$ 166,545	\$ 788,725	\$1,463,221	374%	86%
EMEA	36,867	57,284	144,547	55%	152%
Asia Pacific	14,119	31,505	43,018	123%	37%
Total TAC	<u>\$ 217,531</u>	<u>\$ 877,514</u>	<u>\$1,650,786</u>	303%	88%
Revenue ex-TAC by segment:					
Americas	\$3,351,316	\$ 3,188,045	\$2,709,615	(5)%	(15)%
EMEA	337,966	286,362	253,221	(15)%	(12)%
Asia Pacific	711,320	616,380	555,513	(13)%	(10)%
Total revenue ex-TAC	<u>\$4,400,602</u>	<u>\$ 4,090,787</u>	<u>\$3,518,349</u>	(7)%	(14)%
Direct costs by segment(2):					
Americas	249,971	284,875	263,010	14%	(8)%
EMEA	87,490	95,789	51,597	9%	(46)%
Asia Pacific	198,910	196,056	185,195	(1)%	(6)%
Global operating costs(3)	2,600,577	2,582,235	2,214,842	(1)%	(14)%
Gain on sale of patents and land	(97,894)	(11,100)	(121,559)	(89)%	995%
Asset impairment charge	—	44,381	—	100%	100%
Goodwill impairment charge	88,414	4,460,837	394,901	4945%	(91)%
Intangible assets impairment charge	—	15,423	87,335	100%	100%
Depreciation and amortization	606,568	609,613	507,555	1%	(17)%
Stock-based compensation expense	420,174	457,153	491,902	9%	8%
Restructuring charges, net	103,450	104,019	88,629	1%	(15)%
Income (loss) from operations	<u>\$ 142,942</u>	<u>\$ (4,748,494)</u>	<u>\$ (645,058)</u>	(3422)%	(86)%

(1) Commencing in the second quarter of 2016, TAC payments related to the Microsoft Search Agreement, which previously would have been recorded as a reduction to revenue, began to be recorded as cost of revenue—TAC due to a required change in revenue presentation. See Note 1—"The Company and Summary of Significant Accounting Policies" and Note 19—"Microsoft

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Search Agreement” in the Notes to our consolidated financial statements for additional information.

- (2) Direct costs for each segment include costs associated with the local sales teams and other cost of revenue. Prior to the second quarter of 2016, certain account management costs associated with Yahoo Properties were managed locally and included as direct costs for each segment. Prior period amounts have been revised to conform to the current presentation.
- (3) Global operating costs include product development, marketing, real estate workplace, general and administrative, account management costs, and other corporate expenses that are managed on a global basis and that are not directly attributable to any particular segment. Beginning in the second quarter of 2016, certain account management costs associated with Yahoo Properties are managed globally and included as global costs. Prior period amounts have been revised to conform to the current presentation.

Revenue and Revenue ex-TAC by Segment

Americas

Americas revenue for the year ended December 31, 2016 increased \$196 million, or 5 percent, compared to 2015. The increase in Americas revenue for the year ended December 31, 2016 was primarily attributable to an increase in search revenue of \$478 million, partially offset by declines in other revenue and display revenue of \$235 million and \$47 million, respectively. The increase in Americas search revenue was primarily due to the change in revenue presentation associated with the implementation of the Eleventh Amendment to the Microsoft Search Agreement. The revenue and TAC increase from the change in revenue presentation was \$701 million for the year ended December 31, 2016. See “Significant Transactions—Microsoft Search Agreement” above for further detail. Excluding the impact of the change in revenue presentation, noted above, Americas search revenue declined \$224 million, or 13 percent, for the year ended December 31, 2016 primarily due to a decline in Paid Clicks on Yahoo Properties and Affiliate sites driven by a decline in traffic, partially offset by an increase in Affiliate site revenue due to improved pricing. A decline in revenue of \$77 million associated with the Mozilla Agreement also contributed to the decline in Americas search revenue on Yahoo Properties. The decline in Americas other revenue was primarily due to a decline in fees revenue and, to a lesser extent, a decline in listings-based revenue. The decline in fees revenue was primarily due to the completion of recognition of deferred revenue pursuant to the TIPLA with Alibaba Group in which we recognized \$199 million in the year ended December 31, 2015 for which no similar revenue was recognized in 2016. Listings-based revenue for the year ended December 31, 2016 declined \$27 million, compared to the same period of 2015, primarily due to partner agreements that ended in 2015 and a directory product shut down in 2015. The decline in Americas display revenue for the year ended December 31, 2016 was attributable to a decline in premium advertising and, to a lesser extent, video and native advertising, partially offset by an increase in audience advertising.

Americas revenue for the year ended December 31, 2015 increased \$459 million, or 13 percent, compared to 2014. The increase in Americas revenue for the year ended December 31, 2015 was primarily attributable to increases in search and display revenue of \$323 million and \$239 million, respectively, partially offset by a decline in other revenue of \$103 million. The increase in Americas search revenue for the year ended December 31, 2015 was attributable to an increase in search revenue from mobile devices as well as \$390 million attributable to the Mozilla Agreement, partially offset by a decline in click volume on other visits to Yahoo Properties and on Affiliate sites. The increase in Americas display revenue for the year ended December 31, 2015 was primarily associated with an increase in video and native advertising, including incremental revenue following the BrightRoll acquisition and an increase in revenue from mobile devices driven by native advertising. The increase in Americas display revenue for the year ended December 31, 2015 occurred despite

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unfavorable foreign exchange fluctuations related to Canada and Brazil of approximately \$17 million. The decrease in Americas other revenue for the year ended December 31, 2015 was primarily attributable to declines in fees and listings-based revenue of \$34 million and \$68 million, respectively, due to a decline in Alibaba Group royalty revenue under the TIPLA, a decline in shopping traffic, expiration of a partner agreement, and declines in Yahoo Small Business associated with a reduction in its subscriber base.

Revenue in the Americas accounted for approximately 81 percent of total revenue for 2016, compared to 80 percent in 2015 and 76 percent in 2014.

Americas revenue ex-TAC for the year ended December 31, 2016 decreased \$478 million, or 15 percent, compared to 2015, primarily due to declines in revenue of \$505 million excluding the impact of the change in revenue presentation (described further above). Americas TAC for the year ended December 31, 2016 decreased \$27 million (excluding the impact of the change in revenue presentation) due to declines in display TAC of \$102 million and TAC associated with the Mozilla Agreement of \$40 million associated with an amendment entered into in the third quarter of 2016. This was partially offset by an increase in search TAC primarily from Yahoo Gemini.

Americas revenue ex-TAC for the year ended December 31, 2015 decreased \$163 million, or 5 percent, compared to 2014, due to an increase in TAC, partially offset by an increase in revenue as discussed above. TAC in the Americas segment increased \$622 million for the year ended December 31, 2015 due to increased payments to distribution partners, including Mozilla, TAC associated with Yahoo Gemini, and incremental TAC from the BrightRoll acquisition.

Revenue ex-TAC in the Americas accounted for approximately 77 percent of total revenue ex-TAC for 2016, compared to 78 percent in 2015 and 76 percent in 2014.

EMEA

EMEA revenue for the year ended December 31, 2016 increased \$54 million, or 16 percent, compared to 2015. The increase in EMEA revenue for the year ended December 31, 2016 was attributable to an increase in search revenue of \$83 million, partially offset by a decline in display revenue of \$25 million and other revenue of \$5 million. The increase in EMEA search revenue was primarily due to the change in revenue presentation associated with the implementation of the Eleventh Amendment to the Microsoft Search Agreement. The revenue and TAC increase from the change in revenue presentation was \$106 million for the year ended December 31, 2016. Excluding the impact of the change in revenue presentation, noted above, EMEA search revenue declined \$22 million, or 20 percent, for the year ended December 31, 2016, primarily due to unfavorable foreign exchange fluctuations of \$13 million using the foreign exchange rates from the year ended December 31, 2015 and a decline in Paid Clicks. The decline in EMEA display revenue for the year ended December 31, 2016 was primarily due to a decline in premium advertising and, to a lesser extent, audience advertising, partially offset by an increase in native advertising. Additionally, the decline in display revenue in the EMEA segment was partially due to unfavorable foreign exchange fluctuations of \$14 million using the foreign exchange rates from the year ended December 31, 2015.

EMEA revenue for the year ended December 31, 2015 decreased \$31 million, or 8 percent, compared to 2014, primarily due to unfavorable foreign exchange fluctuations of \$44 million for the year ended December 31, 2015, using the foreign currency exchange rates from the year ended December 31, 2014. Excluding the impact of foreign exchange, display and search revenue in the EMEA segment increased \$21 million and \$3 million, respectively, and other revenue declined \$11 million. The increase in display revenue in the segment was attributable to an increase in Affiliate revenue in the region primarily from native advertising.

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Revenue in EMEA accounted for approximately 8 percent of total revenue for 2016, compared to 7 percent in 2015 and 8 percent in 2014.

EMEA revenue ex-TAC for the year ended December 31, 2016 decreased \$33 million, or 12 percent, compared to 2015, primarily due to revenue declines exceeding the TAC declines (excluding the impact of the change in revenue presentation). TAC declined \$18 million (excluding the impact of the change in revenue presentation) due to a decline in display TAC in the segment.

EMEA revenue ex-TAC for the year ended December 31, 2015 decreased \$52 million, or 15 percent, compared to 2014, primarily due to an increase in TAC and a decrease in revenue as discussed above. The increase in TAC in the EMEA segment for the year ended December 31, 2015 was primarily driven by an increase in display TAC of \$17 million, associated with an increase in Affiliate TAC payments to partners.

Revenue ex-TAC in EMEA accounted for approximately 7 percent of total revenue ex-TAC for 2016, compared to 7 percent in 2015 and 8 percent in 2014.

Asia Pacific

Asia Pacific revenue for the year ended December 31, 2016 decreased \$49 million, or 8 percent, compared to 2015. The decline in Asia Pacific revenue for the year ended December 31, 2016 was primarily due to declines in display and other revenue of \$33 million and \$15 million, respectively. The decline in Asia Pacific display revenue for the year ended December 31, 2016 was primarily attributable to a decline in premium advertising, and to a lesser extent, audience advertising, partially offset by an increase in native advertising. The decline in Asia Pacific other revenue was attributable to declines in fees revenue and listings-based revenue associated with e-commerce transactions.

Asia Pacific revenue for the year ended December 31, 2015 decreased \$78 million, or 11 percent, compared to 2014, primarily due to unfavorable foreign exchange fluctuations of \$52 million for the year ended December 31, 2015, using the foreign currency exchange rates from the year ended December 31, 2014. In addition to unfavorable foreign exchange fluctuations, the decline in Asia Pacific revenue for the year ended December 31, 2015 was driven primarily by a decrease in search and other revenue of \$7 million and \$15 million, respectively.

Revenue in Asia Pacific accounted for approximately 12 percent of total revenue for 2016, compared to 13 percent in 2015 and 16 percent in 2014.

We expect Asia Pacific revenue to decline following the expiration of a revenue sharing arrangement with Yahoo Japan in August 2017, under which we recognized approximately \$113 million in 2016.

Asia Pacific revenue ex-TAC for the year ended December 31, 2016 decreased \$61 million, or 10 percent, compared to 2015, primarily due to a decrease in revenue of \$49 million and an increase in display TAC of \$8 million.

Asia Pacific revenue ex-TAC for year ended December 31, 2015 decreased \$95 million, or 13 percent, compared to 2014, primarily due to an increase in TAC and a decrease in revenue as discussed above. The increase in TAC in the Asia Pacific segment for the year ended December 31, 2015 was primarily driven by an increase in display TAC of \$17 million primarily associated with an increase in Affiliate TAC payments to partners.

Revenue ex-TAC in Asia Pacific accounted for approximately 16 percent of total revenue ex-TAC for 2016, compared to 15 percent in 2015 and 16 percent in 2014.

Direct Costs by Segment

Americas

For the year ended December 31, 2016, direct costs attributable to the Americas segment decreased \$22 million, or 8 percent, compared to 2015, primarily attributable to declines in compensation costs of \$16 million, other cost of revenue of \$8 million, and travel and entertainment expense of \$3 million, partially offset by an increase in marketing and public relations expense of \$4 million. The decline in compensation costs in the segment was primarily due to a 19 percent decline in headcount year-over-year.

For the year ended December 31, 2015, direct costs attributable to the Americas segment increased \$35 million, or 14 percent, compared to 2014. The increase in direct costs was primarily due to higher compensation costs from acquisitions of \$32 million, marketing and public relations expense of \$7 million, and other cost of revenue of \$2 million, partially offset by lower content costs of \$5 million.

Direct costs attributable to the Americas segment represented approximately 10 percent of Americas revenue ex-TAC for 2016, compared to 9 percent in 2015 and 7 percent in 2014.

EMEA

For the year ended December 31, 2016, direct costs attributable to the EMEA segment decreased \$44 million, or 46 percent, compared to 2015, primarily related to declines in bad debt expense of \$28 million, compensation costs of \$16 million, and other cost of revenue of \$3 million, partially offset by an increase in marketing and public relations expense of \$5 million. The decline in compensation costs in the segment was primarily due to a 32 percent decline in headcount year-over-year.

For the year ended December 31, 2015, direct costs attributable to the EMEA segment increased \$8 million, or 9 percent, compared to 2014, primarily due to an increase in bad debt expense of \$15 million, partially offset by a decline in compensation costs of \$6 million. The decline in bad debt expense reflected improved collections of total and aged accounts receivable balances.

Direct costs attributable to the EMEA segment represented approximately 20 percent of EMEA revenue ex-TAC for 2016, compared to 33 percent in 2015 and 26 percent in 2014.

Asia Pacific

For the year ended December 31, 2016, direct costs attributable to the Asia Pacific segment decreased \$11 million, or 6 percent, compared to 2015, primarily attributable to declines in compensation costs of \$10 million and marketing and public relations expense of \$5 million, partially offset by an increase in other cost of revenue of \$5 million.

For the year ended December 31, 2015, direct costs attributable to the Asia Pacific segment decreased \$3 million, or 1 percent, compared to 2014, primarily due to a decline in compensation costs of \$16 million and outside service provider expenses of \$2 million, partially offset by an increase in other cost of revenue of \$14 million related to our e-commerce business in the region.

Direct costs attributable to the Asia Pacific segment represented approximately 33 percent of Asia Pacific revenue ex-TAC for 2016, compared to 32 percent and 28 percent in 2015 and 2014, respectively.

Liquidity and Capital Resources

	December 31, 2015	December 31, 2016
	(dollars in thousands)	
Cash and cash equivalents	\$ 1,631,911	\$ 1,119,469
Short-term marketable securities	4,225,112	5,700,925
Long-term marketable securities	975,961	1,089,707
Total cash, cash equivalents, and marketable securities	<u>\$ 6,832,984</u>	<u>\$ 7,910,101</u>
Percentage of total assets	<u>15%</u>	<u>16%</u>

Cash Flow Highlights	Years Ended December 31,		
	2014	2015	2016
	(in thousands)		
Net cash provided by (used in) operating activities	\$ 916,350	\$ (2,383,422)	\$ 1,248,863
Net cash provided by (used in) investing activities	\$ 3,738,501	\$ 1,752,112	\$ (1,574,265)
Net cash used in financing activities	\$ (4,022,466)	\$ (377,258)	\$ (193,682)

Our operating activities for 2016 and 2014 have generated adequate cash to meet our operating needs. In 2015, we satisfied the \$3.3 billion income tax liability associated with the sale of Alibaba Group ADSs in the Alibaba Group's IPO in 2014, which drove the net use of cash from operations.

As of December 31, 2016, we had cash, cash equivalents, and marketable securities (excluding Alibaba Group and Hortonworks equity securities) totaling \$7.9 billion compared to \$6.8 billion at December 31, 2015. The increase primarily was due to cash provided by operating activities, cash proceeds from the sale of certain property in Santa Clara, California of \$246 million (net of closing costs of \$4 million) and a cash tax refund of \$190 million associated with our claim to carry back 2015 losses and tax attributes to earlier taxable years.

As of December 31, 2015, we had cash, cash equivalents, and marketable securities (excluding Alibaba Group and Hortonworks equity securities) totaling \$6.8 billion compared to \$10.2 billion at December 31, 2014. The decrease was due to our purchase of Polyvore for \$154 million in cash consideration, net of cash acquired, the repurchase of 4 million shares of our outstanding common stock for \$204 million, and the settlement of the \$3.3 billion income tax liability related to the sale of Alibaba Group ADSs in September 2014.

Our foreign subsidiaries held \$317 million of our total \$7.9 billion of cash and cash equivalents and marketable securities (excluding Alibaba Group and Hortonworks equity securities) as of December 31, 2016. We have recorded a \$17 million tax expense related to the repatriation of cumulative earnings from our wholly owned foreign subsidiaries for the year ended December 31, 2016. As of December 31, 2016, we do not have a plan to repatriate approximately \$3.3 billion of earnings related to our equity method investment in Yahoo Japan. If those earnings were to be repatriated in the future, we may be subject to additional U.S. income taxes (subject to an adjustment for foreign tax credits). It is not practicable to determine the income tax liability that might be incurred if these earnings were to be repatriated.

On May 18, 2016, we delivered notice to Citibank to terminate our credit agreement with Citibank, N.A., as Administrative Agent entered into on October 19, 2012 (as amended on October 10, 2013,

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October 9, 2014, and July 24, 2015) which provided for a \$750 million unsecured revolving credit facility. The termination of the credit agreement took effect on May 23, 2016.

We invest excess cash predominantly in marketable debt securities, money market funds, and time deposits that are liquid and highly rated, and our investment portfolio has an effective maturity of less than one year. Our marketable securities are classified as available-for-sale and are reported at fair value, with unrealized gains and losses, net of tax, recorded in accumulated other comprehensive income. Realized gains or losses and declines in value judged to be other-than-temporary, if any, on available-for-sale securities are reported in other income (expense), net. The fair value of securities is determined based on quoted market prices of the historical underlying security or from readily available pricing sources for the identical underlying securities that may not be actively traded as of the valuation date. As of December 31, 2016, certain of our marketable securities had a fair value below cost due primarily to the changes in market rates of interest and yields on these securities. We evaluate these investments periodically for possible other-than-temporary impairment. We have no current requirement or intent to sell these securities. We expect to recover up to (or beyond) the initial cost of the investment.

We currently hedge a portion of our net investment in Yahoo Japan with forward contracts to reduce the risk that our investment in Yahoo Japan will be adversely affected by foreign currency translation exchange rate fluctuations. The forward contracts are required to be settled in cash and the amount of cash payment we receive or could be required to pay upon settlement could be material.

While we have evaluated possible acquisitions of, or strategic investments in, businesses, products, and technologies that are complementary to our business in the past, we do not anticipate pursuing any acquisitions and/or investments that may require the use of cash at this time.

We use cash generated by operations as our primary source of liquidity and believe that existing cash, cash equivalents, and investments in marketable securities, together with any cash generated from operations, will be sufficient to meet normal operating requirements and capital expenditures for the next twelve months.

See Note 2—"Marketable Securities, Investments and Fair Value Disclosures" in the Notes to our consolidated financial statements for additional information.

Cash Flow Changes

Net cash provided (used in) by operating activities. Cash provided by (used in) operating activities is driven by our net income (loss), adjusted for non-cash items, working capital changes and dividends received from equity investees. Non-cash adjustments include depreciation, amortization of intangible assets, accretion of convertible notes discount, stock-based compensation expense, non-cash restructuring charges, non-cash asset impairment charges, non-cash goodwill impairment charges, non-cash intangible assets impairment charges, non-cash accretion on marketable securities, foreign exchange gain/loss, gain/loss on sale of assets and other, gain/loss on sale of Hortonworks warrants, tax benefits from stock-based awards, excess tax benefits from stock-based awards, deferred income taxes, earnings in equity interests, and gain on sale of patents and land.

Cash flows from operating activities for the year ended December 31, 2016 were driven by a net source of cash from working capital of \$421 million (which included a \$190 million cash tax refund), dividends received from equity investees of \$157 million and non-cash adjustments of \$1,243 million, reduced by a net loss of \$209 million and earnings in equity interests of \$363 million.

Cash flows from operating activities for the year ended December 31, 2015 was reduced by a net loss of \$4,351 million, changes in working capital of \$3,445 million (which included the reduction of the

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income tax liability related to the sale of Alibaba Group shares in September 2014) and earnings in equity interests of \$384 million offset by non-cash goodwill and other impairment charges of \$4,521 million, other non-cash adjustments of \$1,134 million, and dividends from equity investees of \$142 million.

For the year ended December 31, 2014, operating activities provided \$916 million in cash. Net income for the year ended December 31, 2014 was \$7,532 million, which was offset by the gain on sale of Alibaba Group ADSs of \$10,319 million and earnings in equity interests of \$1,058 million. Additionally, we received dividends from equity investees of \$84 million, incurred non-cash adjustments of \$1,473 million and had a net source of cash from working capital of \$3,204 million which included the income tax liability related to the sale of Alibaba Group shares in September 2014.

Net cash provided by (used in) investing activities. Cash provided by (used in) investing activities is primarily attributable to sales and maturities of marketable securities, sales of our strategic investments or settlement of derivative hedge contracts, proceeds from sale of patents, acquisitions, purchases of marketable securities, capital expenditures, investments in privately held companies and purchases of intangible assets.

During the year ended December 31, 2016, the \$1,574 million used in investing activities was due to purchases of marketable securities, net of proceeds from sales and maturities, of \$1,614 million, partially offset by \$29 million in net proceeds from settlement of derivative hedge contracts and net proceeds from disposition of property and equipment of \$11 million.

During the year ended December 31, 2015, the \$1,752 million provided by investing activities was due to proceeds from sales and maturities of marketable securities, net of purchases, of \$2,308 million, \$29 million in proceeds from the sale of patents, and \$138 million in net proceeds from settlement of derivative hedge contracts, partially offset by \$543 million used for capital expenditures, net, \$176 million used for acquisitions, and \$4 million used for the purchase of intangibles and other activities.

During the year ended December 31, 2014, the \$3.7 billion provided by investing activities was due to \$9.4 billion in cash proceeds from the sale of Alibaba Group ADSs, net of underwriting discounts, fees and commissions, proceeds from sales and maturities of marketable securities of \$3.2 billion, \$254 million in proceeds received from settlement of derivative hedge contracts, and \$86 million in proceeds from sales of patents, partially offset by \$7.9 billion in purchases of marketable securities, \$396 million used for capital expenditures, \$859 million used for acquisitions, and \$74 million used for additional equity investments.

Net cash used in financing activities. Cash used in financing activities is primarily driven by tax withholding payments related to net share settlement of restricted stock units, stock repurchases offset by employee stock option exercises and employee stock purchases.

During the year ended December 31, 2016, the \$194 million used in financing activities was due to \$223 million used for tax withholding payments related to net share settlements of restricted stock units and other financing activities and \$6 million used for distribution to noncontrolling interests. This use of cash was partially offset by \$17 million in cash proceeds received from employee stock option exercises, and an excess tax benefit from stock-based awards of \$18 million.

During the year ended December 31, 2015, the \$377 million used in financing activities was due to \$204 million used for the repurchase of 4 million shares of common stock at an average price of \$47.65 per share, \$16 million used for distributions to non-controlling interests, and \$274 million used for tax withholding payments related to net share settlements of restricted stock units and other

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financing activities. This use of cash was partially offset by \$59 million in cash proceeds received from employee stock option exercises and employee stock purchases made through our employee stock purchase plan, and an excess tax benefit from stock-based awards of \$58 million.

During the year ended December 31, 2014, the \$4 billion used in financing activities was due to \$4.2 billion used for the repurchase of 102 million shares of our common stock at an average price of \$40.94 per share, \$22 million used for distributions to noncontrolling interests, and \$295 million used for tax withholding payments related to net share settlements of restricted stock units and other financing activities. This use of cash was partially offset by \$308 million in cash proceeds received from employee stock option exercises and employee stock purchases made through our employee stock purchase plan, and an excess tax benefit from stock-based awards of \$150 million.

In 2016, 2015, and 2014, \$18 million, \$58 million, and \$150 million, respectively, of excess tax benefits from stock-based awards for options exercised in current and prior periods were included as a source of cash flows from financing activities. These excess tax benefits represent the reduction in income taxes otherwise payable during the period, attributable to the actual gross tax benefits in excess of the expected tax benefits for options exercised in current and prior periods. We have accumulated excess tax deductions relating to stock options exercised prior to January 1, 2006 available to reduce income taxes otherwise payable. To the extent such deductions reduce income taxes payable in the current year, they are reported as financing activities in the consolidated statements of cash flows. See Note 14—"Employee Benefits" in the Notes to our consolidated financial statements for additional information.

Capital Expenditures, Net

Capital expenditures, net are generally comprised of purchases of computer hardware, software, server equipment, furniture and fixtures, real estate, and capitalized software and labor for internal use software projects.

Capital expenditures, net were \$11 million net benefit in 2016, \$543 million net expenditure in 2015, and \$396 million net expenditure in 2014. Capital expenditures for the year ended December 31, 2016 were reduced by net cash proceeds of \$246 million received from the sale of land in Santa Clara, California. Excluding the proceeds received from the land sale, capital expenditures, net were \$235 million. The \$308 million decrease in capital expenditures, net (excluding land sale proceeds) for the year ended December 31, 2016 was primarily due to the completion of certain Company initiatives, facilities expansions and improvements in 2015, more efficient use of existing data center capacity and overall increased controls over expense and capital expenditures. Capital expenditures increased \$147 million for the year ended December 31, 2015, compared to 2014, primarily due to incremental investment in hardware to support Company initiatives, facilities expansions and improvements, partially offset by a decline in capitalizable software projects.

We expect capital expenditures in 2017 to be slightly higher than the amount reported in 2016 excluding the land sale proceeds and will be funded by our cash flows from operating activities.

[Table of Contents](#)**Free Cash Flow (a non-GAAP financial measure)**

	Years Ended December 31,		
	2014	2015	2016
	(in thousands)		
Net cash provided by (used in) operating activities	\$ 916,350	\$ (2,383,422)	\$ 1,248,863
Acquisition of property and equipment, net	(395,615)	(542,987)	10,678
Excess tax benefits from stock-based awards	149,582	58,282	18,007
Dividends received from equity investees	(83,685)	(142,045)	(156,968)
Free cash flow	<u>\$ 586,632</u>	<u>\$ (3,010,172)</u>	<u>\$ 1,120,580</u>

For the year ended December 31, 2016, free cash flow increased \$4.1 billion, compared to 2015, primarily due to the satisfaction of the \$3.3 billion income tax liability related to the sale of Alibaba Group ADSs in the first quarter of 2015, for which there were no similar transactions in 2016, the net cash proceeds from disposition of property and equipment associated with the sale of land of \$246 million in the second quarter of 2016, and a cash tax refund of \$190 million associated with our claim to carry back 2015 losses and tax attributes to earlier taxable years.

For the year ended December 31, 2015, free cash flow decreased \$3.6 billion, compared to 2014, primarily due to satisfaction of the \$3.3 billion income tax liability related to the sale of Alibaba Group ADSs in September 2014 and an increase in the acquisition of property and equipment to support our product investment initiatives in our Mail, Search, and Mavens offerings.

Stock Repurchases

In November 2013, the Board authorized a stock repurchase program with an authorized level of \$5 billion, which expired in December 2016. In March 2015, the Board approved an additional stock repurchase program of \$2 billion, all of which was still available as of December 31, 2016. The March 2015 program, according to its terms, will expire in March 2018. Repurchases under the March 2015 program may take place in the open market or in privately negotiated transactions, including structured and derivative transactions such as accelerated share repurchase transactions, and may be made under a Rule 10b5-1 plan.

During the year ended December 31, 2016, we did not repurchase any of our outstanding shares of common stock.

During the year ended December 31, 2015, we repurchased approximately 4 million shares of our common stock under the November 2013 program at an average price of \$47.65 per share for a total of approximately \$204 million.

During the year ended December 31, 2014, we repurchased approximately 102 million shares of our common stock at an average price of \$40.94 per share. These shares were repurchased under the May 2012 and November 2013 program authorizations.

Repurchase Capacity under Approved Programs

	May 2012 Program	November 2013 Program	March 2015 Program	Total
	(in millions)			
January 1, 2014	\$ 93	\$ 5,000	\$ —	\$ 5,093
Total 2014 Repurchases	(93)	(4,070)	—	(4,163)
December 31, 2014	\$ —	\$ 930	\$ —	\$ 930
Authorized Share Repurchase amount under March 2015 Program	\$ —	\$ —	\$ 2,000	\$ 2,000
Total 2015 Repurchases	—	(204)	—	(204)
December 31, 2015	\$ —	\$ 726	\$ 2,000	\$ 2,726
Total 2016 Repurchases	—	—	—	—
Program Expiration	\$ —	\$ (726)	\$ —	\$ (726)
December 31, 2016	\$ —	\$ —	\$ 2,000	\$ 2,000

Contractual Obligations and Commitments

The following table presents certain payments due under contractual obligations with minimum commitments as of December 31, 2016 (in millions):

	Payments Due by Period				
	Total	Due in 2017	Due in 2018- 2019	Due in 2020- 2021	Thereafter
Convertible notes ⁽¹⁾	\$ 1,438	\$ —	\$ 1,438	\$ —	\$ —
Note payable obligations	52	5	10	10	27
Operating lease obligations ⁽²⁾⁽³⁾	408	103	135	84	86
Capital lease obligations	28	11	14	—	3
Affiliate commitments ⁽⁴⁾	925	300	600	25	—
Non-cancelable obligations ⁽⁵⁾	172	86	72	7	7
Intellectual property rights ⁽⁶⁾	12	6	3	2	1
Uncertain tax positions, including interest and penalties ⁽⁷⁾	1,182	2	—	—	1,180
Total contractual obligations	\$ 4,217	\$ 513	\$ 2,272	\$ 128	\$ 1,304

(1) During the year end December 31, 2013, we completed an offering of the Notes, which are due in 2018. The amount above represents the principal balance to be repaid. See Note 11—"Convertible Notes" in the Notes to our consolidated financial statements for additional information.

(2) We have entered into various non-cancelable operating lease agreements for our offices throughout the Americas, EMEA, and Asia Pacific regions with original lease periods up to 15 years, expiring between 2017 and 2025. See Note 12—"Commitments and Contingencies" in the Notes to our consolidated financial statements for additional information.

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- (3) In May 2013, we entered into a 12 year operating lease agreement for four floors of the former New York Times building in New York City with a total expected minimum lease commitment of \$125 million. We have the option to renew the lease for an additional five years.
- (4) We are obligated to make minimum payments under contracts to provide sponsored search and/or display advertising services to our Affiliates, which represent TAC.
- (5) We are obligated to make payments under various arrangements with vendors and other business partners, principally for content, bandwidth, and marketing arrangements.
- (6) We are committed to make certain payments under various intellectual property arrangements.
- (7) As of December 31, 2016, unrecognized tax benefits and potential interest and penalties resulted in accrued liabilities of \$1,182 million, classified as other accrued expenses and current liabilities and deferred and other long-term tax liabilities on our consolidated balance sheets. As of December 31, 2016, the settlement period for the \$1,180 million income tax liabilities cannot be determined. See Note 16—"Income Taxes" in the Notes to our consolidated financial statements for additional information.

Standby Letters of Credit. As of December 31, 2016, we had outstanding potential obligations relating to standby letters of credit of \$38 million. Standby letters of credit are financial guarantees provided by third parties for ongoing operating liabilities such as leases, utility bills, taxes, and insurance. If any letter of credit is drawn upon by a beneficiary, we are obligated to reimburse the provider of the guarantee. The standby letters of credit generally renew annually.

Other Commitments and Off-Balance Sheet Arrangements. In the ordinary course of business, we may provide indemnifications of varying scope and terms to customers, vendors, lessors, joint ventures and business partners, purchasers of assets or subsidiaries and other parties with respect to certain matters, including, but not limited to, losses arising out of our breach of agreements or representations and warranties made by us, services to be provided by us, intellectual property infringement claims made by third parties or, with respect to the sale, lease, or assignment of assets or the sale of a subsidiary, matters related to our conduct of the business and tax matters prior to the sale, lease, or assignment of assets. In addition, we have entered into indemnification agreements with our directors and certain of our officers that will require us, among other things, to indemnify them against certain liabilities that may arise by reason of their status or service as directors or officers. We have also agreed to indemnify certain former officers, directors, and employees of acquired companies in connection with the acquisition of such companies. We maintain director and officer insurance, which may cover certain liabilities arising from our obligation to indemnify our current and former directors and officers, and former directors and officers of acquired companies, in certain circumstances. It is not possible to determine the aggregate maximum potential loss under these indemnification agreements due to the limited history of prior indemnification claims and the unique facts and circumstances involved in each particular agreement. Such indemnification agreements might not be subject to maximum loss clauses. Historically, we have not incurred material costs as a result of obligations under these agreements and we have not accrued any material liabilities related to such indemnification obligations in our consolidated financial statements.

As of December 31, 2016, we did not have any relationships with unconsolidated entities or financial partnerships, such as entities often referred to as structured finance or special purpose entities, established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes. Accordingly, we are not exposed to any financing, liquidity, market, or credit risk that could arise if we had such relationships. In addition, we identified no variable interests currently held in entities for which we are the primary beneficiary. In addition, as of December 31, 2016, we had no off-balance sheet arrangements that have, or are reasonably likely to have, a current or future material effect on our consolidated financial condition, results of operations, liquidity, capital expenditures or capital resources.

Critical Accounting Policies and Estimates

Our discussion and analysis of our financial condition and results of operations is based upon our consolidated financial statements, which have been prepared in accordance with GAAP. The preparation of these consolidated financial statements requires us to make estimates, judgments, and assumptions that affect the reported amounts of assets, liabilities, revenue and expenses, and the related disclosure of contingent assets and liabilities. We base our estimates on historical experience and on various other assumptions that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about, among other things, the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates.

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

Management has discussed the development and selection of these critical accounting estimates with the Audit and Finance Committee (the "Audit Committee") of our Board, and the Audit Committee has reviewed the disclosure below. In addition, there are other items within our financial statements that require estimation, but are not deemed critical as defined above. Changes in estimates used in these and other items could have a material impact on our consolidated financial statements.

Revenue Recognition. Our revenue is generated from search and display advertising, and other sources. Display advertising revenue is generated from the display of graphical, non-graphical, and video advertisements and search advertising revenue is generated from clicks on text-based links to advertisers' websites that appear primarily on search results pages, and from a revenue sharing arrangement with Yahoo Japan for search technology and services. Other revenue consists of listings-based services revenue, e-commerce transaction revenue, royalties, patent licenses and fees revenue. While the majority of our revenue transactions contain standard business terms and conditions, there are certain transactions that contain contract-specific business terms and conditions. In addition, we enter into certain sales transactions that involve multiple elements (arrangements with more than one deliverable). We also enter into arrangements to purchase goods and/or services from certain customers. As a result, significant contract interpretation is sometimes required to determine the appropriate accounting for these transactions including: (1) whether an arrangement exists; (2) whether fees are fixed or determinable; (3) how the arrangement consideration should be allocated among potential multiple elements; (4) establishing selling prices for deliverables considering multiple factors; (5) when to recognize revenue on the deliverables; (6) whether all elements of the arrangement have been delivered; (7) whether the arrangement should be reported gross as a principal versus net as an agent; (8) whether we receive a separately identifiable benefit from the purchase arrangements with certain customers for which we can reasonably estimate fair value; and (9) whether the consideration received from a vendor should be characterized as revenue or a reimbursement of costs incurred. In addition, our revenue recognition policy requires an assessment as to whether collection is reasonably assured, which inherently requires us to evaluate the creditworthiness of our customers. Changes in judgments on these assumptions could materially impact the timing or amount of revenue recognition.

Income Taxes. Significant judgment is required in evaluating our uncertain tax positions and determining our provision for income taxes. See Note 16 —"Income Taxes" in the Notes to our

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consolidated financial statements for additional information. We establish liabilities for tax-related uncertainties based on estimates of whether, and the extent to which, additional taxes will be due. These liabilities are established when we believe that certain positions might be challenged despite our belief that our tax return positions are in accordance with applicable tax laws. We adjust these liabilities in light of changing facts and circumstances, such as the closing of a tax audit, new tax legislation, developments in case law or interactions with the tax authorities. To the extent that the final tax outcome of these matters is different than the amounts recorded, such differences will affect the provision for income taxes in the period in which such determination is made. The provision for income taxes includes the effect of liability provisions and changes to reserves that are considered appropriate, as well as the related net interest and penalties.

We record a valuation allowance against certain of our deferred income tax assets if it is more likely than not that those assets will not be realized. In evaluating our ability to realize our deferred income tax assets we consider all available positive and negative evidence, including our operating results, ongoing tax planning, and forecasts of future taxable income on a jurisdiction by jurisdiction basis. In the event we were to determine that we would be able to realize these deferred income tax assets in the future, we would make an adjustment to the valuation allowance, which would reduce the provision for income taxes.

Goodwill. Goodwill is not amortized but is evaluated for impairment annually (as of October 31) or whenever we identify certain triggering events or circumstances that would more likely than not reduce the estimated fair value of a reporting unit below its carrying amount. Events or circumstances that might indicate an interim evaluation is warranted include, among other things, unexpected adverse business conditions, regulatory changes, loss of key personnel and reporting unit and macro-economic factors.

Goodwill is tested for impairment at the reporting unit level, which is at or one level below our operating segments. We identified U.S. & Canada, Latin America, and Tumblr as the reporting units below the Americas operating segment; EMEA is the reporting unit as well as the operating segment; and Taiwan, Hong Kong, Australia & New Zealand, and India & Southeast Asia as the reporting units below the Asia Pacific operating segment. These operating segments are the same as our reportable segments.

To test for impairment, we use the two-step quantitative test. The first step of the quantitative test involves comparing the estimated fair value of our reporting units to their carrying values, including goodwill. If the carrying value of the reporting unit exceeds its fair value, the second step of the quantitative test is performed by comparing the carrying value of the goodwill in the reporting unit to its implied fair value. An impairment charge is recognized for the excess of the carrying value of goodwill over its implied fair value.

We use a combination of income and market approaches for valuing the reporting units. Refer to Note 5—"Goodwill" in the Notes to our consolidated financial statements for discussion of the methodologies utilized in 2016, 2015, and 2014 for each reporting unit. The components of these approaches, as outlined below, require us to make assumptions about the timing and amount of future cash flows, growth rates and discount rates. Significant management judgment is involved in determining these estimates and assumptions, and actual results may differ from those used in valuations. Changes in these estimates and assumptions could materially affect the determination of fair value for each reporting unit which could trigger future impairment.

- **Market comparables.** We select comparable companies in the specific regions in which these reporting units operate based on similarity of type of business, primarily those involved in online advertising, relative size, financial profile, and other characteristics of those companies compared

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to these reporting units. Forward revenue multiples derived from these comparable companies are applied to financial metrics of these reporting units to determine their estimated fair values.

- **Estimated future cash flows.** We base cash flow projections for each reporting unit using a forecast of cash flows and a terminal value based on the Perpetuity Growth Model. The forecast and related assumptions were derived from the most recent annual financial forecast for which the planning process commenced in our fourth quarter of 2016. Key assumptions in estimating future cash flows include, among other items, revenue and operating expense growth rates, terminal value growth rate, and capital expenditure and working capital levels.
- **Discount rates.** We employ a Weighted Average Cost of Capital approach to determine the discount rates used in our cash flow projections. The determination of the discount rates for each reporting unit includes factors such as the risk-free rate of return and the return an outside investor would expect to earn based on the overall level of inherent risk. The determination of expected returns includes consideration of the beta (a measure of volatility) of traded securities of comparable companies and risk premiums of reporting units based on international cost of capital methods.

Discount rate assumptions for these reporting units take into account our assessment of the risks inherent in the future cash flows of the respective reporting unit and our weighted-average cost of capital. We also review marketplace data to assess the reasonableness of our computation of our overall weighted average cost of capital and, when available, the discount rates utilized for each of these reporting units.

In determining the fair value of all of the reporting units for the annual goodwill impairment test as of October 31, 2016, we used the following assumptions:

- Expected cash flows underlying our business plans for the periods 2017 through 2027.
- Cash flows beyond 2027 are projected to grow at a perpetual growth rate.
- In order to risk adjust the cash flow projections in determining fair value, we utilized discount rates ranging from 15 percent to 17.5 percent for these reporting units.

For any reporting units where the carrying value exceeds the estimated fair value, as determined in step one, we perform a second step to measure the amount of impairment, if any. The second step of the quantitative test is performed by comparing the carrying value of the goodwill in the reporting unit to its implied fair value. The implied fair value is calculated by allocating all of the assets and liabilities of the reporting unit, including any unrecognized intangible assets, in a hypothetical analysis that calculates the implied fair value of goodwill in the same manner as if the reporting unit was being acquired in a business combination. An impairment charge is recognized for the excess of the carrying value of goodwill over its implied fair value. We did not book an impairment charge as a result of our annual goodwill impairment test as of October 31, 2016.

Determining the fair value of each reporting unit is judgmental in nature and requires the use of significant estimates and assumptions, including revenue growth rates and operating margins, discount rates and future market conditions, among others. It is reasonably possible that a future decline in market conditions and/or changes in our market share could negatively impact the market comparables, estimated future cash flows and discount rates used in the market and income approaches to determine the fair value of each reporting unit and could result in some portion or all of the remaining goodwill to become impaired in the foreseeable future.

2016 Interim Goodwill Impairment. After recording the goodwill impairment charge as of October 31, 2015 for Tumblr during the fourth quarter of 2015, the fair value of the Tumblr reporting

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unit approximated its carrying value. As such, any significant unfavorable changes in the forecast would result in the fair value being less than the carrying value. Subsequent to the annual goodwill impairment assessment performed as of October 31, 2015, we continued to monitor actual performance of our reporting units. During the three months ended June 30, 2016, we determined that there were indicators present to suggest that it was more likely than not that the fair value of the Tumblr reporting unit was less than its carrying amount. The significant changes for the Tumblr reporting unit subsequent to the annual goodwill impairment test performed as of October 31, 2015 included a decline in the 2016 and beyond forecasted revenue, operating income and cash flows.

In determining the fair value of the Tumblr reporting unit, we used the following assumptions:

- Expected cash flows underlying our business plans for the periods 2016 through 2027.
- Cash flows beyond 2026 are projected to grow at a perpetual growth rate.
- In order to risk adjust the cash flow projections in determining fair value, we utilized a discount rate of 15 percent.

We recorded goodwill impairment charges of \$395 million in the Tumblr reporting unit during the second quarter of 2016.

It is reasonably possible that future changes in judgments, assumptions and estimates we made in assessing the fair value of goodwill could cause us to consider some portion or all of the remaining goodwill of the Tumblr reporting unit to become impaired, which comprised \$124 million of our remaining \$416 million goodwill balance as of December 31, 2016. In addition, a future decline in market conditions and/or changes in our market share could negatively impact the estimated future cash flows and discount rates used in the income approach to determine the fair value of the reporting unit and could result in an impairment charge in the foreseeable future.

See “Operating Costs and Expenses—Goodwill Impairment Charge” for additional goodwill impairment information for the years ended December 31, 2014, 2015, and 2016 and also Note 5—“Goodwill” in the Notes to our consolidated financial statements.

Long-lived Assets. We amortize long-lived assets, including property and equipment and intangible assets, over their estimated useful lives. Identifiable long-lived assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying value may not be recoverable. Determination of recoverability is based on the lowest level of identifiable estimated undiscounted future cash flows resulting from use of the asset and its eventual disposition. Measurement of any impairment loss is based on the excess of the carrying value of the asset over its fair value. Fair value is determined based on the lowest level of identifiable estimated future cash flows using discount rates determined by our management to be commensurate with the risk inherent in our business model. Our estimates of future cash flows attributable to our long-lived assets require significant judgment based on our historical and anticipated results and are subject to many factors. Different assumptions and judgments such as revenue growth rates and operating margins, the estimation of the useful life over which the undiscounted cash flows will occur, and the terminal value of the asset group at the end of that useful life could materially affect estimated future cash flows relating to our long-lived assets which could trigger impairment. We recorded intangible assets impairment charges of \$87 million associated with Tumblr during the second quarter of 2016. See “Operating Costs and Expenses—Asset Impairment Charge” and “Intangible Assets Impairment Charge” and Note 6—“Intangible Assets, Net” in the Notes to our consolidated financial statements in the Notes to our consolidated financial statements for additional information.

Investments in Equity Interests. We account for investments in the common stock of entities in which we have the ability to exercise significant influence but do not own a majority equity interest

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or otherwise control using the equity method. In accounting for these investments we record our proportionate share of the entities' net income or loss, one quarter in arrears.

We review our investments in equity interests for impairment whenever events or changes in business circumstances indicate that the carrying value of the investment may not be fully recoverable. Investments identified as having an indication of impairment are subject to further analysis to determine if the impairment is other-than-temporary and this analysis requires estimating the fair value of the investment. The determination of fair value of the investment involves considering factors such as the stock prices of public companies in which we have an equity investment, current economic and market conditions, the operating performance of the companies, including current earnings trends and forecasted cash flows, and other company and industry specific information. The fair value determination, particularly for investments in privately-held companies, requires significant judgment to determine appropriate estimates and assumptions. Changes in these estimates and assumptions could affect the calculation of the fair value of the investments and the determination of whether any identified impairment is other-than-temporary.

Stock-Based Compensation Expense. We recognize stock-based compensation expense net of an estimated forfeiture rate and therefore only recognize compensation expense for those shares expected to vest over the service period of the award. Calculating stock-based compensation expense requires the input of highly subjective assumptions, including the expected term of the stock-based options, stock price volatility, and the pre-vesting award forfeiture rate. We estimate the expected life of options granted based on historical exercise patterns, which we believe are representative of future behavior. We estimate the volatility of our common stock on the date of grant based on the implied volatility of publicly traded options on our common stock, with a term of one year or greater. We believe that implied volatility calculated based on actively traded options on our common stock is a better indicator of expected volatility and future stock price trends than historical volatility.

Therefore, expected volatility for the year ended December 31, 2016 was based on a market-based implied volatility. The assumptions used in calculating the fair value of stock-based awards represent our best estimates, but these estimates involve inherent uncertainties and the application of management judgment. As a result, if factors change and we use different assumptions, our stock-based compensation expense could be materially different in the future. In addition, we are required to estimate the expected pre-vesting award forfeiture rate, as well as the probability that performance conditions that affect the vesting of certain awards will be achieved, and recognize expense only for those shares expected to vest. Performance conditions are estimated and monitored throughout the year. We estimate this forfeiture rate based on historical experience of our stock-based awards that are granted and cancelled before vesting. If our actual forfeiture rate is materially different from our original estimates, the stock-based compensation expense could be significantly different from what we have recorded in the current period. Changes in the estimated forfeiture rate can have a significant effect on reported stock-based compensation expense, as the effect of adjusting the forfeiture rate for all current and previously recognized expense for unvested awards is recognized in the period the forfeiture estimate is changed. If the actual forfeiture rate is higher than the estimated forfeiture rate, then an adjustment will be made to increase the estimated forfeiture rate, which will result in a decrease to the expense recognized in our consolidated financial statements. If the actual forfeiture rate is lower than the estimated forfeiture rate, then an adjustment will be made to lower the estimated forfeiture rate, which will result in an increase to the expense recognized in our consolidated financial statements. See Note 14—"Employee Benefits" in the Notes to our consolidated financial statements for additional information.

Recent Accounting Pronouncements

See Note 1—"The Company and Summary of Significant Accounting Policies" in the Notes to our consolidated financial statements, which is incorporated herein by reference.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

We are exposed to financial market risks, including changes in currency exchange rates and interest rates and changes in the market values of our investments. We may use derivative financial instruments to mitigate certain risks in accordance with our investment and foreign exchange policies.

We enter into master netting arrangements, which are designed to reduce credit risk by permitting net settlement of transactions with the same counterparty. We present our derivative assets and liabilities at their gross fair values on the consolidated balance sheets.

Interest Rate Exposure

We are exposed to various risks that relate to our marketable securities portfolio, including market and interest rate risk. While our interest rate risk relates primarily to the marketable debt securities in which we invest, interest rates may also impact our costs associated with foreign exchange hedging. We invest excess cash in money market funds, time deposits, and liquid debt instruments of the U.S. and foreign governments and their agencies, and high credit-quality corporate issuers which are classified as cash equivalents and/or marketable securities.

Investments in fixed rate and floating rate interest earning instruments carry a degree of interest rate risk. Fixed rate securities may have their fair market value adversely impacted due to a rise in interest rates, while floating rate securities may produce less income than expected if interest rates fall. Due in part to these factors, our future investment income may fall short of expectations due to changes in interest rates or we may suffer losses in principal if forced to sell securities that have declined in market value due to changes in interest rates or changes in credit quality. A hypothetical 100 basis point increase in interest rates would result in a \$35 million and \$28 million decrease in the fair value of our available-for-sale debt securities as of December 31, 2016 and 2015, respectively.

In November 2013, we issued \$1.4375 billion of the Notes. We carry the Notes at face value less unamortized discount on our consolidated balance sheets. The fair value of the Notes fluctuates due to changes in interest rates, credit spreads, and time to maturity. There is no coupon payment associated with the Notes.

Foreign Currency Exposure

The objective of our foreign exchange risk management program is to identify material foreign currency exposures and identify methods to manage these exposures to minimize the potential effects of currency fluctuations on our reported consolidated cash flows and results of operations. All counterparties to our derivative contracts are major financial institutions. See Note 9—"Foreign Currency Derivative Financial Instruments" in the Notes to our consolidated financial statements for additional information on our hedging programs.

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We transact business in various foreign currencies and have international revenue, as well as costs denominated in foreign currencies. This exposes us to the risk of fluctuations in foreign currency exchange rates.

We had net realized and unrealized foreign currency transaction gains of \$4 million for the year ended December 31, 2016 and losses of \$22 million and \$15 million for the years ended December 31, 2015 and 2014, respectively, which include the impact of balance sheet hedging and remeasurements of foreign denominated assets and liabilities on the balance sheets of the Company and our subsidiaries.

Translation Exposure. We are also exposed to foreign exchange rate fluctuations as we convert the financial statements of our foreign subsidiaries and our investments in equity interests into U.S. dollars in consolidation. If there is a change in foreign currency exchange rates, the conversion of the foreign subsidiaries' financial statements into U.S. dollars results in a gain or loss which is recorded as foreign currency translation adjustments, net of tax within accumulated other comprehensive income which is part of stockholders' equity.

A Value-at-Risk ("VaR") sensitivity analysis was performed on all of our foreign currency derivative positions to assess the potential impact of fluctuations in exchange rates. The VaR model uses a Monte Carlo simulation to generate thousands of random price paths assuming normal market conditions. The VaR is the maximum expected one day loss in fair value, for a given statistical confidence level, to our foreign currency derivative positions due to adverse movements in rates. The VaR model is used as a risk management tool and is not intended to represent either actual or forecasted losses. Based on the results of the model using a 99 percent confidence interval, we estimate the maximum one-day loss in the net investment hedge portfolio was \$6 million and \$45 million at December 31, 2016 and 2015, respectively. The maximum one-day loss in the cash flow hedge portfolio was \$1 million and \$3 million at December 31, 2016 and 2015, respectively. The maximum one-day loss in the balance sheet hedge portfolio was \$5 million at December 31, 2016 compared to a \$11 million and \$2 million loss at December 31, 2015 and 2014, respectively. Actual future gains and losses associated with our derivative positions may differ materially from the sensitivity analysis performed as of December 31, 2016 due to the inherent limitations associated with predicting the timing and amount of changes in foreign currency exchange rates and our actual exposures and positions. In addition, the VaR sensitivity analysis may not reflect the complex market reactions that may arise from the market shifts modeled within this VaR sensitivity analysis.

Revenue ex-TAC and related expenses generated from our international subsidiaries are generally denominated in the currencies of the local countries. Primary currencies include Australian dollars, British pounds, Euros, Japanese yen, Taiwan dollars, Hong Kong dollars, Canadian dollars and Singapore dollars. The statements of operations of our international operations are translated into U.S. dollars at exchange rates indicative of market rates during each applicable period. To the extent the U.S. dollar strengthens against foreign currencies, the translation of these foreign currency-denominated transactions results in reduced consolidated revenue and operating expenses. Conversely, our consolidated revenue and operating expenses will increase if the U.S. dollar weakens against foreign currencies. Using the foreign currency exchange rates from the year ended December 31, 2015, revenue ex-TAC for the Americas segment for the year ended December 31, 2016 would have been higher than we reported by \$5 million; revenue ex-TAC for the EMEA segment would have been higher than we reported by \$19 million; and revenue ex-TAC for the Asia Pacific segment would have been lower than we reported by \$4 million. Using the foreign currency exchange rates from the year ended December 31, 2015, direct costs for the Americas segment for the year ended December 31, 2016 would have been higher than we reported by \$2 million; direct costs for the EMEA segment would have been higher than we reported by \$4 million; and direct costs for the Asia Pacific segment would have been higher than we reported by \$4 million.

Investment Exposure

We are exposed to investment risk as it relates to changes in the market value of our investments. We have investments in marketable debt securities and equity instruments of public and private companies. As of the date of the Alibaba Group IPO, we no longer account for our remaining investment in Alibaba Group using the equity method and no longer record our proportionate share of Alibaba Group's financial results in the consolidated financial statements. Instead, we now reflect our remaining investment in Alibaba Group as an available-for-sale equity security on the consolidated balance sheet and adjust the investment to fair value each quarterly reporting period with changes in fair value recorded within other comprehensive income (loss), net of tax. The change in the classification of our investment in Alibaba Group from an equity method investment to an available-for-sale equity security exposes our investment portfolio to increased equity price risk. The fair value of the equity investment in Alibaba Group will vary over time and is subject to a variety of market risks including: company performance, macro-economic, regulatory, industry, and systemic risks of the equity markets overall.

The objective of our corporate investment policy is to preserve capital, meet liquidity requirements, and provide a reasonable rate of return. A large portion of our cash and cash equivalents and short-term and long-term investments is managed by external managers according to the guidelines of our corporate investment policy. We protect and preserve invested funds by limiting default, market, and reinvestment risk. To achieve this objective, we maintain our portfolio of cash and cash equivalents and short-term and long-term investments in a variety of marketable debt securities, including both government and corporate obligations and money market funds. As of both December 31, 2016 and 2015, net unrealized losses on these investments were \$5 million.

A sensitivity analysis was performed on our marketable equity securities portfolio to assess the potential impact of fluctuations in stock price. Hypothetical declines in stock price of ten percent, twenty percent, and thirty percent were selected based on potential near-term changes in the stock price that could have an adverse effect on our marketable equity securities portfolio. As of December 31, 2016 and 2015, the fair value of our marketable equity securities portfolio was approximately \$34 billion and \$31 billion, respectively. As of December 31, 2016, declines in stock prices of ten percent, twenty percent and thirty percent would result in a \$3 billion, \$7 billion and \$10 billion decline, respectively, in the total value of our marketable equity securities portfolio.

We performed a separate sensitivity analysis on our Hortonworks warrants for which we estimate fair value using the Black-Scholes model. We have held all other inputs constant and determined the impact of hypothetical declines in stock price of ten percent, twenty percent, and thirty percent, based on potential near-term changes in the stock price that could have an adverse effect on the fair value of the warrants and result in a loss recorded to the consolidated statements of operations. As of December 31, 2016 and 2015, the fair value of the Hortonworks warrants was approximately \$29 million and \$79 million, respectively. As of December 31, 2016, declines in stock prices of ten percent, twenty percent and thirty percent would result in a \$3 million, \$6 million and \$9 million decline, respectively, in the total value of the Hortonworks warrants.

Item 8. Financial Statements and Supplementary Data

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Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of Yahoo! Inc.:

In our opinion, the accompanying consolidated balance sheets and the related consolidated statements of operations, of comprehensive income (loss), of stockholders' equity and of cash flows present fairly, in all material respects, the financial position of Yahoo! Inc. and its subsidiaries at December 31, 2016 and December 31, 2015, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2016 in conformity with accounting principles generally accepted in the United States of America. In addition, in our opinion, the financial statement schedule listed in the accompanying index presents fairly, in all material respects, the information set forth therein when read in conjunction with the related consolidated financial statements. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2016, based on criteria established in *Internal Control—Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company's management is responsible for these financial statements and financial statement schedule, for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in Management's Report on Internal Control Over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on these financial statements, on the financial statement schedule, and on the Company's internal control over financial reporting based on our integrated audits. We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audits of the financial statements included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

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

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

/s/ PricewaterhouseCoopers LLP

San Jose, California
March 1, 2017

Yahoo! Inc.
Consolidated Balance Sheets

	December 31, 2015	December 31, 2016
	(in thousands, except par values)	
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 1,631,911	\$ 1,119,469
Short-term marketable securities	4,225,112	5,700,925
Accounts receivable, net of allowance of \$57,503 and \$32,537 as of December 31, 2015 and 2016, respectively	1,047,504	1,084,267
Prepaid expenses and other current assets (includes restricted cash of \$29,678 and \$55,168 as of December 31, 2015 and 2016, respectively)	602,792	221,499
Total current assets	7,507,319	8,126,160
Long-term marketable securities	975,961	1,089,707
Property and equipment, net	1,547,323	1,209,937
Goodwill	808,114	415,809
Intangible assets, net	347,269	161,644
Other long-term assets and investments	342,390	206,059
Investment in Alibaba Group	31,172,361	33,680,879
Investments in equity interests	2,503,229	3,192,884
Total assets	\$ 45,203,966	\$ 48,083,079
LIABILITIES AND EQUITY		
Current liabilities:		
Accounts payable	\$ 208,691	\$ 171,520
Other accrued expenses and current liabilities	934,658	1,006,676
Deferred revenue	134,031	109,228
Total current liabilities	1,277,380	1,287,424
Convertible notes	1,233,485	1,299,945
Long-term deferred revenue	27,801	39,583
Other long-term liabilities	118,689	95,597
Deferred tax liabilities related to investment in Alibaba Group	12,611,867	13,633,988
Deferred and other long-term tax liabilities	855,324	642,466
Total liabilities	16,124,546	16,999,003
Commitments and contingencies (Note 12)		
Yahoo! Inc. stockholders' equity:		
Preferred stock, \$0.001 par value; 10,000 shares authorized; none issued or outstanding	—	—
Common stock, \$0.001 par value; 5,000,000 shares authorized; 962,959 shares issued and 945,854 shares outstanding as of December 31, 2015 and 972,472 shares issued and 955,308 shares outstanding as of December 31, 2016	959	969
Additional paid-in capital	8,807,273	9,125,459
Treasury stock at cost, 17,105 shares as of December 31, 2015 and 17,164 shares as of December 31, 2016	(911,533)	(908,996)
Retained earnings	4,570,807	4,353,958
Accumulated other comprehensive income	16,576,031	18,477,893
Total Yahoo! Inc. stockholders' equity	29,043,537	31,049,283
Noncontrolling interests	35,883	34,793
Total equity	29,079,420	31,084,076
Total liabilities and equity	\$ 45,203,966	\$ 48,083,079

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

Yahoo! Inc.
Consolidated Statements of Operations

	Years Ended December 31,		
	2014	2015	2016
	(in thousands, except per share amounts)		
Revenue	\$ 4,618,133	\$ 4,968,301	\$ 5,169,135
Operating expenses:			
Cost of revenue—traffic acquisition costs	217,531	877,514	1,650,786
Cost of revenue—other	1,169,844	1,200,234	1,068,108
Sales and marketing	1,084,438	1,080,718	881,521
Product development	1,156,386	1,177,923	1,055,462
General and administrative	686,272	687,804	650,708
Amortization of intangibles	66,750	79,042	58,302
Gain on sale of patents and land	(97,894)	(11,100)	(121,559)
Asset impairment charge	—	44,381	—
Goodwill impairment charge	88,414	4,460,837	394,901
Intangible assets impairment charge	—	15,423	87,335
Restructuring charges, net	103,450	104,019	88,629
Total operating expenses	4,475,191	9,716,795	5,814,193
Income (loss) from operations	142,942	(4,748,494)	(645,058)
Other income (expense), net	10,369,439	(75,782)	(53,916)
Income (loss) before income taxes and earnings in equity interests	10,512,381	(4,824,276)	(698,974)
(Provision) benefit for income taxes	(4,038,102)	89,598	126,228
Earnings in equity interests, net of tax	1,057,863	383,571	363,283
Net income (loss)	7,532,142	(4,351,107)	(209,463)
Net income attributable to noncontrolling interests	(10,411)	(7,975)	(4,858)
Net income (loss) attributable to Yahoo! Inc.	\$ 7,521,731	\$ (4,359,082)	\$ (214,321)
Net income (loss) attributable to Yahoo! Inc. common stockholders per share—basic	\$ 7.61	\$ (4.64)	\$ (0.23)
Net income (loss) attributable to Yahoo! Inc. common stockholders per share—diluted	\$ 7.45	\$ (4.64)	\$ (0.23)
Shares used in per share calculation—basic	987,819	939,141	949,843
Shares used in per share calculation—diluted	1,004,108	939,141	949,843
Stock-based compensation expense by function:			
Cost of revenue—other	\$ 42,155	\$ 32,010	\$ 34,742
Sales and marketing	145,777	141,418	142,301
Product development	139,056	190,454	213,451
General and administrative	93,186	93,271	101,408
Restructuring charges, net	—	2,705	7,374

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

Yahoo! Inc.
Consolidated Statements of Comprehensive Income (Loss)

	Years Ended December 31,		
	2014	2015	2016
Net income (loss)	\$ 7,532,142	\$ (4,351,107)	\$ (209,463)
Available-for-sale securities:	(in thousands)		
Unrealized gains (losses) on available-for-sale securities, net of taxes of \$(15,170,607), \$3,551,551, and \$(1,000,094) for 2014, 2015, and 2016, respectively	22,072,073	(5,166,595)	1,458,245
Reclassification adjustment for realized (gains) losses on available-for-sale securities included in net income (loss), net of taxes of \$1,339, \$(104), and \$(100) for 2014, 2015, and 2016, respectively	(2,218)	174	181
Net change in unrealized gains (losses) on available-for-sale securities, net of tax	22,069,855	(5,166,421)	1,458,426
Foreign currency translation adjustments ("CTA"):			
Foreign CTA (losses) gains, net of taxes of \$1,734, \$1,279, and \$(90) for 2014, 2015, and 2016, respectively	(363,013)	(279,135)	498,036
Net investment hedge CTA gains (losses), net of taxes of \$(79,037), \$(1,941), and \$18,766 for 2014, 2015, and 2016, respectively	130,904	3,333	(34,005)
Reclassification adjustment for realized (gains) losses included in CTA, net of taxes of \$30,325, \$0, and \$0 for 2014, 2015, and 2016, respectively	(50,301)	—	(20,094)
Net foreign CTA (losses) gains, net of tax	(282,410)	(275,802)	443,937
Cash flow hedges:			
Unrealized gains (losses) on cash flow hedges, net of taxes of \$(3,044), \$(490), and \$2,645 for 2014, 2015, and 2016, respectively	5,704	(5,795)	(4,799)
Reclassification adjustment for realized (gains) losses on cash flow hedges included in net income (loss), net of taxes of \$2,771, \$1,319, and \$(2,369) for 2014, 2015, and 2016, respectively	(5,259)	4,421	4,298
Net change in unrealized gains (losses) on cash flow hedges, net of tax	445	(1,374)	(501)
Other comprehensive income (loss)	21,787,890	(5,443,597)	1,901,862
Comprehensive income (loss)	29,320,032	(9,794,704)	1,692,399
Less: comprehensive income attributable to noncontrolling interests	(10,411)	(7,975)	(4,858)
Comprehensive income (loss) attributable to Yahoo! Inc.	\$ 29,309,621	\$ (9,802,679)	\$ 1,687,541

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

Yahoo! Inc.
Consolidated Statements of Stockholders' Equity

	Years Ended December 31,		
	2014	2015	2016
	(in thousands)		
Common stock			
Balance, beginning of year	\$ 1,015	\$ 945	\$ 959
Common stock issued	24	14	10
Common stock retired	(94)	—	—
Balance, end of year	945	959	969
Additional paid-in capital			
Balance, beginning of year	8,688,304	8,499,475	8,807,273
Common stock and stock-based awards issued	306,608	58,778	17,498
Stock-based compensation expense	432,614	464,586	503,468
Tax benefits from stock-based awards	145,711	41,729	6,256
Tax withholdings related to net share settlements of restricted stock awards	(280,879)	(257,731)	(209,053)
Retirement of treasury stock	(794,596)	—	—
Other	1,713	436	17
Balance, end of year	8,499,475	8,807,273	9,125,459
Treasury stock			
Balance, beginning of year	(200,228)	(712,455)	(911,533)
Repurchases of common stock	(2,430,436)	(203,771)	—
Treasury shares reissuance	4,189	4,693	2,537
Accelerated share repurchases	(1,732,794)	—	—
Retirement of treasury stock	3,646,814	—	—
Balance, end of year	(712,455)	(911,533)	(908,996)
Retained earnings			
Balance, beginning of year	4,267,429	8,934,244	4,570,807
Net income (loss) attributable to Yahoo! Inc.	7,521,731	(4,359,082)	(214,321)
Retirement of treasury stock	(2,852,124)	—	—
Treasury shares reissuance	(2,792)	(4,355)	(2,528)
Balance, end of year	8,934,244	4,570,807	4,353,958
Accumulated other comprehensive income			
Balance, beginning of year	318,389	22,019,628	16,576,031
Net change in unrealized gains (losses) on available-for-sale securities, net of tax	22,069,855	(5,166,421)	1,458,426
Net change in unrealized gains (losses) on cash flow hedges, net of tax	445	(1,374)	(501)
Foreign currency translation adjustments, net of tax	(369,061)	(275,802)	443,937
Balance, end of year	22,019,628	16,576,031	18,477,893
Total Yahoo! Inc. stockholders' equity	\$ 38,741,837	\$ 29,043,537	\$ 31,049,283

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

Yahoo! Inc.
Consolidated Statements of Stockholders' Equity—(Continued)

	Years Ended December 31,		
	2014	2015	2016
	Number of Outstanding Shares		
	(in thousands)		
Common stock			
Balance, beginning of year	1,014,338	936,838	945,854
Common stock and restricted stock issued	24,197	12,824	9,569
Restricted stock issued (forfeited) under compensation arrangements related to acquisitions	—	468	(115)
Accelerated share repurchase	(39,859)	—	—
Repurchases of common stock	(61,838)	(4,276)	—
Balance, end of year	<u>936,838</u>	<u>945,854</u>	<u>955,308</u>

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

Yahoo! Inc.
Consolidated Statements of Cash Flows

	Years Ended December 31,		
	2014	2015	2016
	(in thousands)		
CASH FLOWS FROM OPERATING ACTIVITIES:			
Net income (loss)	\$ 7,532,142	\$ (4,351,107)	\$ (209,463)
Adjustments to reconcile net income (loss) to net cash provided by (used in) operating activities:			
Depreciation	475,031	472,894	407,341
Amortization of intangible assets	131,537	136,719	100,214
Accretion of convertible notes discount	59,838	63,061	66,461
Stock-based compensation expense	420,174	459,858	499,276
Non-cash asset impairment charge	—	44,381	—
Non-cash goodwill impairment charge	88,414	4,460,837	394,901
Non-cash intangible assets impairment charge	—	15,423	87,335
Non-cash restructuring (reversals) charges	(3,394)	3,150	1,227
Non-cash accretion on marketable securities	30,878	47,218	25,280
Foreign exchange loss (gain)	15,978	4,376	(27,428)
Gain on sale of assets and other	(11,383)	(2,878)	(3,316)
Gain on sale of Alibaba Group ADSs	(10,319,437)	—	—
Gain on sales of patents and land	(97,894)	(11,100)	(121,559)
(Gain) loss on Hortonworks warrants	(98,062)	19,199	50,046
Earnings in equity interests	(1,057,863)	(383,571)	(363,283)
Tax benefits from stock-based awards	145,711	41,729	6,256
Excess tax benefits from stock-based awards	(149,582)	(58,282)	(18,007)
Deferred income taxes	465,873	(42,341)	(224,737)
Dividends received from equity investees	83,685	142,045	156,968
Changes in assets and liabilities, net of effects of acquisitions:			
Accounts receivable	29,278	(39,065)	(43,029)
Prepaid expenses and other	(82,419)	21,842	376,351
Accounts payable	14,165	(59,965)	(4,550)
Accrued expenses and other liabilities	156,307	109,776	105,677
Incomes taxes payable related to sale of Alibaba Group ADSs	3,282,293	(3,282,293)	—
Deferred revenue	(194,920)	(195,328)	(13,098)
Net cash provided by (used in) operating activities	<u>916,350</u>	<u>(2,383,422)</u>	<u>1,248,863</u>

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

Yahoo! Inc.
Consolidated Statements of Cash Flows—(Continued)

	Years Ended December 31,		
	2014	2015	2016
	(in thousands)		
CASH FLOWS FROM INVESTING ACTIVITIES:			
Acquisition of property and equipment	(413,019)	(554,163)	(239,109)
Proceeds from sales of property and equipment	17,404	11,176	249,787
Purchases of marketable securities	(7,890,092)	(5,206,245)	(7,817,485)
Proceeds from sales of marketable securities	2,269,659	822,997	387,254
Proceeds from maturities of marketable securities	945,696	6,691,645	5,816,713
Proceeds from sale of Alibaba Group ADSs, net of underwriting discounts, commissions, and fees	9,404,974	—	—
Acquisitions, net of cash acquired	(859,036)	(175,693)	—
Proceeds from sales of patents	86,300	29,100	1,500
Purchases of intangible assets	(2,658)	(4,811)	(2,045)
Proceeds from settlement of derivative hedge contracts	254,496	147,179	39,007
Payments for settlement of derivative hedge contracts	(5,454)	(8,817)	(9,717)
Payments for equity investments in privately held companies	(74,399)	—	(9)
Other investing activities, net	4,630	(256)	(161)
Net cash provided by (used in) investing activities	<u>\$ 3,738,501</u>	<u>\$ 1,752,112</u>	<u>\$ (1,574,265)</u>
CASH FLOWS FROM FINANCING ACTIVITIES:			
Proceeds from issuance of common stock	\$ 308,029	\$ 59,130	\$ 17,517
Repurchases of common stock	(4,163,227)	(203,771)	—
Excess tax benefits from stock-based awards	149,582	58,282	18,007
Tax withholdings related to net share settlements of restricted stock units	(280,879)	(257,731)	(209,053)
Distributions to noncontrolling interests	(22,344)	(15,847)	(5,948)
Other financing activities, net	(13,627)	(17,321)	(14,205)
Net cash used in financing activities	<u>(4,022,466)</u>	<u>(377,258)</u>	<u>(193,682)</u>
Effect of exchange rate changes on cash and cash equivalents	(45,877)	(23,619)	6,642
Net change in cash and cash equivalents	586,508	(1,032,187)	(512,442)
Cash and cash equivalents at beginning of period	<u>2,077,590</u>	<u>2,664,098</u>	<u>1,631,911</u>
Cash and cash equivalents at end of period	<u>\$ 2,664,098</u>	<u>\$ 1,631,911</u>	<u>\$ 1,119,469</u>
NON-CASH ACTIVITIES:			
Change in non-cash acquisitions of property and equipment	\$ (27,533)	\$ (12,392)	\$ (4,277)

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

Yahoo! Inc.

Notes to Consolidated Financial Statements

Note 1 The Company and Summary of Significant Accounting Policies

The Company. Yahoo! Inc., together with its consolidated subsidiaries (“Yahoo” or the “Company”), is a guide to digital information discovery, focused on informing, connecting, and entertaining users through its search, communications, and digital content products. By creating highly personalized experiences, the Company helps users discover the information that matters most to them around the world—on mobile or desktop. The Company creates value for advertisers with a streamlined, simple advertising technology that leverages Yahoo’s data, content, and technology to connect advertisers with their target audiences. Advertisers can build their businesses through advertising to targeted audiences on the Company’s online properties and services (“Yahoo Properties”) and a distribution network of third party entities (“Affiliates”) who integrate the Company’s advertising offerings into their websites or other offerings (“Affiliate sites”). The Company’s revenue is generated principally from search and display advertising. The Company manages and measures its business geographically, principally in the Americas, EMEA (Europe, Middle East, and Africa) and Asia Pacific.

Basis of Presentation. The consolidated financial statements include the accounts of Yahoo! Inc. and its majority-owned or otherwise controlled subsidiaries. All intercompany accounts and transactions have been eliminated. Investments in entities in which the Company can exercise significant influence, but does not own a majority equity interest or otherwise control, are accounted for using the equity method and are included as investments in equity interests on the consolidated balance sheets. The Company has included the results of operations of acquired companies from the date of the acquisition.

The preparation of consolidated financial statements in conformity with generally accepted accounting principles (“GAAP”) in the United States (“U.S.”) requires management to make estimates, judgments, and assumptions that affect the reported amounts of assets, liabilities, revenue, and expenses and the related disclosure of contingent assets and liabilities. On an ongoing basis, the Company evaluates its estimates, including those related to revenue, the useful lives of long-lived assets including property and equipment and intangible assets, investment fair values, originally developed content, acquired content, stock-based compensation, goodwill, income taxes, contingencies, and restructuring charges. The Company bases its estimates of the carrying value of certain assets and liabilities on historical experience and on various other assumptions that are believed to be reasonable under the circumstances, when these carrying values are not readily available from other sources. Actual results may differ from these estimates.

Concentration of Risk. Financial instruments that potentially subject the Company to significant concentration of credit and equity price risk consist primarily of cash equivalents, marketable securities (including Alibaba Group Holding Limited (“Alibaba Group”) and Hortonworks, Inc. (“Hortonworks”) equity securities, as well as our portfolio of marketable debt securities), accounts receivable, and derivative financial instruments. The primary focus of the Company’s investment strategy is to preserve capital and meet liquidity requirements. A large portion of the Company’s cash and cash equivalents and short-term and long-term investments is managed by external managers within the guidelines of the Company’s investment policy. The Company’s investment policy addresses the level of credit exposure by limiting the concentration in any one corporate issuer or sector and establishing a minimum allowable credit rating. To manage the risk exposure, the Company maintains its portfolio of cash and cash equivalents and short-term and long-term investments in marketable securities, including U.S. and foreign government, agency, municipal and highly rated corporate debt obligations and money market funds.

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The fair value of the equity investments in Alibaba Group and Hortonworks will vary over time and is subject to a variety of risks including: company performance, macro-economic, regulatory, industry, and systemic risks of the equity markets overall. Consequently, the carrying value of the Company's investment portfolio will vary over time as the value of the Company's investments in marketable equity securities fluctuates, including Alibaba Group and Hortonworks changes.

Accounts receivable are typically unsecured and are derived from revenue earned from customers. The Company performs ongoing credit evaluations of its customers and maintains allowances for potential credit losses.

The Company's derivative instruments, including the convertible note hedge transactions, expose the Company to credit risk to the extent that its derivative counterparties become unable to meet their financial obligations under the terms of the agreements. The Company seeks to mitigate this risk by limiting its derivative counterparties to major financial institutions and by spreading the risk across several major financial institutions. In addition, the potential risk of loss with any one counterparty resulting from this type of credit risk is monitored on an ongoing basis. See "Note 9—Foreign Currency Derivative Financial Instruments" for additional information related to the Company's derivative instruments.

The Company also holds warrants in Hortonworks, which expose the Company to variability in fair value based on changes in the stock price and volatility as inputs to the Black-Scholes model.

Revenue under the Company's Search and Advertising Services and Sales Agreement (as amended, "Microsoft Search Agreement") with Microsoft Corporation ("Microsoft") represented approximately 35 percent, 35 percent, and 37 percent of the Company's revenue for the years ended December 31, 2014, 2015, and 2016, respectively, and no other individual customer accounted for 10 percent or more of the Company's revenue for 2014, 2015, or 2016. As of December 31, 2015 and 2016, no one customer accounted for 10 percent or more of the accounts receivable balance.

Comprehensive Income (Loss). Comprehensive income (loss) consists of two components, net income (loss) and other comprehensive income (loss). Other comprehensive income (loss) refers to revenue, expenses, and gains and losses that under GAAP are recorded as an element of stockholders' equity but are excluded from net income (loss). The Company's other comprehensive income (loss) consists of foreign currency translation adjustments from subsidiaries or equity method investments where the local currency is the functional currency, from unrealized gains and losses on marketable securities classified as available-for-sale, unrealized gains and losses on cash flow hedges, net changes in fair value of derivative instruments related to the Company's net investment hedges, as well as the Company's share of its equity investees' other comprehensive income.

Foreign Currency. The functional currency of the Company's international subsidiaries is evaluated on a case-by-case basis and is often the local currency. The financial statements of these subsidiaries are translated into U.S. dollars using period-end rates of exchange for assets and liabilities, historical rates of exchange for equity, and average rates of exchange for the period for revenue and expenses. Translation gains (losses) are recorded in accumulated other comprehensive income as a component of stockholders' equity. In addition, the Company records translation gains (losses) related to its foreign equity method investments in accumulated other comprehensive income. The Company records foreign currency transaction gains and losses, realized and unrealized and foreign exchange gains and losses due to re-measurement of monetary assets and liabilities denominated in non-functional currencies in other income (expense), net in the consolidated statements of operations. The Company recorded \$15 million and \$22 million net losses in 2014 and 2015, respectively, and a \$4 million net gain in 2016.

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Cash and Cash Equivalents, Short- and Long-Term Marketable Securities. The Company invests its excess cash in money market funds, time deposits, and liquid debt securities of the U.S. and foreign governments and their agencies, and high credit-quality corporate issuers which are classified as marketable debt securities and cash equivalents. All investments in debt securities with an original maturity of 90 days or less are considered cash equivalents. Investments in debt securities with remaining maturities of less than 12 months from the balance sheet date are classified as current assets, which are available for use to fund current operations. Investments with remaining maturities greater than 12 months from the balance sheet date are classified as long-term assets.

Operating cash deposits held with banks may exceed the amount of insurance provided on such deposits. Generally, these deposits may be redeemed upon demand and are maintained with financial institutions with reputable credit and therefore bear limited credit risk. The Company seeks to mitigate its credit risk by spreading such risk across multiple counterparties and monitoring the risk profiles of these counterparties.

The Company's marketable equity securities, including Alibaba Group and Hortonworks, are classified as available-for-sale and are reported at fair value, with unrealized gains and losses, net of tax, recorded in accumulated other comprehensive income. The change in the classification of the Company's investments in Alibaba Group and Hortonworks to available-for-sale marketable securities exposes the Company's investment portfolio to increased equity price risk. The Company evaluates the marketable equity securities periodically for possible other-than-temporary impairment. A decline of fair value below cost basis is considered an other-than-temporary impairment if the Company has the intent to sell the security or it is more likely than not that the Company will be required to sell the security before recovery of the entire cost basis. In those instances, an impairment charge equal to the difference between the fair value and the cost basis is recognized in earnings. Regardless of the Company's intent or requirement to sell the marketable equity securities, an impairment is considered other-than-temporary if the Company does not expect to recover the entire cost basis; in those instances, a loss equal to the difference between fair value and the cost basis of the marketable equity security is recognized in earnings.

Realized gains or losses and declines in value judged to be other-than-temporary, if any, on available-for-sale securities are reported in other income (expense), net. The Company evaluates its marketable debt investments periodically for possible other-than-temporary impairment. A decline of fair value below amortized costs of debt securities is considered an other-than-temporary impairment if the Company has the intent to sell the security or it is more likely than not that the Company will be required to sell the security before recovery of the entire amortized cost basis. In those instances, an impairment charge equal to the difference between the fair value and the amortized cost basis is recognized in earnings. Regardless of the Company's intent or requirement to sell a debt security, an impairment is considered other-than-temporary if the Company does not expect to recover the entire amortized cost basis; in those instances, a credit loss equal to the difference between the present value of the cash flows expected to be collected based on credit risk and the amortized cost basis of the debt security is recognized in earnings. The Company has no current requirement or intent to sell a material portion of debt securities as of December 31, 2016. The Company expects to recover up to (or beyond) the initial cost of investment for securities held. In computing realized gains and losses on available-for-sale securities, the Company determines cost based on amounts paid, including direct costs such as commissions to acquire the security, using the specific identification method. During the years ended December 31, 2014, 2015, and 2016, gross realized gains and losses on available-for-sale marketable debt and equity securities were not material.

Allowance for Doubtful Accounts. The Company records its allowance for doubtful accounts based upon its assessment of various factors. The Company considers historical experience, the age of the

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accounts receivable balances, the credit quality of its customers, current economic conditions, and other factors that may affect customers' ability to pay to determine the level of allowance required.

Foreign Currency Derivative Financial Instruments. The Company uses derivative financial instruments, primarily foreign currency forward contracts, to mitigate certain foreign currency exposures. The Company hedges, on an after-tax basis, a portion of its net investment in Yahoo Japan Corporation ("Yahoo Japan"). The Company has designated these foreign currency forward contracts as net investment hedges. The effective portion of changes in fair value is recorded in accumulated other comprehensive income on the Company's consolidated balance sheet and any ineffective portion is recorded in other income (expense), net on the Company's consolidated statements of operations. The Company expects the net investment hedges to be effective, on an after-tax basis, and effectiveness will be assessed each quarter. Should any portion of the net investment hedge become ineffective, the ineffective portion will be reclassified to other income (expense), net on the Company's consolidated statements of operations. The fair values of the net investment hedges are determined using quoted observable inputs. Gains and losses reported in accumulated other comprehensive income will not be reclassified into earnings until a sale of the Company's underlying investment.

For derivatives designated as cash flow hedges, the effective portion of the unrealized gains or losses on these forward contracts is recorded in accumulated other comprehensive income on the Company's consolidated balance sheets and reclassified into revenue in the consolidated statements of operations when the underlying hedged revenue is recognized. If the cash flow hedges were to become ineffective, the ineffective portion would be immediately recorded in other income (expense), net in the Company's consolidated statements of operations.

The Company hedges certain of its net recognized foreign currency assets and liabilities with foreign exchange forward contracts to reduce the risk that its earnings and cash flows will be adversely affected by changes in foreign currency exchange rates. These balance sheet hedges are used to partially offset the foreign currency exchange gains and losses generated by the re-measurement of certain assets and liabilities denominated in non-functional currency. Changes in the fair value of these derivatives are recorded in other income (expense), net on the Company's consolidated statements of operations. The fair values of the balance sheet hedges are determined using quoted observable inputs.

The Company recognizes all derivative instruments as other assets or liabilities on the Company's consolidated balance sheets at fair value. See Note 9—"Foreign Currency Derivative Financial Instruments" for a full description of the Company's derivative financial instrument activities and related accounting.

Property and Equipment. Buildings are stated at cost and depreciated using the straight-line method over the estimated useful lives of 20 to 25 years. Leasehold improvements are amortized over the lesser of their expected useful lives and the remaining lease term. Computers and equipment and furniture and fixtures are stated at cost and depreciated using the straight-line method over the estimated useful lives of the assets, generally three to five years.

Property and equipment to be held and used are reviewed for impairment whenever events or changes in circumstances indicate that the carrying value of the assets may not be recoverable. Determination of recoverability is based on the lowest level of identifiable estimated undiscounted future cash flows resulting from the use of the asset and its eventual disposition. Measurement of any impairment loss for long-lived assets that management expects to hold and use is based on the excess of the carrying value of the asset over its fair value. No impairments of such assets were identified during any of the periods presented.

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Capitalized Software and Labor. The Company capitalized certain software and labor costs totaling approximately \$85 million, \$31 million, and \$25 million during 2014, 2015, and 2016, respectively. The Company capitalizes eligible costs to acquire or develop internal-use software that are incurred subsequent to the preliminary project stage through the development stage. The estimated useful life of costs capitalized is evaluated for each specific project and ranges from one to three years. Actual economic lives may differ from estimated useful lives. Periodic reviews could result in a change in estimated useful lives and therefore amortization expense in future periods. During 2014, 2015, and 2016, the amortization of capitalized costs totaled approximately \$161 million, \$144 million, and \$85 million, respectively. Capitalized software and labor costs are included in property and equipment, net. Included in the capitalized amounts above are \$12 million, \$5 million, and \$4 million, respectively, of stock-based compensation expense in the years ended December 31, 2014, 2015, and 2016.

Goodwill. Goodwill represents the excess of the purchase price over the fair value of the net tangible and intangible assets acquired in a business combination. Goodwill is not amortized, but is tested for impairment on an annual basis and more frequently if impairment indicators are present. The Company's reporting units are one level below the operating segments level. The reporting unit's carrying value is compared to its fair value. The estimated fair values of the reporting units are determined using either the market approach, income approach or a combination of the market and income approach. Goodwill is considered impaired if the carrying value of the reporting unit exceeds its estimated fair value. The income approach uses expected future operating results and failure to achieve these expected results may cause a future impairment of goodwill at the reporting unit. If the carrying value of the reporting unit exceeds its estimated fair value, the second step of the goodwill impairment test is performed by comparing the carrying value of the goodwill in the reporting unit to its implied fair value. The implied fair value is calculated by allocating all of the assets and liabilities of the reporting unit, including any unrecognized intangible assets, in a hypothetical analysis that calculates the implied fair value of goodwill in the same manner as if the reporting unit was being acquired in a business combination. An impairment charge is recognized for the excess of the carrying value of goodwill over its implied estimated fair value. The Company conducted its annual goodwill impairment test as of October 31, 2016. See Note 5—"Goodwill" for results of the goodwill impairment test.

Intangible Assets. Definite-lived intangible assets are carried at cost and are amortized over their estimated useful lives, generally on a straight-line basis over one to seven years as the pattern of use is ratable. The Company reviews identifiable amortizable intangible assets to be held and used for impairment whenever events or changes in circumstances indicate that the carrying value of the assets may not be recoverable. Determination of recoverability is based on the lowest level of identifiable estimated undiscounted cash flows resulting from use of the asset and its eventual disposition. Intangible assets with indefinite useful lives are not amortized but are reviewed for impairment whenever events or changes in circumstances indicate that it is more likely than not that the fair value is less than its carrying amount. If the Company determines that an intangible asset with an indefinite life is more likely than not impaired, a quantitative test comparing the fair value of the indefinite-lived purchased intangible asset with its carrying amount is performed. The Company estimates the fair value of indefinite-lived purchased intangible assets using an income approach. Measurement of any impairment losses on both definite-lived and indefinite-lived intangible assets are based on the excess of the carrying value of the asset over its fair value. See Note 6—"Intangible Assets, Net" for additional information.

Originally Developed Content and Acquired Content. Originally developed content and acquired content are both carried at cost. Originally developed content is amortized based on the expected pattern of viewing. Acquired content is amortized on a straight-line basis over the shorter of each program's contractual window of availability or estimated period of use, beginning with the month of first availability. Marketing and general and administrative costs are expensed as incurred.

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For originally developed content, the Company performs regular recoverability assessments on a program-by-program basis. If there are any events or changes in circumstances indicating that the Company should assess whether the fair value of originally developed content is less than its unamortized costs, the Company performs a fair value analysis using an expected cash flow approach. The amount by which the unamortized costs of the originally developed content exceed estimated fair value is charged to expense as an asset impairment. During the year ended December 31, 2015, the Company recorded an asset impairment charge of \$16 million related to originally developed content.

For acquired content, the Company compares the net realizable value on a program-by-program basis with the unamortized cost. The amount by which the unamortized costs of the acquired content exceed net realizable value is charged to expense as an asset impairment. During the year ended December 31, 2015, the Company recorded an asset impairment charge of \$28 million related to acquired content, primarily driven by a reduction of forecasted revenues to be generated from advertising on Yahoo Properties.

Investments in Equity Interests. Investments in the common stock of entities in which the Company can exercise significant influence but does not own a majority equity interest or otherwise control are accounted for using the equity method and are included as investments in equity interests on the consolidated balance sheets. The Company records its share of the results of these companies one quarter in arrears within earnings in equity interests in the consolidated statements of operations. Investments in privately held equity interests in which the Company cannot exercise significant influence are accounted for using the cost method of accounting.

The Company reviews its investments for other-than-temporary impairment whenever events or changes in business circumstances indicate that the carrying value of the investment may not be fully recoverable. Investments identified as having an indication of impairment are subject to further analysis to determine if the impairment is other-than-temporary and this analysis requires estimating the fair value of the investment. The determination of fair value of the investment involves considering factors such as the stock prices of public companies in which the Company has an equity investment, current economic and market conditions, the operating performance of the companies including current earnings trends and forecasted cash flows, and other company and industry specific information.

Leasing. The Company leases office space and data centers under operating leases and certain data center equipment under capital lease agreements with original lease periods up to 15 years. Assets acquired under capital leases are amortized over the lesser of the useful life of the asset or the lease term. For the years ended December 31, 2014, 2015, and 2016, the Company expensed \$5 million, \$4 million, and \$3 million of interest related to capital leases, respectively, which approximated the cash payments made for interest. As of December 31, 2015 and 2016, the Company had net capital lease obligations included in other short-term and long-term liabilities on the consolidated balance sheets of \$33 million and \$23 million, respectively. Certain of the operating lease agreements contain rent holidays and rent escalation provisions. For purposes of recognizing these lease incentives on a straight-line basis over the term of the lease, the Company uses the date that the Company has the right to control the asset to begin rent expense. Lease renewal periods are considered on a lease-by-lease basis and are generally not included in the period of straight-line recognition of rent expense.

The Company establishes assets and liabilities for the estimated construction costs incurred under build-to-suit lease arrangements to the extent the Company is involved in the construction of structural improvements or take construction risk prior to commencement of a lease. Upon the right to control the facilities under build-to-suit leases, the Company assesses whether these arrangements

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qualify for sales recognition under the sale-leaseback accounting guidance. If the Company continues to be the deemed owner, the facilities are accounted for as finance leases.

Income Taxes. Deferred income taxes are determined based on the differences between the financial reporting and tax bases of assets and liabilities and are measured using the currently enacted tax rates and laws. The Company records a valuation allowance against particular deferred income tax assets if it is more likely than not that those assets will not be realized. The provision for income taxes comprises the Company's current tax liability and change in deferred income tax assets and liabilities.

Significant judgment is required in evaluating the Company's uncertain tax positions and determining its provision for income taxes. The Company establishes liabilities for tax-related uncertainties based on estimates of whether, and the extent to which, additional taxes will be due. These liabilities are established when the Company believes that certain positions might be challenged despite its belief that its tax return positions are in accordance with applicable tax laws. The Company adjusts these liabilities when new information becomes available, such as the closing of a tax audit, new tax legislation, developments in case law or interactions with the tax authorities. To the extent that the final tax outcome of these matters is different than the amounts recorded, such differences will affect the provision for income taxes in the period in which such determination is made. The provision for income taxes includes the effect of changes to liabilities for tax-related uncertainties that are considered appropriate, as well as the related net interest and penalties. Income taxes paid, net of refunds received, were \$90 million, \$3 billion in the years ended December 31, 2014 and 2015, respectively. Income taxes refund received, net of payments made, was \$151 million in the year ended December 31, 2016. Interest paid was not material in any of the years presented. See Note 16—"Income Taxes" for additional information.

Revenue Recognition. Revenue is generated from offerings, which include clicks on text-based links to advertisers' websites that appear primarily on search results pages ("search advertising"), the display of graphical, non-graphical, and video advertisements ("display advertising"), and other sources.

Search Revenue. Search revenue is generated from mobile and desktop clicks on text-based links to advertisers' websites that appear primarily on search results pages ("search advertising"). The Company recognizes revenue from search advertising on Yahoo Properties and Affiliate sites. Search revenue is recognized based on Paid Clicks. A Paid Click occurs when an end-user clicks on a sponsored listing on Yahoo Properties and Affiliate sites for which an advertiser pays on a per click basis. The Company also sells search traffic to certain customers where it does not have a direct relationship with the advertiser, in which case revenue is also recognized based on Paid Clicks. In the Microsoft Search Agreement, the Company agreed to request paid search results from Microsoft for 51 percent of search queries originating from desktop computers accessing Yahoo Properties and Affiliate sites (the "Volume Commitment"). There is no such Volume Commitment for traffic generated on mobile devices.

On April 15, 2015, the Company and Microsoft Corporation ("Microsoft") entered into the Eleventh Amendment (the "Eleventh Amendment") to the Search and Advertising Services and Sales Agreement ("Microsoft Search Agreement"). Pursuant to the Eleventh Amendment, the Company completed the transition of its exclusive sales responsibilities to Microsoft for Microsoft's paid search services to premium advertisers in the United States, Canada, and Europe on April 1, 2016 and in its remaining markets (other than Taiwan and Hong Kong) on June 1, 2016. Following the transition in each respective market, Yahoo is considered the principal in the sale of traffic to Microsoft and other customers because Yahoo is the primary obligor in its arrangements with Microsoft and has discretion in how search queries from Affiliate sites will be fulfilled and monetized. As a result,

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amounts paid to Affiliates under the Microsoft Search Agreement in the transitioned markets are recorded as cost of revenue—TAC rather than as a reduction to revenue, resulting in revenue from the Microsoft Search Agreement being reported on a gross rather than net basis. Effective June 3, 2016, the Company and Microsoft further amended the Microsoft Search Agreement to provide that sales responsibilities for premium advertisers in Taiwan and Hong Kong will not be transitioned. TAC in those markets will continue to be reported as a reduction to revenue.

The table below presents how the Company accounted for amounts paid to Affiliates related to the Microsoft Search Agreement in transitioned markets, and shows the impact of the implementation of the Eleventh Amendment in transitioned markets (in thousands):

	Years Ended December 31,		
	2014	2015	2016
Cost of revenue—TAC in transitioned markets(*)	\$ —	\$ —	\$ 812,105
Reduction to revenue in transitioned markets	\$ 1,319,242	\$ 1,269,134	\$ 273,705

(*) For the year ended December 31, 2016, cost of revenue—TAC included \$701 million in the Americas segment, \$106 million in the EMEA segment, and \$5 million in the Asia Pacific segment.

See Note 19—"Microsoft Search Agreement" for a description of the Search Agreement with Microsoft.

Prior to the Eleventh Amendment, the Company was entitled to receive a percentage of the revenue (the "Revenue Share Rate") generated from Microsoft's services on Yahoo Properties and on Affiliate sites after deduction of the Affiliate sites' share of revenue and certain Microsoft costs. The Revenue Share Rate was 88 percent for the first five years of the Microsoft Search Agreement and then increased to 90 percent on February 23, 2015. Pursuant to the Eleventh Amendment, the Revenue Share Rate increased to 93 percent, but Microsoft now receives its 7 percent revenue share before deduction of the Affiliate site's share of revenue. The Company is responsible for paying the Affiliate for the Affiliate site's share of revenue.

The Company also recognizes search revenue generated from mobile and desktop ads served through Yahoo Gemini (Yahoo's unified marketplace for search and native advertising on Yahoo Properties and Affiliate sites). The Company is considered the primary obligor to the advertisers who are the customers of the search advertising service. Accordingly, the search revenue generated from mobile and desktop ads served through Yahoo Gemini that involve traffic supplied by Affiliates is reported gross of the traffic acquisition costs ("TAC") paid to Affiliates (reported as cost of revenue—TAC) as the Company performs the search service for advertisers.

In October 2015, Yahoo reached an agreement with Google that provides Yahoo with additional flexibility to choose among suppliers of search results and ads. Google's offerings complement the search services provided by Microsoft and Yahoo Gemini. Yahoo is considered the principal in the sale of traffic to Google because Yahoo is the primary obligor in its arrangement with Google and has discretion in how search queries from Affiliate sites will be fulfilled and monetized. As a result, amounts paid to Affiliates under the Google agreement are recorded as cost of revenue—TAC. Additionally, the Company generates search revenue from a revenue sharing arrangement with Yahoo Japan for search technology and services and records the related revenue as reported.

Display Revenue. The Company recognizes revenue from display advertising on Yahoo Properties and Affiliate sites as impressions of or clicks on display advertisements, including native ads, are delivered. Impressions are delivered when a sold advertisement appears in pages viewed by users.

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Clicks are delivered when a user clicks on an advertisement. Arrangements for these services generally have terms of up to one year. For display advertising on Affiliate sites, the Company pays Affiliates from the revenue generated from the display of these advertisements on the Affiliate sites. Traffic acquisition costs ("TAC") are payments made to Affiliates and payments made to companies that direct consumer and business traffic to Yahoo Properties. The display revenue derived from these arrangements that involve traffic supplied by Affiliates is reported gross of the TAC paid to Affiliates (reported as cost of revenue—TAC) when the Company is the primary obligor to the advertisers who are the customers of the display advertising service.

From time-to-time, the Company may offer customized display advertising solutions to advertisers. These customized display advertising solutions combine the Company's standard display advertising with customized content, customer insights, and campaign analysis which are separate units of accounting. Due to the unique nature of these products, the Company may not be able to establish selling prices based on historical stand-alone sales or third-party evidence; therefore, the Company may use its best estimate to establish selling prices. The Company establishes best estimates within a range of selling prices considering multiple factors including, but not limited to, class of advertiser, size of transaction, seasonality, margin objectives, observed pricing trends, available online inventory, industry pricing strategies, and market conditions. The Company believes the use of the best estimates of selling price allows revenue recognition in a manner consistent with the underlying economics of the transaction.

Other Revenue. Other revenue includes listings-based services revenue, e-commerce transaction revenue, royalties, patent licenses and fees revenue. Listings-based services revenue is generated from a variety of consumer and business listings-based services, including classified advertising such as Yahoo Local and other services. The Company recognizes listings-based services revenue when the services are performed. Transaction revenue is generated from facilitating commercial transactions through Yahoo Properties, principally from Yahoo Small Business, Yahoo Travel, and Yahoo Shopping. The Company recognizes transaction revenue when there is evidence that qualifying transactions have occurred. The Company also receives royalties from Yahoo Japan which are recognized when earned. Alibaba Group's obligation to make royalty payments under the Technology and Intellectual Property License Agreement (the "TIPLA") ceased on September 24, 2014 as a result of the Alibaba Group's initial public offering (the "Alibaba Group IPO") of American Depositary Shares ("ADSs") and the Company's recognition of the remaining TIPLA deferred revenue was completed on September 18, 2015. See Note 8—"Investments in Equity Interests Accounted for Using the Equity Method of Accounting" for additional information on the revenue recognized related to the TIPLA. Fees revenue consists of revenue generated from a variety of consumer and business fee-based services as well as services for small businesses. The Company recognizes fees revenue when the services are performed.

In all cases, revenue is recognized only when the price is fixed or determinable, persuasive evidence of an arrangement exists, the service is performed, and collectability of the related fee is reasonably assured. The Company's arrangements generally do not include a provision for cancellation, termination, or refunds that would significantly impact revenue recognition.

The Company accounts for cash consideration given to customers, for which it does not receive a separately identifiable benefit and cannot reasonably estimate fair value, as a reduction to revenue.

Current deferred revenue is comprised of contractual billings in excess of recognized revenue and payments received in advance of revenue recognition. Long-term deferred revenue includes amounts received for which revenue will not be earned within the next 12 months.

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Cost of revenue—TAC. TAC consists of payments made to Affiliates and payments made to companies that direct consumer and business traffic to Yahoo Properties. TAC is either recorded as a reduction of revenue or as cost of revenue—TAC.

TAC related to the Microsoft Search Agreement was recorded as a reduction to revenue for reporting periods through March 31, 2016. Beginning in the second quarter of 2016, TAC related to the Microsoft Search Agreement is recorded as cost of revenue—TAC in markets that have completed the transition of exclusive sales responsibilities to Microsoft for paid search services to premium advertisers pursuant to the Eleventh Amendment as described above. See Note 19—“Microsoft Search Agreement” for additional information.

TAC recorded as cost of revenue—TAC also relates to the Company’s other offerings. The Company enters into Affiliate agreements of varying duration that involve TAC. There are generally two economic structures of the Affiliate agreements: fixed payments with or without a guaranteed minimum amount of traffic delivered or variable payments based on a percentage of the Company’s revenue or based on a certain metric, such as the number of searches or paid clicks. The Company expenses TAC under two different methods. Agreements with fixed payments are expensed ratably over the term the fixed payment covers or as the traffic is delivered. Agreements based on a percentage of revenue, number of searches, or other metrics are expensed based on the volume of the underlying activity or revenue multiplied by the agreed-upon price or rate.

The Company also has an agreement to compensate a third party, Mozilla Corporation (“Mozilla”), to make the Company the default search provider on certain of Mozilla’s products in the United States. The Company records these payments as cost of revenue—TAC.

Cost of revenue—other. Cost of revenue-other consists of bandwidth costs, stock-based compensation, content, and other expenses associated with the production and usage of Yahoo Properties, including expense and amortization of developed technology and patents. Cost of revenue—other also includes costs for Yahoo’s technology platforms and infrastructure, including depreciation expense of facilities and other operating costs, directly related to revenue generating activities.

Amortization of Intangibles. Amortization of customer, affiliate, and advertiser-related relationships and tradenames, trademarks and domain names are classified within amortization of intangibles. Amortization of developed technology and patents is included in cost of revenue—other.

Product Development. Product development expenses consist primarily of compensation-related expenses (including stock-based compensation expense) incurred for research and development, the development of, enhancements to, and maintenance and operation of Yahoo Properties, advertising products, technology platforms, and infrastructure. Depreciation expense, third-party technology and development expense, and other operating costs are also included in product development.

Advertising Costs. Costs of advertising are recorded as expense as advertising space or airtime is used. All other advertising costs are expensed as incurred. Advertising expense totaled approximately \$142 million, \$184 million, and \$135 million for 2014, 2015, and 2016, respectively.

Restructuring Charges. The Company has developed and implemented restructuring initiatives to improve efficiencies across the organization, reduce its cost structure, and/or better align its resources with the Company’s product strategy. As a result of these plans, the Company has recorded restructuring charges comprised principally of employee severance and associated termination costs related to the reduction of its workforce, the consolidation of certain real estate facilities and data centers, losses on subleases, and contract termination costs. The Company’s

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restructuring plans include one-time termination benefits as well as certain contractual termination benefits or employee terminations under ongoing benefit arrangements. One-time termination benefits are recognized as a liability at estimated fair value when the approved plan of termination has been communicated to employees, unless employees must provide future service, in which case the benefits are recognized ratably over the future service period. Ongoing termination benefits arrangements are recognized as a liability at estimated fair value when the amount of such benefits becomes estimable and payment is probable. Contract termination costs are recognized at estimated fair value when the entity terminates the contract in accordance with the contract terms.

These restructuring initiatives require management to make estimates in several areas including: (i) expenses for severance and other employee separation costs; (ii) realizable values of assets made redundant, obsolete, or excessive; and (iii) the ability to generate sublease income and to terminate lease obligations at the estimated amounts.

Stock-Based Compensation Expense. The Company recognizes stock-based compensation expense, net of an estimated forfeiture rate and therefore only recognizes compensation costs for those shares expected to vest over the service period of the award. Stock-based awards are valued based on the grant date fair value of these awards; the Company records stock-based compensation expense on a straight-line basis over the requisite service period, generally one to four years.

Calculating stock-based compensation expense related to stock options requires the input of highly subjective assumptions, including the expected term of the stock options, stock price volatility, and the pre-vesting forfeiture rate of stock awards. The Company estimates the expected life of options granted based on historical exercise patterns, which the Company believes are representative of future behavior. The Company estimates the volatility of its common stock on the date of grant based on the implied volatility of publicly traded options on its common stock, with a term of one year or greater. The Company believes that implied volatility calculated based on actively traded options on its common stock is a better indicator of expected volatility and future stock price trends than historical volatility. The assumptions used in calculating the fair value of stock-based awards represent the Company's best estimates, but these estimates involve inherent uncertainties and the application of management judgment. As a result, if factors change and the Company uses different assumptions, the Company's stock-based compensation expense could be materially different in the future. In addition, the Company is required to estimate the expected pre-vesting award forfeiture rate, as well as the probability that performance conditions that affect the vesting of certain awards will be achieved, and only recognizes expense for those shares expected to vest. The Company estimates the forfeiture rate based on historical experience of the Company's stock-based awards that are granted and cancelled before vesting. See Note 14—"Employee Benefits" for additional information.

The Company uses the "with and without" approach in determining the order in which tax attributes are utilized. As a result, the Company recognizes a tax benefit from stock-based awards in additional paid-in capital only if an incremental tax benefit is realized after all other tax attributes currently available to the Company have been utilized. When tax deductions from stock-based awards are less than the cumulative book compensation expense, the tax effect of the resulting difference ("shortfall") is charged first to additional paid-in capital, to the extent of the Company's pool of windfall tax benefits, with any remainder recognized in income tax expense. The Company determined that it had a sufficient windfall pool available through the end of 2016 to absorb any shortfalls. In addition, the Company accounts for the indirect effects of stock-based awards on other tax attributes, such as the research tax credit, through the consolidated statements of operations.

Recent Accounting Pronouncements. In May 2014, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") 2014-09, "Revenue from Contracts with

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Customers,” which supersedes the revenue recognition requirements in Topic 605, “Revenue Recognition” and requires entities to recognize revenue in a way that depicts 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. In August 2015, the FASB issued ASU 2015-14, which defers by one year the effective date of ASU 2014-09. Accordingly, this guidance is effective for interim and annual periods beginning after December 15, 2017 with early adoption permitted for interim and annual periods beginning after December 15, 2016. In March 2016, the FASB issued ASU 2016-08 “Principal versus Agent Considerations (Reporting Revenue Gross versus Net),” which finalizes its amendments to the guidance in the new revenue standard on assessing whether an entity is a principal or an agent in a revenue transaction. This conclusion impacts whether an entity reports revenue on a gross or net basis. In April 2016, the FASB issued ASU 2016-10 “Identifying Performance Obligations and Licensing” which finalizes its amendments to the guidance in the new revenue standard regarding the identification of performance obligations and accounting for the license of intellectual property. In May 2016, the FASB issued ASU 2016-12 “Narrow-Scope Improvements and Practical Expedients” which finalizes its amendments to the guidance in the new revenue standard on collectability, noncash consideration, presentation of sales tax, and transition. The amendments are intended to make the guidance more operable and lead to more consistent application. The amendments have the same effective date and transition requirements as the new revenue recognition standard. The standard is required to be applied either retrospectively to each prior reporting period presented or retrospectively with the cumulative effect of initially applying it recognized at the date of initial application. The Company has not yet selected the transition method. The Company will adopt the new revenue standards in its first quarter of 2018. The Company is currently evaluating the effects, if any, that the adoption of this guidance will have on the Company’s financial position, results of operations and cash flows.

In August 2014, the FASB issued ASU No. 2014-15, “Disclosure of Uncertainties about an Entity’s Ability to Continue as a Going Concern” that requires management to evaluate whether there are conditions and events that raise substantial doubt about the Company’s ability to continue as a going concern within one year after the financial statements are issued on both an interim and annual basis. Management is required to provide certain footnote disclosures if it concludes that substantial doubt exists or when its plans alleviate substantial doubt about the Company’s ability to continue as a going concern. ASU 2014-15 is effective for annual periods ending after December 15, 2016 and for annual and interim reporting periods thereafter. The adoption of this ASU did not have any impact on the Company’s disclosures in the footnotes to its consolidated financial statements.

In January 2016, the FASB issued ASU No. 2016-01, “Financial Instruments-Overall: Recognition and Measurement of Financial Assets and Financial Liabilities”. The new standard principally affects accounting standards for equity investments, financial liabilities where the fair value option has been elected, and the presentation and disclosure requirements for financial instruments. Upon the effective date of the new standards, all equity investments in unconsolidated entities, other than those accounted for using the equity method of accounting, will generally be measured at fair value through earnings. There will no longer be an available-for-sale classification and therefore, no changes in fair value will be reported in other comprehensive income (loss) for equity securities with readily determinable fair values. The new guidance on the classification and measurement will be effective for public business entities in fiscal years beginning after December 15, 2017, including interim periods within those fiscal years and early adoption is permitted. The Company is in the process of evaluating the impact of the adoption of ASU 2016-01 on the consolidated financial statements and currently anticipates the new guidance would significantly impact its consolidated statements of operations and consolidated statements of comprehensive Income as the Company’s marketable equity securities, primarily the Company’s investments in Alibaba Group and Hortonworks, are currently classified as available-for-sale and are reported at fair value, with unrealized gains and losses, net of tax, recorded in accumulated other comprehensive income.

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In February 2016, the FASB issued ASU 2016-02, "Leases" which, for operating leases, requires a lessee to recognize a right-of-use asset and a lease liability, initially measured at the present value of the lease payments, in its balance sheet. The standard also requires a lessee to recognize a single lease cost, calculated so that the cost of the lease is allocated over the lease term, on a generally straight-line basis. The ASU is effective for public companies for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. Early adoption is permitted. The Company is currently evaluating the effects that the adoption of ASU 2016-02 will have on the Company's consolidated financial position, results of operations and cash flows and anticipates the new guidance will significantly impact its consolidated financial statements given the Company has a significant number of leases.

In March 2016, the FASB issued ASU 2016-06, "Contingent put and call options in debt instruments, a consensus of the FASB's Emerging Issues Task Force," which simplifies the embedded derivative analysis for debt instruments containing contingent call or put options. The new guidance clarifies that an exercise contingency does not need to be evaluated to determine whether it relates to interest rates and credit risk in an embedded derivative analysis. A contingent put or call option embedded in a debt instrument would be evaluated for possible separate accounting as a derivative instrument without regard to the nature of the exercise contingency. The ASU is effective for public companies for fiscal years beginning after December 15, 2016, and interim periods within those fiscal years. Early adoption is permitted for any interim and annual financial statements that have not yet been issued. The new guidance is required to be applied on a modified retrospective basis to all existing and future debt instruments. An entity will be able to elect the fair value option at transition for the entire debt instrument, including its embedded features, but will not be able to unwind a previously-elected fair value option. The Company is not early adopting this standard and will consider the guidance for future transactions once it is effective.

In March 2016, the FASB issued ASU 2016-07, "Simplifying the Transition to the Equity Method of Accounting," which eliminates the requirement to apply the equity method of accounting retrospectively when a reporting entity obtains significant influence over a previously held investment in order to reduce recognition and presentation complexity in financial reporting. Instead, the new guidance requires equity method of accounting to be applied prospectively from the date significant influence is obtained. The ASU is effective for public companies for fiscal years beginning after December 15, 2016, and interim periods within those fiscal years. Early adoption is permitted for any interim and annual financial statements that have not yet been issued. The new guidance is required to be applied prospectively for investments that qualify for the equity method of accounting after the effective date. The Company is not early adopting this standard and will consider the guidance for future transactions once it is effective.

In March 2016, the FASB issued ASU 2016-09, "Improvements to Employee Share-Based Payment Accounting" as part of its simplification initiative, which involves several aspects of accounting for share-based payment transactions, including the income tax effects, statutory withholding requirements, forfeitures, and classification on the statement of cash flows. Under ASU 2016-09, stock based compensation excess benefits (if any) will be recorded to the consolidated statements of operations. The ASU is effective for public companies for fiscal years beginning after December 15, 2016 and interim periods within those fiscal years. The Company will adopt this guidance in the first quarter of 2017. Upon adoption of this guidance, the Company will record the cumulative tax benefits that were not previously recognized because the related tax deduction had not reduced taxes payable. This cumulative impact is expected to increase retained earnings by approximately \$100 million.

In June 2016, the FASB issued ASU 2016-13, "Financial Instruments—Credit Losses", which introduces new guidance for credit losses on instruments within its scope. The new guidance introduces an

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approach based on expected losses to estimate credit losses on certain types of financial instruments, including, but not limited to, trade and other receivables, held-to-maturity debt securities, loans and net investments in leases. The new guidance also modifies the impairment model for available-for-sale debt securities and requires the entities to determine whether all or a portion of the unrealized loss on an available-for-sale debt security is a credit loss. The standard also indicates that entities may not use the length of time a security has been in an unrealized loss position as a factor in concluding whether a credit loss exists. The ASU is effective for public companies for fiscal years beginning after December 15, 2019, and interim periods within those fiscal years. Early adoption is permitted for all entities for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. The Company is currently evaluating the effects, if any, that the adoption of this guidance will have on the Company's consolidated financial position, results of operations and cash flows.

In June 2016, the FASB issued ASU 2016-15, "Statement of Cash Flows (Topic 230), a consensus of the FASB's Emerging Issues Task Force." The new guidance is intended to reduce diversity in practice in how certain transactions are classified in the statement of cash flows. The ASU is effective for public companies for fiscal years beginning after December 15, 2017, and interim periods within those fiscal years. Early adoption is permitted, including interim periods within those fiscal years. An entity that elects early adoption must adopt all of the amendments in the same period. The guidance requires application using a retrospective transition method. The Company is currently evaluating the effects, if any, that the adoption of this guidance will have on the Company's consolidated cash flows.

In October 2016, the FASB issued ASU 2016-16, "Income Taxes: Intra-Entity Transfers of Assets Other than Inventory" which amends the accounting for income taxes. The new guidance requires the recognition of the income tax consequences of an intra-entity asset transfer, other than transfers of inventory, when the transfer occurs. For intra-entity transfers of inventory, the income tax effects will continue to be deferred until the inventory has been sold to a third party. The ASU is effective for reporting periods beginning after December 15, 2017, with early adoption permitted. The new guidance is required to be applied on a modified retrospective basis through a cumulative-effect adjustment directly to retained earnings as of the beginning of the period of adoption. The Company is currently evaluating the effects, if any, that the adoption of this guidance will have on the Company's consolidated financial position, results of operations and cash flows.

In November 2016, the FASB issued ASU No. 2016-18 "Statement of Cash Flows (Topic 230), Restricted Cash" which provides guidance on the presentation of restricted cash and restricted cash equivalents in the statements of cash flows. The new guidance requires restricted cash and restricted cash equivalents to be included within the cash and cash equivalents balances when reconciling the beginning-of-period and end-of-period amounts shown on the statements of cash flows. The ASU is effective for reporting periods beginning after December 15, 2017 with early adoption permitted. The Company is currently evaluating the effects, if any, that the adoption of this guidance will have on the Company's consolidated cash flows.

In January 2017, the FASB issued ASU No. 2017-04 "Intangibles—Goodwill and Other (Topic 350), Simplifying the Test for Goodwill Impairment" which eliminated Step 2 from the goodwill impairment test. In computing the implied fair value of goodwill under Step 2, an entity had to perform procedures to determine the fair value at the impairment testing date of its assets and liabilities (including unrecognized assets and liabilities) following the procedure that would be required in determining the fair value of assets acquired and liabilities assumed in a business combination. Instead, under the amendments in this ASU an entity should perform its annual, or interim, goodwill impairment test by comparing the fair value of a reporting unit with its carrying amount. An entity should recognize an impairment charge for the amount by which the carrying amount exceeds the reporting unit's fair value; however, the loss recognized should not exceed the total amount of

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goodwill allocated to that reporting unit. Additionally, an entity should consider income tax effects from any tax deductible goodwill on the carrying amount of the reporting unit when measuring the goodwill impairment loss, if applicable. The ASU also eliminated the requirements for any reporting unit with a zero or negative carrying amount to perform a qualitative assessment and, if it fails that qualitative test, to perform Step 2 of the goodwill impairment test. Therefore, the same impairment assessment applies to all reporting units. An entity is required to disclose the amount of goodwill allocated to each reporting unit with a zero or negative carrying amount of net assets. An entity still has the option to perform the qualitative assessment for a reporting unit to determine if the quantitative impairment test is necessary. The ASU is effective for reporting periods beginning after December 15, 2019 with early adoption permitted for interim or annual goodwill impairment tests performed on testing dates after January 1, 2017. The Company is currently evaluating the effects, if any, that the adoption of this guidance will have on the Company's consolidated financial position, results of operations and cash flows.

Note 2 Marketable Securities, Investments and Fair Value Disclosures

The following tables summarize the available-for-sale securities (in thousands):

	December 31, 2015			
	Cost Basis	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
Government and agency securities	\$ 616,501	\$ 24	\$ (635)	\$ 615,890
Corporate debt securities, commercial paper, time deposits, and bank certificates of deposit	4,589,799	292	(4,908)	4,585,183
Alibaba Group equity securities	2,713,484	28,458,877	—	31,172,361
Hortonworks equity securities	26,246	57,977	—	84,223
Other corporate equity securities	298	—	(101)	197
Total available-for-sale marketable securities	<u>\$ 7,946,328</u>	<u>\$ 28,517,170</u>	<u>\$ (5,644)</u>	<u>\$ 36,457,854</u>

	December 31, 2016			
	Cost Basis	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
Government and agency securities	\$ 650,344	\$ 43	\$ (903)	\$ 649,484
Corporate debt securities, commercial paper, time deposits, and bank certificates of deposit	6,144,991	812	(4,655)	6,141,148
Alibaba Group equity securities	2,713,484	30,967,395	—	33,680,879
Hortonworks equity securities	26,246	5,713	—	31,959
Other corporate equity securities	8,093	69	(3,057) (*)	5,105
Total available-for-sale marketable securities	<u>\$ 9,543,158</u>	<u>\$ 30,974,032</u>	<u>\$ (8,615)</u>	<u>\$ 40,508,575</u>

(*) Relates to the other corporate equity securities in an unrealized loss position for less than 12 months.

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	December 31,	
	2015	2016
Reported as:		
Short-term marketable securities	\$ 4,225,112	\$ 5,700,925
Long-term marketable securities	975,961	1,089,707
Investment in Alibaba Group	31,172,361	33,680,879
Other long-term assets and investments	84,420	37,064
Total	<u>\$ 36,457,854</u>	<u>\$ 40,508,575</u>

Short-term, highly liquid investments of \$667 million and \$415 million as of December 31, 2015 and 2016, respectively, included in cash and cash equivalents on the consolidated balance sheets are not included in the table above as the gross unrealized gains and losses were immaterial as the carrying value approximates fair value because of the short maturity of those instruments. Realized gains and losses from sales of available-for-sale marketable debt securities were not material for the years ended December 31, 2014, 2015, and 2016.

The remaining contractual maturities of available-for-sale marketable debt securities were as follows (in thousands):

	December 31,	
	2015	2016
Due within one year	\$ 4,225,112	\$ 5,700,925
Due after one year through three years	975,961	1,089,707
Total available-for-sale marketable debt securities	<u>\$ 5,201,073</u>	<u>\$ 6,790,632</u>

The following tables show all available-for-sale marketable debt securities in an unrealized loss position for which an other-than-temporary impairment has not been recognized and the related gross unrealized losses and fair value, aggregated by investment category and length of time that individual securities have been in a continuous unrealized loss position (in thousands):

	December 31, 2015					
	Less than 12 Months		12 Months or Longer		Total	
	Fair Value	Unrealized Loss	Fair Value	Unrealized Loss	Fair Value	Unrealized Loss
Government and agency securities	\$ 552,041	\$ (635)	\$ —	\$ —	\$ 552,041	\$ (635)
Corporate debt securities, commercial paper, and bank certificates of deposit	2,415,347	(4,763)	99,214	(145)	2,514,561	(4,908)
Total available-for-sale marketable debt securities	<u>\$ 2,967,388</u>	<u>\$ (5,398)</u>	<u>\$ 99,214</u>	<u>\$ (145)</u>	<u>\$ 3,066,602</u>	<u>\$ (5,543)</u>

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	December 31, 2016					
	Less than 12 Months		12 Months or Longer		Total	
	Fair Value	Unrealized Loss	Fair Value	Unrealized Loss	Fair Value	Unrealized Loss
Government and agency securities	\$ 543,605	\$ (903)	\$ —	\$ —	\$ 543,605	\$ (903)
Corporate debt securities, commercial paper, and bank certificates of deposit	2,355,935	(4,638)	46,438	(17)	2,402,373	(4,655)
Total available-for-sale marketable debt securities	<u>\$ 2,899,540</u>	<u>\$ (5,541)</u>	<u>\$ 46,438</u>	<u>\$ (17)</u>	<u>\$ 2,945,978</u>	<u>\$ (5,558)</u>

The Company's investment portfolio includes equity securities of Alibaba Group and Hortonworks, as well as liquid high-quality fixed income debt securities including government, agency and corporate debt, money market funds, commercial paper, certificates of deposit and time deposits held with financial institutions. The fair value of any debt or equity security will vary over time and is subject to a variety of market risks including: macro-economic, regulatory, industry, company performance, and systemic risks of the equity markets overall. Consequently, the carrying value of the Company's investment portfolio will vary over time as the value of the various marketable securities changes.

Investments in instruments that earn a fixed rate or a floating rate interest earning instruments carry a degree of interest rate risk. Fixed rate securities may have their fair value adversely impacted due to a rise in interest rates, while floating rate securities may produce less income than expected if interest rates fall. Fixed income securities may have their fair value adversely impacted due to a deterioration of the credit quality of the issuer. The longer the term of the securities, the more susceptible they are to changes in market rates.

Available-for-sale marketable debt securities are reviewed periodically to identify possible other-than-temporary impairment. The Company has no current requirement or intent to sell the securities in an unrealized loss position. The Company expects to recover up to (or beyond) the initial cost of investment for securities held.

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The following table sets forth the financial assets and liabilities, measured at fair value, by level within the fair value hierarchy as of December 31, 2015 (in thousands):

Assets	Fair Value Measurements at Reporting Date Using			
	Level 1	Level 2	Level 3	Total
Money market funds ⁽¹⁾	\$ 386,792	\$ —	\$ —	\$ 386,792
Available-for-sale marketable debt securities:				
Government and agency securities ⁽¹⁾	—	635,917	—	635,917
Commercial paper and bank certificates of deposit ⁽¹⁾	—	1,844,494	—	1,844,494
Corporate debt securities ⁽¹⁾	—	2,918,496	—	2,918,496
Time deposits ⁽¹⁾	—	82,703	—	82,703
Available-for-sale equity securities:				
Other corporate equity securities ⁽²⁾	197	—	—	197
Alibaba Group equity securities	31,172,361	—	—	31,172,361
Hortonworks equity securities ⁽²⁾	84,223	—	—	84,223
Hortonworks warrants	—	—	78,861	78,861
Foreign currency derivative contracts ⁽³⁾	—	84,319	—	84,319
Financial assets at fair value	\$ 31,643,573	\$ 5,565,929	\$ 78,861	\$ 37,288,363
Liabilities				
Foreign currency derivative contracts ⁽³⁾	—	(5,661)	—	(5,661)
Total financial assets and liabilities at fair value	\$ 31,643,573	\$ 5,560,268	\$ 78,861	\$ 37,282,702

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The following table sets forth the financial assets and liabilities, measured at fair value, by level within the fair value hierarchy as of December 31, 2016 (in thousands):

Assets	Fair Value Measurements at Reporting Date Using			
	Level 1	Level 2	Level 3	Total
Money market funds ⁽¹⁾	\$ 375,286	\$ —	\$ —	\$ 375,286
Available-for-sale marketable debt securities:				
Government and agency securities ⁽¹⁾	—	649,484	—	649,484
Commercial paper and bank certificates of deposit ⁽¹⁾	—	3,008,971	—	3,008,971
Corporate debt securities ⁽¹⁾	—	3,132,177	—	3,132,177
Time deposits ⁽¹⁾	—	39,598	—	39,598
Available-for-sale equity securities:				
Other corporate equity securities ⁽²⁾	5,105	—	—	5,105
Alibaba Group equity securities	33,680,879	—	—	33,680,879
Hortonworks equity securities ⁽²⁾	31,959	—	—	31,959
Hortonworks warrants	—	—	28,815	28,815
Foreign currency derivative contracts ⁽³⁾	—	11,684	—	11,684
Financial assets at fair value	\$ 34,093,229	\$ 6,841,914	\$ 28,815	\$ 40,963,958
Liabilities				
Foreign currency derivative contracts ⁽³⁾	—	(9,333)	—	(9,333)
Total financial assets and liabilities at fair value	\$ 34,093,229	\$ 6,832,581	\$ 28,815	\$ 40,954,625

- (1) The money market funds, government and agency securities, commercial paper and bank certificates of deposit, corporate debt securities, and time deposits are classified as part of either cash and cash equivalents or short or long-term marketable securities on the consolidated balance sheets.
- (2) The Hortonworks equity securities and other corporate equity securities are classified as part of other long-term assets and investments on the consolidated balance sheets.
- (3) Foreign currency derivative contracts are classified as part of either current or noncurrent assets or liabilities on the consolidated balance sheets. The notional amounts of the foreign currency derivative contracts were: \$1.5 billion, including contracts designated as net investment hedges of \$1.2 billion, as of December 31, 2015; and \$0.6 billion, including contracts designated as net investment hedges of \$0.2 billion, as of December 31, 2016.

The amount of cash included in cash and cash equivalents as of December 31, 2015 and 2016 was \$965 million and \$705 million, respectively.

The fair values of the Company's Level 1 financial assets and liabilities are based on quoted prices in active markets for identical assets or liabilities. The fair values of the Company's Level 2 financial assets and liabilities are obtained using quoted prices for similar assets or liabilities in active markets; quoted prices for identical or similar assets in markets that are not active; and inputs other than quoted prices (e.g., interest rates and yield curves). The Company utilizes a pricing service to assist in obtaining fair value pricing for the marketable debt securities. The fair value for the Company's Level 3 financial asset was obtained using a Black-Scholes model.

Activity between Levels of the Fair Value Hierarchy

During the years ended December 31, 2015 and 2016, the Company did not make any transfers between Level 1, Level 2 and Level 3 assets or liabilities.

Hortonworks

Prior to the December 12, 2014 initial public offering of Hortonworks, the Company held an approximate 16 percent interest in Hortonworks with an investment balance of \$26 million, which was accounted for as a cost method investment. Subsequent to the initial public offering, the Company owns 3.8 million unregistered shares. These shares were subject to a 6-month lock-up period which expired during 2015. These shares are accounted for as an available-for-sale security and had a fair value of \$84 million and \$32 million as of December 2015 and 2016, respectively.

The Company also holds warrants that vested upon the initial public offering of Hortonworks, which entitle the Company to purchase an aggregate of 3.7 million shares of Hortonworks common stock upon exercise of the warrants. The Company holds 6.5 million preferred warrants that are exercisable for 3.25 million shares of common stock at an exercise price of \$0.01 per share, as well as 0.5 million common warrants that are exercisable for 0.5 million shares of common stock at an exercise price of \$8.46 per share. These warrants had a fair value of \$79 million and \$29 million as of December 31, 2015 and 2016, respectively. The Company determined the estimated fair value of the warrants using the Black-Scholes model with the following assumptions:

	Preferred Warrants		Common Warrants	
	Years Ended December 31,		Years Ended December 31,	
	2015	2016	2015	2016
Expected dividend yield	0%	0%	0%	0%
Risk-free interest rate	1.78%	1.70%	2.25%	2.25%
Expected volatility	46.0%	44.0%	46.0%	44.0%
Expected life (in years)	4.50	3.50	7.44	6.44

During the year ended December 31, 2014, the Company recorded a gain of \$57 million upon the initial public offering of Hortonworks through other comprehensive income on its consolidated balance sheet and a \$41 million gain related to the mark to market of the warrants as of December 31, 2014, which was included within other income (expense), net in the consolidated statements of operations. During the year ended December 31, 2015, the Company recorded a loss of \$19 million related to the mark to market of the respective warrants as of December 31, 2015, which was included within other income (expense), net in the Company's consolidated statements of operations. During the year ended December 31, 2016, the Company recorded a loss of \$50 million related to the mark to market of the respective warrants as of December 31, 2016, which was included within other income (expense), net in the Company's consolidated statements of operations. Changes in the estimated fair value of the Hortonworks warrants are recorded through other income (expense), net in the Company's consolidated statements of operations.

Assets and Liabilities at Fair Value on a Nonrecurring Basis

Convertible Senior Notes. In 2013, the Company issued \$1.4375 billion aggregate principal amount of 0.00% Convertible Senior Notes due in 2018 (the "Notes"). The Notes are carried at their original issuance value, net of unamortized debt discount, and are not marked to market each period. The approximate estimated fair value of the Notes as of December 31, 2015 and 2016 was \$1.3 billion. The

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estimated fair value of the Notes was determined on the basis of quoted market prices observable in the market and is considered Level 2 in the fair value hierarchy. See Note 11—"Convertible Notes" for additional information related to the Notes.

Goodwill and Definite-Lived Intangible Assets. The inputs used to measure the estimated fair value of goodwill and definite-lived intangible assets are classified as a Level 3 fair value measurement due to the significance of unobservable inputs using company-specific information. The valuation methodology used to estimate the fair value of goodwill and definite-lived intangible assets is discussed in Note 5—"Goodwill" and Note 6—"Intangible Assets, Net".

Other Investments. As of both December 31, 2015 and 2016, the Company held approximately \$83 million of investments in equity securities of privately-held companies that are accounted for using the cost method. These investments are included within other long-term assets and investments on the consolidated balance sheets. Such investments are reviewed periodically for impairment.

Note 3 Consolidated Financial Statement Details

Prepaid Expenses and Other Current Assets

As of December 31, prepaid expenses and other current assets consisted of the following (in thousands):

	2015	2016
Prepaid expenses	\$ 87,843	\$ 73,671
Foreign currency forward and option contract assets	84,136	11,684
Other receivables non-trade	167,198	33,519
Restricted cash ^(*)	29,678	55,168
Income tax receivables	220,996	35,059
Other	12,941	12,398
Total prepaid expenses and other current assets	<u>\$ 602,792</u>	<u>\$ 221,499</u>

^(*) The majority of the balance as of December 31, 2015 and 2016 represents customer funds received by the Company in connection with its online e-commerce services in the Asia Pacific region that are restricted in a separate bank account. In addition, the balance as of December 31, 2016 also included customer funds received by the Company in connection with its fantasy sports that are restricted in separate bank accounts.

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Property and Equipment, Net

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

	2015	2016
Land(1)	\$ 215,740	\$ 89,960
Buildings(1)(2)	840,083	935,515
Leasehold improvements(2)	252,985	249,698
Computers and equipment(2)	2,143,413	1,901,619
Capitalized software and labor	643,758	679,902
Furniture and fixtures(1)	86,418	74,526
Assets not yet in use	83,164	15,505
	<u>4,265,561</u>	<u>3,946,725</u>
Less: accumulated depreciation and amortization(2)	<u>(2,718,238)</u>	<u>(2,736,788)</u>
Total property and equipment, net	<u>\$ 1,547,323</u>	<u>\$ 1,209,937</u>

- (1) During 2016, the Company completed the sale of certain property located in Santa Clara, California. The total carrying value of the property assets was \$126 million, which mostly pertained to the land.
- (2) The Company recorded assets under capital leases, primarily for computers and equipment and leasehold improvements, which had gross carrying values of \$82 million and \$57 million as of December 31, 2015 and 2016, respectively. Accumulated amortization related to these capital leases totaled \$75 million and \$52 million as of December 31, 2015 and 2016, respectively.

Other Long-Term Assets and Investments

As of December 31, other long-term assets and investments consisted of the following (in thousands):

	2015	2016
Deferred income taxes	\$ 21,745	\$ 18,228
Investments in privately-held companies	82,610	82,780
Hortonworks equity securities and warrants	163,084	60,774
Foreign currency forward and option contracts	183	—
Other	74,768	44,277
Total other long-term assets and investments	<u>\$ 342,390</u>	<u>\$ 206,059</u>

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Other Accrued Expenses and Current Liabilities

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

	2015	2016
Accrued content, connection, traffic acquisition, and other costs	\$ 252,612	\$ 400,172
Accrued compensation and related expenses	310,111	342,354
Income taxes payable	4,181	6,039
Accrued professional service expenses	40,914	30,827
Accrued sales and marketing related expenses	40,876	13,936
Accrued restructuring costs	40,283	27,041
Current liability for uncertain tax contingencies	12,586	2,409
Other	233,095	183,898
Total other accrued expenses and current liabilities	<u>\$ 934,658</u>	<u>\$ 1,006,676</u>

Deferred and Other Long-Term Tax Liabilities

As of December 31, deferred and other long-term tax liabilities consisted of the following (in thousands):

	2015	2016
Deferred and other income tax liabilities ⁽¹⁾	\$ 12,312,013	\$ 13,096,849
Long-term liability for uncertain tax contingencies ⁽²⁾	1,155,178	1,179,605
Total deferred and other long-term tax contingencies	<u>\$ 13,467,191</u>	<u>\$ 14,276,454</u>
Presented as:		
Deferred tax liabilities related to investment in Alibaba Group ⁽¹⁾	\$ 12,611,867	\$ 13,633,988
Deferred and other long-term tax liabilities	\$ 855,324	\$ 642,466

- 1) Deferred and other income tax liabilities are presented on a net basis by jurisdiction. The balances as of December 31, 2015 and 2016 include the deferred tax liabilities related to investment in Alibaba Group.
- 2) Includes interest and penalties.

Accumulated Other Comprehensive Income

As of December 31, the components of accumulated other comprehensive income were as follows (in thousands):

	2015	2016
Unrealized gains on available-for-sale securities, net of tax	\$ 16,918,539	\$ 18,376,965
Unrealized gains (losses) on cash flow hedges, net of tax	482	(19)
Foreign currency translation adjustments, net of tax	(342,990)	100,947
Accumulated other comprehensive income	<u>\$ 16,576,031</u>	<u>\$ 18,477,893</u>

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Noncontrolling Interests

As of December 31, noncontrolling interests were as follows (in thousands):

	2015	2016
Beginning noncontrolling interests	\$ 43,755	\$ 35,883
Distributions to noncontrolling interests	(15,847)	(5,948)
Net income attributable to noncontrolling interests	7,975	4,858
Ending noncontrolling interests	<u>\$ 35,883</u>	<u>\$ 34,793</u>

Other Income (Expense), Net

Other income (expense), net for 2014, 2015, and 2016 were as follows (in thousands):

	Years Ended December 31,		
	2014	2015	2016
Interest and investment income	\$ 26,309	\$ 34,383	\$ 60,931
Interest expense	(68,851)	(71,865)	(73,783)
Gain on sale of Alibaba Group ADSs	10,319,437	—	—
Gain (loss) on Hortonworks warrants	98,062	(19,199)	(50,046)
Foreign exchange (loss) gain	(14,687)	(22,226)	4,282
Other	9,169	3,125	4,700
Total other income (expense), net	<u>\$ 10,369,439</u>	<u>\$ (75,782)</u>	<u>\$ (53,916)</u>

Interest and investment income consists of income earned from cash and cash equivalents in bank accounts and investments made in marketable debt securities.

Interest expense is related to the Notes and notes payable related to building and capital lease obligations for data centers.

Gain on sale of Alibaba Group ADSs during the year ended December 31, 2014 is attributable to the pre-tax gain related to the sale of 140 million ADSs of Alibaba Group in the Alibaba Group IPO on September 24, 2014.

During the year ended December 31, 2014, the Company recorded a gain of \$57 million upon the initial public offering of Hortonworks and a \$41 million gain related to the mark to market of the warrants as of December 31, 2014, which were included within other income (expense), net in the consolidated statements of operations. During the year ended December 31, 2015, the Company recorded a loss of \$19 million related to the mark to market of the warrants as of December 31, 2015, which was included within other income (expense), net in the Company's consolidated statements of operations. During the year ended December 31, 2016, the Company recorded a loss of \$50 million related to the mark to market of the warrants as of December 31, 2016, which was included within other income (expense), net in the Company's consolidated statements of operations. Changes in the estimated fair value of the Hortonworks warrants will be recorded through other income (expense), net in the Company's consolidated statements of operations. See Note 2—"Marketable Securities, Investments and Fair Value Disclosures" for additional information.

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Foreign exchange losses consists of foreign exchange gains and losses due to re-measurement of monetary assets and liabilities denominated in non-functional currencies, and unrealized and realized foreign currency transaction gains and losses, including gains and losses related to balance sheet hedges. Additionally, in 2016, the Company reclassified certain unrealized currency translation adjustments from accumulated other comprehensive income and realized a net gain of \$20 million due to the liquidation of foreign subsidiaries.

Other consists of gains from other non-operational items.

Reclassifications Out of Accumulated Other Comprehensive Income

Reclassifications out of accumulated other comprehensive income for the period ended December 31, 2014 were as follows(in thousands):

	Amount Reclassified from Accumulated Other Comprehensive Income	Affected Line Item in the Statement of Income
Realized gains on cash flow hedges, net of tax	\$ (5,259)	Revenue
Realized gains on available-for-sale securities, net of tax	(2,218)	Other income (expense), net
Foreign currency translation adjustments ("CTA"):		
Disposal of a portion of the investment in Alibaba Group, net of \$30 million in tax	(50,301)	Other income (expense), net
Total reclassifications for the period	\$ (57,778)	

Reclassifications out of accumulated other comprehensive income for the period ended December 31, 2015 were as follows(in thousands):

	Amount Reclassified from Accumulated Other Comprehensive Income	Affected Line Item in the Statement of Income
Realized losses on cash flow hedges, net of tax	\$ 4,421	Revenue
Realized losses on available-for-sale securities, net of tax	174	Other income (expense), net
Total reclassifications for the period	\$ 4,595	

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Reclassifications out of accumulated other comprehensive income for the period ended December 31, 2016 were as follows(in thousands):

	Amount Reclassified from Accumulated Other Comprehensive Income	Affected Line Item in the Statement of Income
Realized losses on cash flow hedges, net of tax	\$ 4,298	Revenue
Realized losses on available-for-sale securities, net of tax	181	Other income (expense), net
Realized (gains) losses on foreign currency translation adjustments ("CTA"):		
Liquidation of foreign subsidiary CTA reclassification	1,110	Restructuring charges, net
Liquidation of foreign subsidiary CTA reclassification	(21,204)	Other income (expense), net
Total reclassifications for the period	<u>\$ (15,615)</u>	

Note 4 Acquisitions and Dispositions

The following table summarizes acquisitions (including business combinations and asset acquisitions) completed during the three years ended December 31, 2016 (in millions):

	Purchase Price	Goodwill	Amortizable Intangibles
2014			
Flurry	\$ 270	\$ 194	\$ 55
BrightRoll	\$ 581	\$ 417	\$ 113
Other acquisitions	\$ 66	\$ 39	\$ 18
2015			
Polyvore	\$ 161	\$ 131	\$ 19
Other acquisition	\$ 23	\$ 22	\$ 5

At the completion date of each acquisition, the Company recorded goodwill where the purchase price exceeded the fair value of the net tangible and identifiable intangible assets acquired. Goodwill is not amortized, but is tested for impairment at the reporting unit level on an annual basis and more frequently if impairment indicators are present. The majority of the goodwill originating from these acquisitions was subsequently impaired in the fourth quarter of 2015. See Note 5—"Goodwill" for results of the goodwill impairment test.

Transactions completed in 2014

Flurry. On August 25, 2014, the Company completed the acquisition of Flurry, Inc. ("Flurry"), a mobile data analytics company that optimizes mobile experiences for developers, marketers, and users. The combined scale of Yahoo and Flurry created more personalized and inspiring app experiences for users and enabled more effective mobile advertising solutions for brands seeking to reach their audiences and gain cross-device insights.

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The total purchase price of approximately \$270 million consisted of cash consideration. Under the terms of the agreement, the Company acquired all of the equity interests (including all outstanding vested options) of Flurry. Outstanding Flurry unvested options were assumed and converted into equivalent awards for Yahoo common stock valued at \$4 million, which is being recognized as stock-based compensation expense as the options vest over periods of up to four years from the date of the acquisition.

Separately, in connection with the acquisition, the Company issued restricted stock units valued at \$23 million, which are being recognized as stock-based compensation expense as the restricted stock units vest over four years from the date of the acquisition.

The allocation of the purchase price of the assets acquired and liabilities assumed based on their fair values was as follows (in thousands):

Cash acquired	\$ 12,139
Other tangible assets acquired	51,235
Amortizable intangible assets:	
Developed technology	7,100
Customer contracts and related relationships	47,600
Other	720
Goodwill	<u>194,081</u>
Total assets acquired	312,875
Liabilities assumed	<u>(43,205)</u>
Total	<u>\$ 269,670</u>

The amortizable intangible assets have useful lives not exceeding five years and a weighted average useful life of five years. The purchase price exceeded the estimated fair value of the tangible and identifiable intangible assets and liabilities acquired and, as a result of the allocation, the Company recorded goodwill of \$194 million in connection with this transaction. Goodwill represented the excess of the purchase price over the estimated fair value of the net tangible and identifiable intangible assets acquired and was not deductible for tax purposes.

BrightRoll. On December 12, 2014, the Company completed the acquisition of BrightRoll, Inc. ("BrightRoll"), a leading programmatic video advertising platform. The transaction combined Yahoo's premium-desktop and mobile video advertising inventory with BrightRoll's programmatic video platform and publisher relationships to bring substantial value to advertisers on both platforms.

The purchase price of \$581 million exceeded the estimated fair value of the net tangible and identifiable intangible assets and liabilities acquired and, as a result, the Company recorded goodwill of \$417 million in connection with this transaction. Under the terms of the agreement, the Company acquired all of the equity interests (including all outstanding vested options) in BrightRoll and BrightRoll stockholders and vested option holders were paid in cash. Outstanding BrightRoll unvested options were assumed and converted into equivalent awards for Yahoo common stock valued at \$25 million, which is being recognized as stock-based compensation expense as the options vest over periods of up to four years from the date of the acquisition.

Separately, in connection with the acquisition, the Company issued restricted stock units to employees valued at \$78 million, which is being recognized as stock-based compensation expense as

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the restricted stock units vest over four years from the date of the acquisition and relate to continuing employment. In addition, the transaction resulted in cash consideration of \$54 million to be paid to BrightRoll's founder over three years also provided that he remains an employee of the Company (or a successor company). Such cash payments are being recognized as compensation expense over the three-year service period from the date of the acquisition.

The total purchase price of approximately \$581 million consisted mainly of cash consideration. The allocation of the purchase price of the assets acquired and liabilities assumed based on their fair values was as follows (in thousands):

Cash acquired	\$	41,899
Accounts receivable, net		99,330
Other tangible assets acquired		55,923
Amortizable intangible assets:		
Developed technology		19,400
Customer contracts and related relationships		85,600
Other		8,100
Goodwill		416,580
Total assets acquired		726,832
Liabilities assumed		(145,667)
Total	\$	<u>581,165</u>

The amortizable intangible assets have useful lives not exceeding seven years and a weighted average useful life of five years. The purchase price exceeded the estimated fair value of the tangible and identifiable intangible assets and liabilities acquired and, as a result of the allocation, the Company recorded goodwill of \$417 million in connection with this transaction. Goodwill represented the excess of the purchase price over the estimated fair value of the net tangible and identifiable intangible assets acquired and was not deductible for tax purposes.

Other Acquisitions—Business Combinations. During the year ended December 31, 2014, the Company acquired nine other companies, all of which were accounted for as business combinations. The total purchase price for these acquisitions was \$66 million less cash acquired of \$4 million, which resulted in a net cash outlay of \$62 million. The purchase price allocation of the assets acquired and liabilities assumed based on their estimated fair values was \$39 million allocated to goodwill, \$18 million to amortizable intangible assets, \$4 million to cash acquired, \$10 million to other tangible assets, and \$5 million to assumed liabilities.

Transactions completed in 2015

Polyvore. On September 2, 2015, the Company acquired Polyvore, Inc. ("Polyvore"), a social commerce website that lets users across the globe discover and shop for their favorite products in fashion, beauty and home décor.

The total purchase price of approximately \$161 million consisted of cash consideration. Under the terms of the agreement, the Company acquired all of the equity interests (including all outstanding vested options) of Polyvore. Outstanding Polyvore unvested options were assumed and converted into equivalent awards for Yahoo common stock valued at \$7 million, which is being recognized as stock-based compensation expense as the options vest over periods of up to four years from the date of the acquisition.

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Separately, in connection with the acquisition, the Company is also recognizing stock-based compensation expense of \$15 million over a period of four years from the date of the acquisition. This amount is comprised of Yahoo common stock issued to the founders (which had a fair value of \$15 million at the acquisition date). The Yahoo common stock held in escrow was issued to the founders, but is subject to forfeiture and will be released over four years from the date of the acquisition provided they remain employees of the Company (or a successor company).

The allocation of the purchase price of the assets acquired and liabilities assumed based on their fair values was as follows (in thousands):

Cash acquired	\$ 6,019
Other tangible assets acquired	12,057
Amortizable intangible assets:	
Developed technology	17,550
Tradename	1,150
Customer contracts and related relationships	225
Goodwill	<u>131,084</u>
Total assets acquired	168,085
Liabilities assumed	<u>(7,503)</u>
Total	<u>\$ 160,582</u>

The amortizable intangible assets have useful lives not exceeding five years and a weighted average useful life of three years. The purchase price of \$161 million exceeded the estimated fair value of the tangible and identifiable intangible assets and liabilities acquired and, as a result of the allocation, the Company recorded goodwill of \$131 million in connection with this transaction. Goodwill represented the excess of the purchase price over the estimated fair value of the net tangible and identifiable intangible assets acquired and is not deductible for tax purposes. The entire goodwill amount was recorded in the Americas segment.

Other Acquisitions—During the year ended December 31, 2015, the Company acquired one other company which was accounted for as a business combination. The total purchase price for this acquisition was \$23 million. The purchase price allocation of the assets acquired and liabilities assumed based on their estimated fair values was as follows: \$5 million to amortizable intangibles; \$4 million to net liabilities assumed; and the remainder of \$22 million to goodwill. Goodwill represents the excess of the purchase price over the estimated fair value of the net tangible and identifiable intangible assets acquired and is not deductible for tax purposes. The entire goodwill amount was recorded in the EMEA segment.

The Company's business combinations completed during the years ended December 31, 2014 and 2015 did not have a material impact on the Company's consolidated statements of operations, and therefore proforma disclosures have not been presented.

The Company did not make any acquisitions during the year ended December 31, 2016.

Patent Sale and License Agreement

During 2014, the Company entered into a patent sale and license agreement for total cash consideration of \$460 million. The total consideration was allocated based on the estimated relative

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fair value of each of the elements of the agreement: \$61 million was allocated to the sale of patents ("Sold Patents"), \$135 million to the license to existing patents ("Existing Patents") and \$264 million to the license of patents developed or acquired in the five years following the date the Company entered into the agreement ("Capture Period Patents"). The Company recorded \$61 million as a gain on the Sold Patents during 2014.

The amounts allocated to the license of the Existing Patents are being recorded as revenue over the four-year payment period under the license when payments are due. The amounts allocated to the Capture Period Patents are being recorded as revenue over the five-year capture period. The Company recognized \$43 million, \$86 million, and \$86 million in revenue related to the Existing Patents and the Capture Period Patents during the years ended December 31, 2014, 2015, and 2016, respectively.

Patent Sale Agreements

During 2014, the Company entered into patent sale agreements with a wholly-owned affiliate of Alibaba Group pursuant to which the Company sold certain patents for aggregate consideration of \$23.5 million. The gain on sale of these patents are recorded as a part of gain on sale of patents in the consolidated statements of operations.

During 2014, the Company entered into a patent sale agreement with Yahoo Japan pursuant to which the Company sold certain patents for aggregate consideration of \$18 million. The gain on sale of these patents of \$12 million is recorded as a part of gain on sale of patents in the consolidated statements of operations.

During 2015 and 2016, the Company sold certain patents and recorded a gain on sale of patents of approximately \$11 million and \$2 million, respectively.

Sale of Santa Clara Property

During 2016, the Company entered into a purchase agreement to sell certain property located in Santa Clara, California. The total carrying value of the property assets was \$126 million, which mostly pertained to the land, and was reported within the Americas segment. The decision to sell this property was largely based upon a general lack of operational need for the land and recent improvements in market conditions for commercial real estate in the area. The sale under the purchase agreement was finalized on June 16, 2016 for total proceeds of \$246 million, net of closing costs of \$4 million. During the year ended December 31, 2016, the Company recorded a gain of \$120 million, net of closing costs, on the sale of the property assets which is included in gain on sale of patents and land in the Company's consolidated statements of operations.

Pending Sale of the Operating Business to Verizon Communications Inc.

On July 23, 2016, the Company entered into a Stock Purchase Agreement (the "Original Stock Purchase Agreement") with Verizon Communications Inc. ("Verizon"), pursuant to which the Company has agreed to sell, and Verizon has agreed to purchase (the "Sale"), all of the outstanding shares of Yahoo Holdings, Inc., a newly formed wholly-owned subsidiary of the Company ("Yahoo Holdings") (and prior to the sale of Yahoo Holdings to cause Yahoo Holdings to sell to a foreign subsidiary of Verizon all of the equity interests in a foreign subsidiary of Yahoo Holdings that will hold certain foreign subsidiaries relating to the Company's operating business), which, immediately prior to the consummation of the Sale, will own the Company's operating business. Under the Original Stock Purchase Agreement, the aggregate consideration to be paid to the Company by Verizon in connection with the Sale was \$4,825,800,000 in cash, subject to certain adjustments as provided in the Original Stock Purchase Agreement.

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Concurrently with the execution of the Original Stock Purchase Agreement, the Company entered into a Reorganization Agreement (the "Original Reorganization Agreement") with Yahoo Holdings, pursuant to which the Company will transfer to Yahoo Holdings prior to the consummation of the Sale all of its assets and liabilities relating to its operating business, other than specified excluded assets and retained liabilities (the "Reorganization").

On February 20, 2017, the Company and Verizon entered into an Amendment to Stock Purchase Agreement amending the Original Stock Purchase Agreement (the "SPA Amendment" and, together with the Original Stock Purchase Agreement, the "Amended Stock Purchase Agreement"), and, concurrently with the execution of the SPA Amendment, the Company and Yahoo Holdings entered into an Amendment to Reorganization Agreement amending the Original Reorganization Agreement (the "RA Amendment"). Additionally, concurrently with the execution of the SPA Amendment and the RA Amendment, the Company, Yahoo Holdings, and Verizon entered into a Settlement and Release Agreement (the "Settlement and Release Agreement").

The SPA Amendment, among other things, (i) reduced the consideration to be paid by Verizon to the Company in connection with the Sale by \$350,000,000 to \$4,475,800,000, (ii) provided that certain data security incidents to which the Company has been subject will be disregarded for purposes of determining whether certain closing conditions have been satisfied and in determining whether a "Business Material Adverse Effect" has occurred, and (iii) provided that the date after which each of Yahoo and Verizon may terminate the Amended Stock Purchase Agreement if the Closing (as defined in the Amended Stock Purchase Agreement) has not occurred has been extended to July 24, 2017.

The RA Amendment provides, among other things, that the Company and Verizon will each be responsible for 50 percent of certain post-closing cash liabilities related to certain data security incidents and other data breaches incurred by the Company.

Under the terms of the Settlement and Release Agreement, among other things, Verizon released certain claims, subject to certain exceptions, it (and its affiliates and representatives) may have against the Company (or its affiliates and representatives) relating to certain data security incidents and other data breaches incurred by the Company.

Upon completion of the Sale, Verizon will also receive for its benefit and that of its current and certain of its future affiliates, a non-exclusive, worldwide, perpetual, royalty-free license to certain intellectual property not core to the operating business held by Excalibur IP, LLC, a wholly-owned subsidiary of the Company ("Excalibur"), that is not being transferred to Yahoo Holdings with the operating business.

The excluded assets include the Company's cash and marketable securities as of the closing of the Sale, the Company's shares in Alibaba Group and Yahoo Japan, certain other minority equity investments, and all of the equity in Excalibur. The retained liabilities will include the Notes, securityholder litigation, certain director and officer indemnification obligations, and, pursuant to the RA Amendment, 50 percent of certain post-closing cash liabilities related to certain data security incidents and other data breaches incurred by the Company. Following the closing of the Sale, the excluded assets and retained liabilities will remain in the Company which will be renamed Altaba Inc. and will become an independent, publicly traded, management investment company registered under the Investment Company Act of 1940.

The closing of the Sale is subject to certain conditions, including, among others, the approval of the Sale by the Company's stockholders, the closing of the Reorganization, and certain other customary closing conditions.

Note 5 Goodwill

The changes in the carrying amount of goodwill for the years ended December 31, 2015 and 2016 were as follows (in thousands):

	Americas ⁽¹⁾	EMEA ⁽²⁾	Asia Pacific ⁽³⁾	Total
Net balance as of January 1, 2015	\$ 4,322,219	\$ 532,469	\$ 297,882	\$ 5,152,570
Acquisitions and related adjustments	130,450	21,606	—	152,056
Goodwill impairment charge	(3,929,576)	(531,261)	—	(4,460,837)
Foreign currency translation adjustments	(4,207)	(22,814)	(8,654)	(35,675)
Net balance as of December 31, 2015	\$ 518,886	\$ —	\$ 289,228	\$ 808,114
Goodwill impairment charge	(394,901)	—	—	(394,901)
Foreign currency translation adjustments	—	—	2,596	2,596
Net balance as of December 31, 2016	\$ 123,985	\$ —	\$ 291,824	\$ 415,809

- (1) Gross goodwill balances for the Americas segment were \$4.3 billion as of January 1, 2015 and \$4.4 billion as of December 31, 2016. The Americas segment includes accumulated impairment losses of \$4.3 billion as of December 31, 2016.
- (2) Gross goodwill balances for the EMEA segment were \$1.2 billion as of January 1, 2015 and December 31, 2016. The EMEA segment includes accumulated impairment losses of \$630 million as of January 1, 2015, and \$1.2 billion as of December 31, 2016.
- (3) Gross goodwill balances for the Asia Pacific segment were \$457 million as of January 1, 2015 and \$451 million as of December 31, 2016. The Asia Pacific segment includes accumulated impairment losses of \$159 million as of January 1, 2015 and December 31, 2016.

Goodwill Impairment Testing

Goodwill is not amortized but is tested for impairment annually (as of October 31) at the reporting unit level or whenever the Company identifies certain triggering events or circumstances that would more likely than not reduce the estimated fair value of a reporting unit below its carrying amount. Events or circumstances that might indicate an interim evaluation is warranted include, among other things, unexpected adverse business conditions, regulatory changes, loss of key personnel and reporting unit and macro-economic factors such as deterioration in general economic conditions, limitations on accessing capital, fluctuations in foreign exchange rates, or other developments in equity and credit markets.

Goodwill is tested for impairment at the reporting unit level, which is at or one level below the Company's operating segments. The Company identified U.S. & Canada, Latin America, and Tumblr as the reporting units below the Americas operating segment; EMEA is the reporting unit as well as the operating segment; and Taiwan, Hong Kong, Australia & New Zealand, India & Southeast Asia as the reporting units below the Asia Pacific operating segment. These operating segments are the same as the Company's reportable segments.

To test for impairment, the Company uses the two-step quantitative test.

Step One

The first step of the quantitative test involves comparing the estimated fair value of the Company's reporting units to their carrying values, including goodwill.

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To estimate fair value, the company uses the market approach, income approach, or a combination of the two. Under the market approach, the Company utilizes publicly-traded comparable company information to determine revenue and earnings multiples that are used to value the Company's reporting units. Under the income approach, the Company determines fair value based on estimated future cash flows of each reporting unit discounted by an estimated weighted-average cost of capital, reflecting the overall level of inherent risk of a reporting unit and the rate of return an outside investor would expect to earn. The Company bases cash flow projections for each reporting unit using a forecast of cash flows and a terminal value based on the Perpetuity Growth Model.

Step Two

For any reporting units, where the carrying value exceeds the estimated fair value, as determined in step one, the Company performs step two to measure the amount of impairment, if any. The second step of the quantitative test is performed by comparing the carrying value of the goodwill in the reporting unit to its implied fair value. The implied fair value is calculated by allocating all of the assets and liabilities of the reporting unit, including any unrecognized intangible assets, in a hypothetical analysis that calculates the implied fair value of goodwill in the same manner as if the reporting unit was being acquired in a business combination. An impairment charge is recognized for the excess of the carrying value of goodwill over its implied fair value.

2016 Impairment Testing

Interim Test. After recording the goodwill impairment charge for Tumblr during the fourth quarter of 2015, the fair value of the Tumblr reporting unit approximated its carrying value. As such, any significant unfavorable changes in the forecast would result in the fair value being less than the carrying value. During the second quarter of 2016, the Company determined that there were indicators present to suggest that it was more likely than not that the fair value of the Tumblr reporting unit was less than its carrying amount. The significant changes for the Tumblr reporting unit subsequent to the annual goodwill impairment test performed as of October 31, 2015 included a decline in the 2016 and beyond forecasted revenue, operating income and cash flows.

To test the Tumblr reporting unit for impairment, the Company used the two-step quantitative test. Consistent with methodology used for the prior year's annual goodwill impairment testing, the Company estimated the fair value of the Tumblr reporting unit using an income approach which was deemed to be the most indicative of fair value in an orderly transaction between market participants. Under the income approach, the Company determined fair value based on estimated future cash flows of the Tumblr reporting unit discounted by an estimated weighted-average cost of capital, reflecting the overall level of inherent risk of the Tumblr reporting unit and the rate of return an outside investor would expect to earn. The Company based its cash flow projections for the Tumblr reporting unit using a forecast of cash flows and a terminal value based on the Perpetuity Growth Model. The forecast and related assumptions were derived from an updated financial forecast prepared during the second quarter of 2016. As a result of the analysis, the Company concluded that the carrying value of the Tumblr reporting unit exceeded its estimated fair value. The second step of the quantitative test was performed by comparing the carrying value of the goodwill in the Tumblr reporting unit to its implied fair value. The step two quantitative test for the Tumblr reporting unit resulted in an impairment for the Tumblr reporting unit, and the Company recorded a goodwill impairment charge of \$395 million during the second quarter of 2016.

Annual Test. As of October 31, 2016, the Company conducted its annual impairment test and no additional impairment was identified.

The remaining goodwill related to the Tumblr reporting unit as of December 31, 2016 was \$124 million, which is included in the Americas operating segment. As of December 31, 2016, there was also

goodwill remaining for Taiwan, Hong Kong, and Australia & New Zealand reporting units, which are included in the Asia Pacific operating segment.

2015 Impairment Testing

In 2015, the estimated fair values of the reporting units for all reporting units identified, except for Tumblr and Latin America, were estimated using a combination of a market approach and an income approach, giving equal weighting to each. This combination is deemed to be the most indicative of the reporting units' estimated fair value in an orderly transaction between market participants and is consistent with the methodology used for the goodwill impairment test in prior years. For the Tumblr reporting unit, the fair value was estimated using an income approach which was deemed to be the most indicative of fair value in an orderly transaction between market participants. For the Latin America reporting unit, the fair value was estimated using the market approach as the income approach yielded negative cash flows and was not deemed to be comparable. The forecast and related assumptions were derived from the most recent annual financial forecast for which the planning process commenced in the fourth quarter of 2015. The estimated fair values of the Company's Taiwan, Hong Kong, and Australia & New Zealand reporting units exceeded their estimated carrying values and therefore goodwill in those reporting units was not impaired. In 2015, the carrying value exceeded the fair value for the following reporting units: U.S. & Canada, Europe, Tumblr and Latin America. The Company completed an assessment of the implied fair value of these reporting units, which resulted in an impairment of all goodwill for the U.S. & Canada, Europe, and Latin America reporting units and a partial impairment for the Tumblr reporting unit. The Company recorded goodwill impairment charges of \$3,692 million, \$531 million, \$230 million and \$8 million, associated with the U.S. & Canada, Europe, Tumblr, and Latin America reporting units, respectively, for the year ended December 31, 2015. The impairments were a result of a combination of factors, including a sustained decrease in the Company's market capitalization in fourth quarter of 2015 and lower estimated projected revenue and profitability in the near term. The lower estimated projected cash flows and higher discount rates were used to estimate the fair value of each reporting unit affected by such changes.

2014 Impairment Testing

In 2014, as a result of the annual goodwill impairment test, the Company concluded that the carrying value of the Middle East reporting unit, included in the EMEA reportable segment, and the carrying value of the India & Southeast Asia reporting unit included in the Asia Pacific reportable segment both exceeded their respective fair values. As required by the second step of the impairment test, the Company performed an allocation of the fair value to all the assets and liabilities of the reporting unit, including identifiable intangible assets, based on their estimated fair values, to determine the implied fair value of goodwill. Accordingly, the Company recorded a goodwill impairment charge related to the Middle East and India & Southeast Asia reporting units of \$79 million and \$9 million, respectively, during the quarter ended December 31, 2014 for the difference between the carrying value of the goodwill in the reporting unit and its implied fair value with no goodwill remaining in either reporting unit. The impairment resulted from a decline in business conditions in the Middle East and India & Southeast Asia during the latter half of 2014.

Note 6 Intangible Assets, Net

The following table summarizes the Company's intangible assets, net (in thousands):

	December 31, 2015		
	Gross Carrying Amount	Accumulated Amortization ^(*)	Net
Customer, affiliate, and advertiser related relationships	\$ 355,568	\$ (135,513)	\$220,055
Developed technology and patents	170,289	(83,380)	86,909
Tradenames, trademarks, and domain names	67,119	(26,814)	40,305
Total intangible assets, net	<u>\$ 592,976</u>	<u>\$ (245,707)</u>	<u>\$347,269</u>

	December 31, 2016			
	Gross Carrying Amount	Accumulated Amortization ^(*)	Impairment Charge	Net
Customer, affiliate, and advertiser related relationships	\$ 350,896	\$ (181,451)	\$ (66,680)	\$102,765
Developed technology and patents	128,732	(81,489)	—	47,243
Tradenames, trademarks, and domain names	66,631	(34,340)	(20,655)	11,636
Total intangible assets, net	<u>\$ 546,259</u>	<u>\$ (297,280)</u>	<u>\$ (87,335)</u>	<u>\$161,644</u>

(*) Cumulative foreign currency translation adjustments, reflecting movement in the currencies of the underlying entities, totaled approximately \$18 million and \$17 million for the years ended as of December 31, 2015 and 2016, respectively.

Definite-lived intangible assets are carried at cost and are amortized over their estimated useful lives, generally on a straight-line basis, as follows:

- Customer, affiliate, and advertiser related relationships—one to six years;
- Developed technology and patents—three to six years; and
- Tradenames, trademarks, and domain names—three to seven years.

The Company recognized amortization expense for intangible assets of \$132 million, \$137 million, and \$100 million for 2014, 2015, and 2016, respectively, including \$65 million, \$58 million, and \$42 million, respectively, included in cost of revenue-other. Based on the current amount of intangibles subject to amortization, the estimated amortization expense for each of the succeeding years is as follows: 2017: \$76 million; 2018: \$55 million; 2019: \$30 million; and 2020 and after: \$1 million.

Intangibles Impairment Testing

The Company reviews identifiable intangible assets to be held and used for impairment whenever events or changes in circumstances indicate that the carrying value of the assets may not be recoverable. Determination of recoverability is based on the lowest level of identifiable estimated undiscounted cash flows resulting from use of the asset and its eventual disposition. Intangible assets with indefinite useful lives are not amortized but are reviewed for impairment whenever events or changes in circumstances indicate that it is more likely than not that the fair value is less than its carrying amount. If the Company determines that an intangible asset with an indefinite life is more likely than not impaired, a quantitative test comparing the fair value of the indefinite-lived purchased

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intangible asset with its carrying amount is performed. The Company estimates the fair value of indefinite-lived purchased intangible assets using an income approach. Measurement of any impairment losses on both definite-lived and indefinite-lived intangible assets are based on the excess of the carrying value of the asset over its fair value.

As a result of the impairment testing performed in the fourth quarter of 2015, the entire carrying value of the indefinite-lived intangible assets were fully impaired as of December 31, 2015, and the Company did not purchase any indefinite-lived intangibles during 2016. As of December 31, 2016, the Company only had definite-lived intangible assets.

2016 Testing

During the second quarter of 2016, the Company reviewed its Tumblr asset group for impairment as there were events and changes in circumstances that indicated that the carrying value of the long-lived assets may not be recoverable. As a result, the Company performed a quantitative test comparing the fair value of the Tumblr long-lived assets with the carrying amounts and recorded a partial impairment charge of \$87 million associated with its definite-lived intangible assets, which were included within customer, affiliate, and advertiser related relationships and tradenames, trademarks, and domain names in the Americas segment.

In the fourth quarter of 2016, the Company reviewed its definite-lived intangible assets for impairment. No impairment was identified for definite-lived intangibles.

2015 Testing

In the fourth quarter of 2015, the Company reviewed both definite-lived and indefinite-lived intangible assets for impairment. No impairment was identified for definite-lived intangibles. For indefinite-lived intangibles, the Company performed a quantitative test comparing the fair value of the indefinite-lived intangible assets with their carrying amount and recorded an impairment charge of \$15 million related to certain indefinite-lived intangible assets in the EMEA segment. As a result, the entire carrying value of the indefinite-lived intangible assets was fully impaired as of December 31, 2015.

Note 7 Basic and Diluted Net Income (Loss) Attributable to Yahoo! Inc. Common Stockholders Per Share

Basic and diluted net income (loss) attributable to Yahoo! Inc. common stockholders per share is computed using the weighted average number of common shares outstanding during the period, excluding net income attributable to participating securities (restricted stock units granted under the Directors' Stock Plan (the "Directors' Plan")). Diluted net income (loss) per share is computed using the weighted average number of common shares and, if dilutive, potential common shares outstanding during the period. Potential common shares are calculated using the treasury stock method and consist of unvested restricted stock and shares underlying unvested restricted stock units, the incremental common shares issuable upon the exercise of stock options, and shares to be purchased under the 1996 Employee Stock Purchase Plan (the "Employee Stock Purchase Plan"). The Company calculates potential tax windfalls and shortfalls by including the impact of deferred tax assets.

The Company takes into account the effect on consolidated net income (loss) per share of dilutive securities of entities in which the Company holds equity interests that are accounted for using the equity method.

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For 2014, potentially dilutive securities representing approximately 3 million were excluded from the computation of diluted earnings per share for these periods because their effect would have been anti-dilutive.

The Company has the option to pay cash, issue shares of common stock or any combination thereof for the aggregate amount due upon conversion of the Notes. The Company's intent is to settle the principal amount of the Notes in cash upon conversion. As a result, upon conversion of the Notes, only the amounts payable in excess of the principal amounts of the Notes are considered in diluted earnings per share under the treasury stock method.

The denominator for diluted net income (loss) per share also does not include any effect from the note hedges. In future periods, the denominator for diluted net income (loss) per share will exclude any effect of the note hedges, if their effect would be anti-dilutive. In the event an actual conversion of any or all of the Notes occurs, the shares that would be delivered to the Company under the note hedges are designed to reduce the dilutive effect of the shares that the Company would issue under the Notes. See Note 11—"Convertible Notes" for additional information.

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

	Years Ended December 31,		
	2014	2015	2016
Basic:			
Numerator:			
Net income (loss) attributable to Yahoo! Inc.	\$ 7,521,731	\$ (4,359,082)	\$ (214,321)
Less: Net income allocated to participating securities	(68)	—	(4)
Net income (loss) attributable to Yahoo! Inc. common stockholders—basic	<u>\$ 7,521,663</u>	<u>\$ (4,359,082)</u>	<u>\$ (214,325)</u>
Denominator:			
Weighted average common shares	987,819	939,141	949,843
Net income (loss) attributable to Yahoo! Inc. common stockholders per share—basic	<u>\$ 7.61</u>	<u>\$ (4.64)</u>	<u>\$ (0.23)</u>
Diluted:			
Numerator:			
Net income (loss) attributable to Yahoo! Inc.	\$ 7,521,731	\$ (4,359,082)	\$ (214,321)
Less: Net income allocated to participating securities	(67)	—	—
Less: Effect of dilutive securities issued by equity investees	(43,689)	—	—
Net income (loss) attributable to Yahoo! Inc. common stockholders—diluted	<u>\$ 7,477,975</u>	<u>\$ (4,359,082)</u>	<u>\$ (214,321)</u>
Denominator:			
Denominator for basic calculation	987,819	939,141	949,843
Weighted average effect of Yahoo! Inc. dilutive securities:			
Restricted stock units	12,365	—	—
Stock options and employee stock purchase plan ^(*)	3,924	—	—
Denominator for diluted calculation	<u>1,004,108</u>	<u>939,141</u>	<u>949,843</u>
Net income (loss) attributable to Yahoo! Inc. common stockholders per share—diluted	<u>\$ 7.45</u>	<u>\$ (4.64)</u>	<u>\$ (0.23)</u>

(*) At the beginning of the first quarter of 2015, the Company discontinued the offering of the Employee Stock Purchase Plan to its employees. See Note 14—"Employee Benefits" for additional information.

Note 8 Investments in Equity Interests Accounted for Using the Equity Method of Accounting

The following table summarizes the Company's investments in equity interests using the equity method of accounting as of December 31, 2015 and 2016 (dollars in thousands):

	December 31, 2015	Percent Ownership	December 31, 2016	Percent Ownership
Yahoo Japan	\$ 2,496,657	35.5%	\$ 3,192,884	35.5%
Other	6,572	20%	—	0%
Total	<u>\$ 2,503,229</u>		<u>\$ 3,192,884</u>	

Yahoo Japan

During April 1996, the Company signed a joint venture agreement with Softbank, as amended in September 1997, which formed Yahoo Japan. Yahoo Japan was formed to establish and manage a local version of Yahoo in Japan.

The investment in Yahoo Japan is accounted for using the equity method and the total investment, including net tangible assets, identifiable intangible assets, and goodwill, is classified as part of the investments in equity interests balance on the Company's consolidated balance sheets. The Company records its share of the results of Yahoo Japan and any related amortization expense, one quarter in arrears within earnings in equity interests in the consolidated statements of operations.

The Company makes adjustments to the earnings in equity interests line in the consolidated statements of operations for any material differences between U.S. GAAP and International Financial Reporting Standards ("IFRS") issued by the International Accounting Standards Board, the standards by which Yahoo Japan's financial statements are prepared.

The fair value of the Company's ownership interest in the common stock of Yahoo Japan, based on the quoted stock price, was approximately \$7.7 billion as of December 31, 2016.

During the years ended December 31, 2014, 2015, and 2016, the Company received cash dividends from Yahoo Japan in the amounts of \$84 million, \$142 million, and \$157 million, net of withholding taxes, respectively, which were recorded as reductions to the Company's investment in Yahoo Japan.

During the year ended December 31, 2014, the Company sold data center assets and assigned a data center lease to Yahoo Japan for cash proceeds of \$11 million and recorded a net gain of approximately \$5 million.

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The following tables present summarized financial information derived from Yahoo Japan's consolidated financial statements, which are prepared on the basis of IFRS. The Company has made adjustments to the Yahoo Japan summarized financial information to address differences between IFRS and U.S. GAAP that materially impact the summarized financial information below. Any other differences between U.S. GAAP and IFRS did not have any material impact on the Yahoo Japan's summarized financial information presented below (in thousands):

	Twelve Months Ended September 30,		
	2014	2015	2016
Operating data:			
Revenue	\$ 4,046,412	\$ 3,769,410	\$ 4,368,106
Gross profit	\$ 3,262,450	\$ 2,983,880	\$ 3,415,075
Income from operations	\$ 1,896,368	\$ 1,609,403	\$ 1,515,171
Net income	\$ 1,236,583	\$ 1,092,657	\$ 1,020,168
Net income attributable to Yahoo Japan	\$ 1,225,221	\$ 1,092,048	\$ 1,028,076
Balance sheet data:			
		September 30,	
		2015	2016
Current assets		\$ 6,150,688	\$ 7,155,657
Long-term assets		\$ 2,430,699	\$ 4,332,498
Current liabilities		\$ 2,003,960	\$ 2,866,924
Long-term liabilities		\$ 245,834	\$ 435,253
Noncontrolling interests		\$ 165,601	\$ 209,363

Since acquiring its equity interest in Yahoo Japan, the Company has recorded cumulative earnings in equity interests, net of dividends received and related taxes on dividends, of \$3.3 billion, \$3.7 billion, and \$4 billion as of December 31, 2014, 2015, and 2016, respectively.

Under technology and trademark license and other commercial arrangements with Yahoo Japan, the Company records revenue from Yahoo Japan based on a percentage of advertising revenue earned by Yahoo Japan. The Company recorded revenue from Yahoo Japan of approximately \$253 million, \$228 million, and \$257 million, respectively, for the years ended December 31, 2014, 2015, and 2016. As of December 31, 2015 and 2016, the Company had net receivable balances from Yahoo Japan of approximately \$37 million and \$46 million, respectively.

Alibaba Group

Equity Investment in Alibaba Group. Prior to the closing of the Alibaba Group IPO in September 2014, the Company's investment in Alibaba Group was accounted for using the equity method, and the total investment, including net tangible assets, identifiable intangible assets, and goodwill, was classified as part of investments in equity interests balance on the Company's consolidated balance sheets. Prior to the Alibaba Group IPO, the Company recorded its share of the results of Alibaba Group one quarter in arrears within earnings in equity interests in the consolidated statements of operations, including any related tax impacts related to the earnings in equity interest. Subsequent to the Alibaba Group IPO, the Company reflects the investment in Alibaba Group as an available-for-sale equity security on the consolidated balance sheet and adjusts the investment to fair value each quarterly reporting period with changes in fair value recorded within other comprehensive income

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(loss), net of tax. See Note 2—"Marketable Securities, Investments and Fair Value Disclosures" and the consolidated statements of comprehensive income (loss) for additional information. The Company does not currently intend to sell its shares of Alibaba Group in response to changes in the market price of the shares.

Technology and Intellectual Property License Agreement. As a result of the Alibaba Group IPO, Alibaba Group's obligation to make royalty payments under the TIPLA ceased on September 24, 2014 and the Company's recognition of the remaining TIPLA deferred revenue was completed on September 18, 2015. The Company recognized approximately \$281 million and \$199 million for the years ended December 31, 2014 and 2015, respectively, related to the TIPLA.

Note 9 Foreign Currency Derivative Financial Instruments

The Company uses derivative financial instruments, primarily forward contracts (and previously including option contracts), to mitigate risk associated with adverse movements in foreign currency exchange rates.

The Company records all derivatives in the consolidated balance sheets at fair value, with assets included in prepaid expenses and other current assets or other long-term assets, and liabilities included in accrued expenses and other current liabilities or other long-term liabilities. The Company's accounting treatment for these instruments is based on whether or not the instruments are designated as a hedging instrument. The effective portions of net investment hedges are recorded in other comprehensive income (expense) as a part of the cumulative translation adjustment. The effective portions of cash flow hedges are recorded in accumulated other comprehensive income until the hedged item is recognized in revenue on the consolidated statements of operations when the underlying hedged revenue is recognized. Any ineffective portions of net investment hedges and cash flow hedges are recorded in other income (expense), net on the Company's consolidated statements of operations. For balance sheet hedges, changes in the fair value are recorded in other income (expense), net on the Company's consolidated statements of operations.

The Company has master netting arrangements, which are designed to reduce credit risk by permitting net settlement of foreign exchange contracts with the same counterparty, subject to applicable requirements. The Company presents its derivative assets and liabilities at their gross fair values on the consolidated balance sheets. The Company is not required to pledge, and is not entitled to receive, cash collateral related to these derivative transactions.

Designated as Hedging Instruments

Net Investment Hedges. The Company currently hedges, on an after-tax basis, a portion of its net investment in Yahoo Japan with forward contracts to reduce the risk that its investment in Yahoo Japan will be adversely affected by foreign currency exchange rate fluctuations. The total of the after-tax net investment hedge was less than the Yahoo Japan investment balance as of both December 31, 2015 and 2016. As such, the net investment hedge was considered to be effective.

Cash Flow Hedges. The Company entered into foreign currency forward contracts designated as cash flow hedges of varying maturities through January 31, 2017. The cash flow hedges were considered to be effective as of December 31, 2014, 2015, and 2016. All of the forward contracts designated as cash flow hedges that were settled were reclassified to revenue within fiscal years 2014, 2015 and 2016, and the Company recognized the hedge forecasted revenue related to these contacts as of December 31, 2014, 2015, and 2016. These trades were de-designated as of December 31, 2016 and all current outstanding cash flow hedges have been reclassified into revenue

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during 2016. For the years ended December 31, 2014, 2015, and 2016, the amounts recorded in other income (expense), net as a result of hedge ineffectiveness were not material.

Not Designated as Hedging Instruments

Balance Sheet Hedges. The Company hedges certain of its net recognized foreign currency assets and liabilities with foreign exchange forward contracts to reduce the risk that its earnings and cash flows will be adversely affected by changes in foreign currency exchange rates. These derivative instruments hedge assets and liabilities, including intercompany transactions, which are denominated in foreign currencies.

Notional amounts of the Company's outstanding derivative contracts as of December 31, 2014, 2015, and 2016 (in millions) were as follows:

	December 31,		
	2014	2015	2016
Derivatives designated as hedging instruments:			
Net investment hedge forward and option contracts	\$ 1,647	\$ 1,150	\$ 200
Cash flow hedge forwards	\$ 222	\$ 75	\$ 19
Derivatives not designated as hedging instruments:			
Balance sheet hedges	\$ 243	\$ 225	\$ 342

Foreign currency derivative activity for the year ended December 31, 2015 was as follows (in millions):

	Beginning Fair Value	Settlement Payment (Receipt), Net	Gain (Loss) Recorded in Other Income (Expense), Net	Gain (Loss) Recorded in Other Comprehensive Income (Loss)	Gain (Loss) Recorded in Revenue	Ending Fair Value
Derivatives designated as hedging instruments:						
Net investment hedges	\$ 185	\$ (117)	\$ 1	\$ 5 (*)	\$ —	\$ 74
Cash flow hedges	\$ 8	\$ —	\$ (1)	\$ (2)	\$ (3)	\$ 2
Derivatives not designated as hedging instruments:						
Balance sheet hedges	\$ 4	\$ (21)	\$ 19	\$ —	\$ —	\$ 2

(*) This amount does not reflect the tax impact of \$2 million recorded during the twelve months ended December 31, 2015. The \$3 million after tax impact of the gain recorded within other comprehensive income (loss) was included in accumulated other comprehensive income on the Company's consolidated balance sheets as of December 31, 2015.

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Foreign currency derivative activity for the year ended December 31, 2016 was as follows (in millions):

	Beginning Fair Value	Settlement Payment (Receipt), Net	Gain (Loss) Recorded in Other Income (Expense), Net	Gain (Loss) Recorded in Other Comprehensive Income (Loss)		Gain (Loss) Recorded in Revenue	Ending Fair Value
Derivatives designated as hedging instruments:							
Net investment hedges	\$ 74	\$ (30)	\$ —	\$ (53)	(*)	\$ —	\$ (9)
Cash flow hedges	\$ 2	\$ 5	\$ 1	\$ (1)		\$ (7)	\$ —
Derivatives not designated as hedging instruments:							
Balance sheet hedges	\$ 2	\$ (4)	\$ 13	\$ —		\$ —	\$ 11

(*) This amount does not reflect the tax impact of \$19 million recorded during the twelve months ended December 31, 2016. The \$34 million after tax impact of the loss recorded within other comprehensive income (loss) was included in accumulated other comprehensive income on the Company's consolidated balance sheets as of December 31, 2016.

Foreign currency derivative contracts balance sheet location and ending fair value was as follows (in millions):

	Balance Sheet Location	December 31, 2015	December 31, 2016
Derivatives designated as hedging instruments:			
Net investment hedges	Asset(1) Liability(2)	\$ 79 \$ (5)	\$ — \$ (9)
Cash flow hedges	Asset(1) Liability(2)	\$ 2 \$ —	\$ — \$ —
Derivatives not designated as hedging instruments:			
Balance sheet hedges	Asset(1) Liability(2)	\$ 3 \$ (1)	\$ 12 \$ (1)

(1) Included in prepaid expenses and other current assets or other long-term assets and investments on the consolidated balance sheets.

(2) Included in other accrued expenses and current liabilities or other long-term liabilities on the consolidated balance sheets.

See the Foreign Currency and Derivative Financial Instruments section within Note 1—"The Company and Summary of Significant Accounting Policies" for additional information.

Note 10 Credit Agreement

On May 18, 2016, the Company delivered notice to Citibank to terminate its credit agreement with Citibank, N.A., as Administrative Agent, entered into on October 19, 2012 (as amended on October 10,

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2013, October 9, 2014, and July 24, 2015) which provided for a \$750 million unsecured revolving credit facility. The termination of the credit agreement took effect on May 23, 2016.

Note 11 Convertible Notes

0.00% Convertible Senior Notes

As of December 31, 2016, the Company had \$1.4 billion in principal amount of Notes outstanding. In 2013, the Company issued the Notes. The Notes were sold under a purchase agreement, dated November 20, 2013, with J.P. Morgan Securities LLC and Goldman, Sachs & Co., as representatives of the several initial purchasers named therein (collectively, the "Initial Purchasers"). The Notes were sold to the Initial Purchasers for resale to qualified institutional buyers pursuant to Rule 144A under the Securities Act of 1933, as amended.

In connection with the issuance of the Notes, the Company entered into an indenture (the "Indenture") with The Bank of New York Mellon Trust Company, N.A., as trustee. Under the Indenture, the Notes are senior unsecured obligations of Yahoo, the Notes do not bear regular interest, and the principal amount of the Notes was issued at par value. The Notes mature on December 1, 2018, unless previously purchased or converted in accordance with their terms prior to such date. The Company may not redeem the Notes prior to maturity. However, holders of the Notes may convert them at certain times and upon the occurrence of certain events in the future, as outlined in the indenture governing the Notes. Holders of the Notes who convert in connection with a "make-whole fundamental change," as defined in the Indenture, may require Yahoo to purchase for cash all or any portion of their Notes at a purchase price equal to 100 percent of the principal amount, plus accrued and unpaid special interest as defined in the Indenture, if any. The Notes are convertible, subject to certain conditions, into shares of Yahoo common stock at an initial conversion rate of 18.7161 shares per \$1,000 principal amount of Notes (which is equivalent to an initial conversion price of approximately \$53.43 per share), subject to adjustment upon the occurrence of certain events. Certain corporate events described in the Indenture may increase the conversion rate for holders who elect to convert their Notes in connection with such corporate event should they occur. Upon conversion of the Notes, holders will receive cash, shares of Yahoo's common stock, or a combination thereof, at Yahoo's election. The Company's intent is to settle the principal amount of the Notes in cash upon conversion. If the conversion value exceeds the principal amount, the Company would deliver shares of its common stock with respect to the remainder of its conversion obligation in excess of the aggregate principal amount (conversion spread). The conversion spread will be included in the denominator for the computation of diluted net income per common share, using the treasury stock method. As of December 31, 2016, none of the conditions allowing holders of the Notes to convert had been met.

In accounting for the issuance of the Notes, the Company separated the Notes into liability and equity components. The carrying amount of the liability component was calculated by measuring the estimated fair value of a similar liability that does not have an associated convertible feature. The carrying amount of the equity component representing the conversion option was determined by deducting the fair value of the liability component from the face value of the Notes as a whole. The excess of the principal amount of the liability component over its carrying amount ("debt discount") is amortized to interest expense over the term of the Notes using the effective interest method with an effective interest rate of 5.26 percent per annum. The equity component is not remeasured as long as it continues to meet the conditions for equity classification.

In accounting for the transaction costs related to the Note issuance, the Company allocated the total amount incurred to the liability and equity components based on their relative values. Issuance costs

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attributable to the \$1.4 billion liability component are being amortized to expense over the term of the Notes, and issuance costs attributable to the \$306 million equity component were included with the equity component in stockholders' equity. Additionally, the Company recorded a deferred tax liability of \$37 million on a portion of the equity component transaction costs which are deductible for tax purposes.

The Notes consist of the following (in thousands):

	December 31, 2015	December 31, 2016
Liability component:		
Principal	\$ 1,437,500	\$ 1,437,500
Less: note discount	(204,015)	(137,555)
Net carrying amount	<u>\$ 1,233,485</u>	<u>\$ 1,299,945</u>
Equity component(*)	<u>\$ 305,569</u>	<u>\$ 305,569</u>

(*) Recorded on the consolidated balance sheet within additional paid-in capital.

The following table sets forth total interest expense recognized related to the Notes (in thousands):

	Years Ended December 31,		
	2014	2015	2016
Accretion of convertible note discount	<u>\$ 59,838</u>	<u>\$ 63,061</u>	<u>\$ 66,461</u>

The estimated fair value of the Notes, which was determined based on inputs that are observable in the market (Level 2), and the carrying value of debt instruments (the carrying value excludes the equity component of the Notes classified in equity) were as follows (in thousands):

	December 31, 2015		December 31, 2016	
	Fair Value	Carrying Value	Fair Value	Carrying Value
Convertible senior notes	\$ 1,250,124	\$ 1,233,485	\$ 1,314,876	\$ 1,299,945

Note Hedge Transactions and Warrant Transactions

The Company entered into note hedge transactions with certain option counterparties (the "Counterparties") to reduce the potential dilution with respect to Yahoo's common stock upon conversion of the Notes or to offset any cash payment the Company is required to make in excess of the principal amount of converted Notes. Separately, the Company also entered into privately negotiated warrant transactions with the Counterparties giving them the right to purchase common stock from the Company. The warrant transactions could separately have a dilutive effect with respect to Yahoo's common stock to the extent that the market price per share of its common stock exceeds the strike price of the warrants. The initial strike price of the warrants was \$71.24. Counterparties to the warrants may make adjustments to certain terms of the warrants upon the occurrence of specified events, including the announcement of the Stock Purchase Agreement, if the event results in a material change to the trading price of Yahoo's common stock or the value of the warrants. To date, two Counterparties have given the Company notices of adjustments reducing their warrant exercise prices. The warrants begin to expire in March 2019.

Note 12 Commitments and Contingencies

Lease Commitments. The Company leases office space and data centers under operating and capital lease agreements with original lease periods of up to 15 years which expire between 2017 and 2025.

Rent expense for all operating leases was approximately \$86 million, \$77 million, and \$60 million for 2014, 2015, and 2016, respectively.

Many of the Company's leases contain one or more of the following options which the Company can exercise at the end of the initial lease term: (i) renewal of the lease for a defined number of years at the then fair market rental rate or at a slight discount to the fair market rental rate; (ii) purchase of the property at the then fair market value; or (iii) right of first offer to lease additional space that becomes available.

A summary of gross and net lease commitments as of December 31, 2016 was as follows (in millions):

	Gross Operating Lease Commitments	Sublease Income	Net Operating Lease Commitments
Years ending December 31,			
2017	\$ 103	\$ (16)	\$ 87
2018	75	(12)	63
2019	60	(9)	51
2020	47	(7)	40
2021	37	(5)	32
Due after 5 years	86	(2)	84
Total gross and net lease commitments	<u>\$ 408</u>	<u>\$ (51)</u>	<u>\$ 357</u>

	Capital Lease Commitments
Years ending December 31,	
2017	\$ 11
2018	9
2019	5
2020	—
2021	—
Due after 5 years	3
Gross capital lease commitments	\$ 28
Less: interest	5
Net capital lease commitments included in other accrued expenses and current liabilities and other long-term liabilities	<u>\$ 23</u>

Affiliate Commitments. The Company is obligated to make payments, which represent TAC, to its Affiliates. As of December 31, 2016, these commitments totaled \$925 million, of which \$300 million will be payable in 2017, \$300 million will be payable in 2018, \$300 million will be payable in 2019, and \$25 million will be payable in 2020.

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Non-cancelable Obligations. The Company is obligated to make payments under various non-cancelable arrangements with vendors and other business partners, principally for content, bandwidth, and marketing arrangements. As of December 31, 2016, these commitments totaled \$172 million, of which \$86 million will be payable in 2017, \$55 million will be payable in 2018, \$17 million will be payable in 2019, \$4 million will be payable in 2020, \$3 million will be payable in 2021, and \$7 million will be payable thereafter.

Intellectual Property Rights. The Company is committed to make certain payments under various intellectual property arrangements of up to \$12 million through 2023.

Note Payable Obligations. The Company is obligated to make payments for notes payable related to two buildings in Sunnyvale, California. The estimated timing and amounts of payments totaled \$52 million, of which \$5 million will be payable each year from 2017 through 2021, and \$27 million will be payable thereafter.

Standby Letters of Credit. As of December 31, 2016, the Company had outstanding potential obligations relating to standby letters of credit of \$38 million. Standby letters of credit are financial guarantees provided by third parties for ongoing operating liabilities such as leases, utility bills, taxes, and insurance. If any letter of credit is drawn upon by a beneficiary, the Company is obligated to reimburse the provider of the guarantee. The standby letters of credit generally renew annually.

Other Commitments. In the ordinary course of business, the Company may provide indemnifications of varying scope and terms to customers, vendors, lessors, joint ventures and business partners, purchasers of assets or subsidiaries and other parties with respect to certain matters, including, but not limited to, losses arising out of the Company's breach of agreements or representations and warranties made by the Company, services to be provided by the Company, intellectual property infringement claims made by third parties or, with respect to the sale, lease, or assignment of assets, or the sale of a subsidiary, matters related to the Company's conduct of the business and tax matters prior to the sale, lease or assignment. In addition, the Company has entered into indemnification agreements with its directors and certain of its officers that will require the Company, among other things, to indemnify them against certain liabilities that may arise by reason of their status or service as directors or officers. The Company has also agreed to indemnify certain former officers, directors, and employees of acquired companies in connection with the acquisition of such companies. The Company maintains director and officer insurance, which may cover certain liabilities arising from its obligation to indemnify its current and former directors and officers, and former directors and officers of acquired companies, in certain circumstances. It is not possible to determine the aggregate maximum potential loss under these indemnification agreements due to the limited history of prior indemnification claims and the unique facts and circumstances involved in each particular agreement. Such indemnification agreements might not be subject to maximum loss clauses. Historically, the Company has not incurred material costs as a result of obligations under these agreements and it has not accrued any material liabilities related to such indemnification obligations in the Company's consolidated financial statements.

As of December 31, 2016, the Company did not have any relationships with unconsolidated entities or financial partnerships, such as entities often referred to as structured finance or special purpose entities, established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes. Accordingly, the Company is not exposed to any financing, liquidity, market, or credit risk that could arise if the Company had such relationships. In addition, the Company identified no variable interests currently held in entities for which it is the primary beneficiary.

Legal Contingencies

Patent Matters. From time to time, third parties assert patent infringement claims against the Company. Currently, the Company is engaged in lawsuits regarding patent issues and has been notified of other potential patent disputes.

Stockholder and Securities Matters. On April 22, 2015, a stockholder action captioned *Cathy Buch v. David Filo, et al.*, was filed in the Delaware Court of Chancery against the Company and certain of its current and former directors. The complaint asserts both derivative claims, purportedly on behalf of Yahoo, and class action claims, purportedly on behalf of the plaintiff and all similarly situated stockholders, relating to the termination of, and severance payments made to, the Company's former chief operating officer, Henrique de Castro. The plaintiff claims that certain current and former board members allegedly violated or acquiesced in the violation of the Company's Bylaws when Mr. de Castro was terminated without cause, and breached fiduciary duties by allowing Yahoo to make allegedly false and misleading statements regarding the value of his severance. The plaintiff has also asserted claims against Mr. de Castro. The plaintiff seeks to have the full Board reassess the propriety of terminating Mr. de Castro without cause, potentially leading to disgorgement in favor of the Company of the severance paid to Mr. de Castro, an equitable accounting, monetary damages, declaratory relief, injunctive relief, and an award of attorneys' fees and costs. The Company and the individual defendants filed a motion to dismiss the action, which the Court denied in part and granted in part on July 27, 2016.

On January 27, 2016, a stockholder action captioned *UCFW Local 1500 Pension Fund v. Marissa Mayer, et al.*, was filed in the U.S. District Court for the Northern District of California against the Company, and certain current and former officers and directors of the Company. On April 29, 2016, the plaintiff filed an amended complaint. The amended complaint asserts derivative claims, purportedly on behalf of Yahoo, for violations of the Investment Company Act of 1940, breach of fiduciary duty, unjust enrichment, violations of Delaware General Corporation Law Section 124, and violations of California Business & Professions Code Section 17200. The amended complaint seeks to rescind Yahoo's employment contracts with the individual defendants because those defendants allegedly caused Yahoo to illegally operate as an unregistered investment company. The plaintiff seeks disgorgement in favor of Yahoo, rescission, and an award of attorneys' fees and costs. In addition, the amended complaint asserts a direct claim against Yahoo for alleged violation of Delaware General Corporation Law Section 124(1), based on the allegation that Yahoo has illegally operated as an unregistered investment company. Pursuant to this claim, the plaintiff seeks injunctive relief preventing Yahoo from entering into any future contracts, including any contracts to sell its assets. On October 19, 2016, the District Court dismissed the amended complaint, with leave to amend. On November 18, 2016, the plaintiff filed a second amended complaint seeking substantially the same relief as it did in the amended complaint. On February 10, 2017, the District Court dismissed the second amended complaint with prejudice.

On January 24, 2017, a stockholder action captioned *Madrack v. Yahoo! Inc., et al.*, was filed in the U.S. District Court for the Northern District of California against the Company and certain of its current officers. The plaintiff purports to represent a class of investors who purchased or otherwise acquired the Company's stock between November 12, 2013 and December 14, 2016. The complaint asserts claims under Sections 10(b) and 20(a) of the Securities Exchange Act of 1934. The complaint alleges that the Company's public disclosures about its business, operations, and compliance policies were materially misleading in light of the Security Incidents discussed under "Security Incidents Contingencies" below. The complaint seeks class certification, damages, interest, and an award of attorneys' fees and costs.

On February 9, 2017, a stockholder derivative action captioned *The LR Trust, et al. v. Marissa Mayer, et al.*, was filed in the Superior Court of California for the County of Santa Clara. The complaint asserts

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claims for breach of fiduciary duty, purportedly on behalf of the Company, against certain of the Company's current and former directors and officers. The complaint alleges that defendants failed to disclose the Security Incidents discussed under "Security Incidents Contingencies" below and caused or allowed the Company to issue materially false and misleading statements in its public filings and other public statements. The complaint seeks unspecified damages, indemnification from the individual defendants, disgorgement of compensation obtained by defendants, an award of attorneys' fees and costs, and other related equitable and injunctive relief.

On February 16, 2017, a stockholder derivative action captioned *Summer v. Marissa Mayer, et al.*, was filed in the U.S. District Court for the Northern District of California purportedly on behalf of the Company against certain of its current and former directors and officers. On February 17, 2017, a substantially identical stockholder derivative action captioned *Bowser v. Marissa Mayer, et al.*, was filed in the U.S. District Court for the Northern District of California against the same defendants. The complaints allege that defendants failed to disclose the Security Incidents discussed under "Security Incidents Contingencies" below and caused or allowed the Company to issue materially false and misleading statements in its public filings and other public statements. The complaints assert derivative claims, purportedly on behalf of the Company, for breach of fiduciary duty, unjust enrichment, and violations of Sections 14(a) and 20(a) of the Securities Exchange Act of 1934. The complaints seek unspecified damages, to enjoin defendants from proceeding with, consummating, or closing the transactions contemplated by the Amended Stock Purchase Agreement with Verizon, disgorgement of profits and compensation obtained by the defendants, an award of attorneys' fees and costs, and other related injunctive and equitable forms of relief.

On February 20, 2017, a stockholder derivative action captioned *Oklahoma Firefighters Pension and Retirement System v. Eric Brandt, et al.*, was filed in the Delaware Court of Chancery purportedly on behalf of the Company and against certain of its current officers and directors. The complaint asserts derivative claims for breach of fiduciary duty. The complaint alleges the defendants violated their fiduciary duties by, among other things, causing or allowing the Company to issue materially false and misleading public statements and failing to disclose the Security Incidents in the Company's public disclosures and in representations and warranties provided to Verizon in connection with the Original Stock Purchase Agreement. The complaint seeks unspecified damages, equitable and injunctive relief, and an award to plaintiff of the costs and disbursements of the action, including but not limited to attorneys' fees and expenses.

TCPA Litigation Concerning Yahoo Messenger. On March 21, 2014 and April 16, 2014, civil complaints were filed in the U.S. District Court for the Northern District of Illinois by plaintiffs Rachel Johnson and Zenaida Calderin, respectively, against the Company, alleging that the process by which Yahoo Messenger sends a notification SMS message in addition to delivering a user's instant message to a recipient's cellular telephone constitutes a violation of the Telephone Consumer Protection Act ("TCPA"), 47 U.S.C. § 227. The penalty per violation ranges from \$500 to \$1,500. The complaints, which were consolidated, seek statutory damages for a purported class of plaintiffs. In January 2016, the District Court denied class certification treatment proposed by plaintiff Calderin, who accepted a \$1,500 offer of judgment to resolve her case in its entirety. The District Court certified a class proposed by plaintiff Johnson comprising more than 300,000 potential members. The Company sought permission from the United States Court of Appeals for the Seventh Circuit to appeal the District Court's certification order, which the Court of Appeals denied. No decision has been made on the merits of plaintiffs' claims, which the Company is defending vigorously. The Company also previously defended related litigation in the United States District Court for the Southern District of California, which denied class certification in September 2015; that case was dismissed with prejudice in March 2016.

General. The Company is regularly involved in claims, suits, government investigations, and proceedings arising from the ordinary course of the Company's business, including actions with

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respect to intellectual property claims, privacy, consumer protection, information security, data protection or law enforcement matters, tax matters, labor and employment claims, commercial claims, as well as actions involving content generated by users, stockholder derivative actions, purported class action lawsuits, and other matters.

The Company has determined, based on current knowledge, that the amount or range of reasonably possible losses, including reasonably possible losses in excess of amounts already accrued, is not reasonably estimable with respect to certain matters described above. The Company has also determined, based on current knowledge, that the aggregate amount or range of losses that are estimable with respect to the Company's legal proceedings, including the matters described above, would not have a material adverse effect on the Company's consolidated financial position, results of operations or cash flows. Amounts accrued as of December 31, 2016 were not material. The ultimate outcome of legal proceedings involves judgments, estimates and inherent uncertainties, and cannot be predicted with certainty. In the event of a determination adverse to Yahoo, its subsidiaries, directors, or officers in these matters, the Company may incur substantial monetary liability, and be required to change its business practices. Either of these events could have a material adverse effect on the Company's financial position, results of operations, or cash flows. The Company may also incur substantial legal fees, which are expensed as incurred, in defending against these claims.

Security Incidents Contingencies

On September 22, 2016, the Company disclosed that a copy of certain user account information for approximately 500 million user accounts was stolen from Yahoo's network in late 2014 (the "2014 Security Incident"). On December 14, 2016, the Company disclosed that, based on its outside forensic expert's analysis of data files provided to the Company in November 2016 by law enforcement, the Company believes an unauthorized third party stole data associated with more than one billion user accounts in August 2013 (the "2013 Security Incident"). In November and December 2016, the Company disclosed that based on an investigation by its outside forensic experts, it believes an unauthorized third party accessed the Company's proprietary code to learn how to forge certain cookies. The outside forensic experts have identified approximately 32 million user accounts for which they believe forged cookies were used or taken in 2015 and 2016 (the "Cookie Forging Activity"). The 2013 Security Incident, the 2014 Security Incident, and the Cookie Forging Activity are collectively referred to herein as the "Security Incidents."

To date, approximately 43 putative consumer class action lawsuits have been filed against the Company in U.S. federal and state courts, and in foreign courts, relating to the Security Incidents. The plaintiffs, who purport to represent various classes of users, generally claim to have been harmed by the Company's alleged actions and/or omissions in connection with the Security Incidents and assert a variety of common law and statutory claims seeking monetary damages or other related relief.

In addition, as described above, one putative stockholder class action has been filed against the Company and certain current officers of the Company and four stockholder derivative actions have been filed purportedly on behalf of the Company against its current and former directors and officers, each asserting claims related to the Security Incidents.

Additional lawsuits and claims related to the Security Incidents may be asserted by or on behalf of users, partners, shareholders, or others seeking damages or other related relief.

While a loss from these matters is reasonably possible, the Company cannot reasonably estimate a range of possible losses related to these legal proceedings at this time because the legal proceedings remain in the early stages, alleged damages have not been specified, there is uncertainty as to the likelihood of a class or classes being certified or the ultimate size of any class if certified, and there

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are significant factual and legal issues to be resolved. Based on current information, the Company does not believe that a loss from these matters is probable and therefore has not recorded an accrual for litigation or other contingencies relating to the Security Incidents. The Company will continue to evaluate information as it becomes known and will record an accrual for estimated losses at the time or times it is determined that a loss is both probable and reasonably estimable.

Note 13 Stockholders' Equity

The Board has the authority to issue up to 10 million shares of preferred stock and to determine the price, rights, preferences, privileges, and restrictions, including voting rights, of those shares without any further vote or action by the stockholders.

Stock Repurchases. In November 2013, the Board authorized a stock repurchase program with an authorized level of \$5 billion, which expired in December 2016. In March 2015, the Board authorized a stock repurchase program with an authorized level of \$2 billion, all of which was still available as of December 31, 2016. The March 2015 program, according to its terms, will expire in March 2018. Repurchases under the repurchase programs may take place in the open market or in privately negotiated transactions, including structured and derivative transactions such as accelerated share repurchase transactions, and may be made under a Rule 10b5-1 plan.

During the year ended December 31, 2016, the Company did not repurchase any of its outstanding shares of common stock.

During the year ended December 31, 2015, the Company repurchased approximately 4 million shares of its common stock under its November 2013 program at an average price of \$47.65 per share for a total of \$204 million.

In September and October 2014, the Company entered into two unrelated accelerated share repurchase agreements ("ASR") with a financial institution to repurchase shares of its common stock. Under the September 2014 agreement, the Company prepaid \$1.1 billion and approximately 15 million shares were initially delivered to the Company on September 30, 2014 and are included in treasury stock. Final settlement occurred on October 17, 2014, resulting in a total of approximately 23.5 million shares, inclusive of shares initially delivered, repurchased for \$933 million, all of which are included in treasury stock. The Company received a return of cash for the remaining amount not settled in shares of \$167 million. Under the October 2014 agreement, the Company prepaid the maximum repurchase amount of \$1.0 billion and approximately 15 million shares were initially delivered on October 30, 2014. Final settlement occurred on December 9, 2014, resulting in a total of approximately 16 million shares, inclusive of shares initially delivered, repurchased for \$800 million, all of which are included in treasury stock. The Company received a return of cash for the remaining amount not settled in shares of \$200 million. Both ASR agreements were entered into pursuant to the Company's existing share repurchase program.

The Company accounted for the September 2014 ASR as two separate transactions: (i) approximately 15 million shares of common stock initially delivered to the Company, and \$600 million was accounted for as a treasury stock transaction and (ii) the remaining \$500 million unsettled portion of the contract was determined to be a forward contract indexed to the Company's own common stock. The initial delivery of approximately 15 million shares resulted in an immediate reduction, on the delivery date, of the outstanding shares used to calculate the weighted-average common shares outstanding for basic and diluted net income per share. The Company has determined that the forward contract, indexed to its common stock, met all of the applicable criteria for equity classification. The Company recorded \$600 million as treasury stock and recorded \$500 million, the implied value of the forward contract, in additional paid-in capital on the

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consolidated balance sheets as of September 30, 2014. As the remainder of the shares were delivered to the Company, in the fourth quarter of 2014, the forward contract was reclassified from additional paid-in capital to treasury stock for the value of the additional shares received, and additional paid-in capital was debited for the cash returned for the remaining amount of shares not settled.

During the year ended December 31, 2014, in addition to the repurchase under the ASR's, the Company repurchased approximately 62 million shares of its common stock under its stock repurchase program at an average price of \$39.30 per share for a total of approximately \$2.4 billion.

Retirements. During the year ended December 31, 2014, the Company retired 94 million shares, resulting in reductions of \$94,000 in common stock, \$795 million in additional paid-in capital, and \$2.9 billion in retained earnings. During the year ended December 31, 2015 and 2016, the Company did not retire any of its remaining treasury stock.

Note 14 Employee Benefits

Benefit Plans. The Company maintains the Yahoo! Inc. 401(k) Plan (the "401(k) Plan") for its full-time employees in the U.S. The 401(k) Plan allows employees of the Company to contribute up to the Internal Revenue Code prescribed maximum amount. Employees may elect to contribute from 1 to 100 percent of their annual compensation to the 401(k) Plan. The Company matches employee contributions at a rate of 25 percent, up to the IRS prescribed amount. Both employee and employer contributions vest immediately upon contribution. During 2014, 2015, and 2016, the Company's contributions to the 401(k) Plan amounted to approximately \$19 million, \$21 million, and \$18 million, respectively. The Company also contributed approximately \$16 million, \$15 million, and \$12 million to its other defined contribution retirement benefit plans outside of the U.S. for 2014, 2015, and 2016, respectively.

Stock Plans. The Stock Plan provides for the issuance of stock-based awards to employees, including executive officers, and consultants. The Stock Plan permits the granting of incentive stock options, non-statutory stock options, restricted stock, restricted stock units, stock appreciation rights, and dividend equivalents.

Options granted under the Stock Plan before May 19, 2005 generally expire 10 years after the grant date, and options granted after May 19, 2005 generally expire seven years after the grant date. Options generally become exercisable over a four-year period based on continued employment and vest either monthly, quarterly, semi-annually, or annually.

The Stock Plan permits the granting of restricted stock and restricted stock units (collectively referred to as "restricted stock awards"). The restricted stock award vesting criteria are generally the passing of time, meeting certain performance-based objectives, or a combination of both, and continued employment through the vesting period (which varies but generally does not exceed four years). Restricted stock award grants are generally measured at fair value on the date of grant based on the number of shares granted and the quoted price of the Company's common stock. Such value is recognized as an expense over the corresponding service period.

The Stock Plan provides for the issuance of a maximum of 784 million shares, of which 96 million shares were still available for award grant purposes as of December 31, 2016. Each share of the Company's common stock issued in settlement of "full-value awards" (which include all awards other than options and stock appreciation rights) granted on or after June 25, 2009 under the Stock Plan counted as 1.75 shares against the Stock Plan's share limit. Each share of the Company's common stock issued in settlement of "full-value awards" granted on or after June 25, 2014 under the Stock Plan is counted as 2.5 shares against the Stock Plan's share limit.

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The Directors' Plan provides for the grant of nonqualified stock options and restricted stock units to non-employee directors of the Company. The Directors' Plan provides for the issuance of up to 9 million shares of the Company's common stock, of which approximately 4 million were still available for award grant purposes as of December 31, 2016. Each share of the Company's common stock issued in settlement of restricted stock units granted after the Company's 2006 annual meeting of shareholders under the Directors' Plan is counted as 1.75 shares against the Directors' Plan's share limit.

Options granted under the Directors' Plan before May 25, 2006 generally become exercisable, based on continued service as a director, for initial grants to new directors, in equal monthly installments over four years, and for annual grants, with 25 percent of such options vesting on the one year anniversary of the date of grant and the remaining options vesting in equal monthly installments over the remaining 36-month period thereafter. Such options generally expire seven to 10 years after the grant date. Options granted on or after May 25, 2006 become exercisable, based on continued service as a director, in equal quarterly installments over one year. Such options generally expire seven years after the grant date.

Restricted stock units granted under the Directors' Plan generally vest in equal quarterly installments over a one-year period following the date of grant and, once vested, are generally payable in an equal number of shares of the Company's common stock on the earlier of the end of the one-year vesting period or the date the director ceases to be a member of the Board (subject to any deferral election that may be made by the director).

Non-employee directors are also permitted to elect an award of restricted stock units or a stock option under the Directors' Plan in lieu of a cash payment of their quarterly Board retainer and any cash fees for serving on committees of the Board. Such stock options or restricted stock unit awards granted in lieu of cash fees are fully vested on the grant date.

From time to time, the Company also assumes stock-based awards in connection with corporate mergers and acquisitions, which awards become payable in shares of the Company's common stock.

Employee Stock Purchase Plan. During the first quarter of 2015, the Company discontinued the offering of the Employee Stock Purchase Plan to its employees. The Employee Stock Purchase Plan allowed employees to purchase shares of the Company's common stock through payroll deductions of up to 15 percent of their compensation subject to certain Internal Revenue Code limitations. The price of the common stock purchased under the plan was equal to 90 percent of the lower of the fair market value of the common stock on the commencement date of each three-month offering period or the specified purchase date.

For the years ended December 31, 2014 and 2015 stock-based compensation expense related to the activity under the plan was \$12 million and \$2 million, respectively.

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Stock Options. The Company's Stock Plan, the Directors' Plan, and stock-based awards assumed through acquisitions (including stock-based commitments related to continued service of acquired employees, such as holdbacks by Yahoo of shares of Yahoo common stock issued to founders of acquired companies in connection with certain of the Company's acquisitions) are collectively referred to as the "Plans". Stock option activity under the Company's Plans for the year ended December 31, 2016 is summarized as follows (in thousands, except years and per share amounts):

	Shares	Weighted Average Exercise Price per Share	Weighted Average Remaining Contractual Life (in years)	Aggregate Intrinsic Value
Outstanding at December 31, 2015 ⁽¹⁾	6,522	\$ 18.82	4.03	\$ 103,230
Options granted	—	\$ —		
Options assumed in acquisitions	—	\$ —		
Options exercised ⁽²⁾	(1,203)	\$ 14.56		
Options expired	(442)	\$ 18.71		
Options cancelled/forfeited	(383)	\$ 18.00		
Outstanding at December 31, 2016 ⁽¹⁾	<u>4,494</u>	<u>\$ 20.04</u>	<u>2.99</u>	<u>\$ 92,503</u>
Vested and expected to vest at December 31, 2016 ⁽³⁾	<u>4,467</u>	<u>\$ 18.11</u>	<u>2.98</u>	<u>\$ 91,950</u>
Exercisable at December 31, 2016	<u>3,537</u>	<u>\$ 18.15</u>	<u>2.77</u>	<u>\$ 72,708</u>

(1) Includes shares subject to performance-based stock options for which performance goals had not been set as of the date shown.

(2) The Company generally issues new shares to satisfy stock option exercises.

(3) The expected to vest options are the result of applying the pre-vesting forfeiture rate assumptions to total outstanding options.

The weighted average grant date fair values of all options granted and assumed in the years ended December 31, 2014 and 2015 were \$31.31 and \$20.31, respectively. The Company did not grant any options in 2016.

The aggregate intrinsic value in the table above represents the total pre-tax intrinsic value (the aggregate difference between the closing stock price of the Company's common stock on December 31, 2016 and the exercise price for in-the-money options) that would have been received by the option holders if all in-the-money options had been exercised on December 31, 2016.

The total intrinsic values of options exercised in the years ended December 31, 2014, 2015, and 2016 were \$167 million, \$53 million, and \$27 million, respectively.

As of December 31, 2016, there was \$7 million of unamortized stock-based compensation expense related to unvested stock options, which is expected to be recognized over a weighted average period of 0.9 years.

Cash received from option exercises and purchases of shares under the Employee Stock Purchase Plan for the year ended December 31, 2016 was \$18 million.

The total net tax benefit attributable to stock options exercised in the year ended December 31, 2016 was \$6 million.

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The fair value of option grants, including assumed options from acquisitions, is determined using the Black-Scholes option pricing model with the following weighted average assumptions:

	Stock Options		Purchase Plan⁽⁵⁾
	Years Ended December 31,		Year Ended December 31,
	2014	2015	2014
Expected dividend yield ⁽¹⁾	0%	0%	0%
Risk-free interest rate ⁽²⁾	1.4%	0.9%	0%
Expected volatility ⁽³⁾	34.5%	34.5%	36.8%
Expected life (in years) ⁽⁴⁾	3.83	2.50	0.25

- (1) The Company currently has no history or expectation of paying cash dividends on its common stock in the near future.
- (2) The risk-free interest rate is based on the U.S. Treasury yield for a term consistent with the expected term of the awards in effect at the time of grant.
- (3) The Company estimates the volatility of its common stock at the date of grant based on the implied volatility of publicly traded options on its common stock, with a term of one year or greater.
- (4) The expected life of stock options granted under the Plans is based on historical exercise patterns, which the Company believes are representative of future behavior. New grants issued by the Company had an expected life of 4 years in 2014. In 2015 and 2016, the Company did not issue new stock options. Options assumed in acquisitions had expected lives of less than 3 years.
- (5) During the first quarter of 2015, the Company discontinued the offering of the Employee Stock Purchase Plan to its employees.

Restricted Stock and Restricted Stock Units. Restricted stock and restricted stock unit activity under the Plans for the year ended December 31, 2016 is summarized as follows (in thousands, except per share amounts):

	Shares	Weighted Average Grant Date Fair Value Per Share
Awarded and unvested at December 31, 2015 ⁽¹⁾	28,739	\$ 39.15
Granted ⁽²⁾	14,893	\$ 34.54
Vested	(14,427)	\$ 32.49
Cancelled/Forfeited	(6,955)	\$ 35.88
Awarded and unvested at December 31, 2016 ⁽¹⁾	<u>22,250</u>	<u>\$ 41.40</u>

- (1) Includes the maximum number of shares issuable under the Company's performance-based restricted stock unit awards (including future-year tranches for which performance goals had not been set) as of the date shown.
- (2) Includes the maximum number of shares issuable under the performance-based restricted stock unit awards granted during the year ended December 31, 2016 (including future-year tranches for which performance goals had not been set during the period); excludes tranches of previously granted performance-based restricted stock units for which performance goals were set during the year ended December 31, 2016.

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As of December 31, 2016, there was \$497 million of unamortized stock-based compensation expense related to unvested restricted stock and restricted stock units, which is expected to be recognized over a weighted average period of 2.3 years.

The total fair value of restricted stock awards vested during the years ended December 31, 2014, 2015, and 2016 was \$415 million, \$502 million, and \$470 million, respectively.

During the year ended December 31, 2016, 14 million shares that were subject to previously granted restricted stock units vested. These vested restricted stock awards were net share settled. The Company withheld 5 million shares based upon the Company's closing stock price on the vesting date, to satisfy the Company's tax withholding obligation relating to the employees' minimum statutory obligation for the applicable income and other employment taxes. The Company then remitted cash to the appropriate taxing authorities.

Total payments for the employees' tax obligations to the relevant taxing authorities were \$209 million for the year ended December 31, 2016 and are reflected as a financing activity within the consolidated statements of cash flows. The payments were used for tax withholdings related to the net share settlements of restricted stock units. The payments had the effect of share repurchases by the Company as they reduced the number of shares that would have otherwise been issued on the vesting date and were recorded as a reduction of additional paid-in capital.

In 2014, 2015, and 2016, \$150 million, \$58 million, and \$18 million, respectively, of excess tax benefits from stock-based awards for options exercised and restricted stock awards that vested in current and prior periods were included as a source of cash flows from financing activities. These excess tax benefits represent the reduction in income taxes otherwise payable during the period, attributable to the actual gross tax benefits in excess of the expected tax benefits for options exercised and restricted stock awards that vested in current and prior periods. The Company has accumulated excess tax deductions relating to stock options exercised and restricted stock awards that vested prior to January 1, 2006 available to reduce income taxes otherwise payable. To the extent such deductions reduce income taxes payable in the current year, they are reported as financing activities in the consolidated statements of cash flows.

Performance-Based Executive Incentive Equity Awards

Performance Options. The financial performance stock options awarded by the Company in November 2012 to Ms. Mayer and Mr. Goldman include multiple performance periods. The number of stock options that ultimately vest for each performance period will range from 0 percent to 100 percent of the target amount for such period stated in each executive's award agreement based on the Company's performance relative to goals. The financial performance goals are established at the beginning of each performance period and the portion (or "tranche") of the award related to each performance period is treated as a separate grant for accounting purposes. In March 2016, the Compensation Committee established performance goals under these stock options for the 2016 performance year. The 2016 financial performance metrics (and their weightings) under the performance stock options are GAAP revenue (one-third), revenue ex-TAC (one-third), and adjusted EBITDA (one-third). The grant date fair value of the 2016 tranche of the November 2012 financial performance stock options was \$13 million, and is being recognized over the twelve-month service period. The Company began recording stock-based compensation expense for this tranche in March 2016, when the financial performance goals were established.

Performance RSUs. In March 2016, the Compensation Committee approved additional annual financial performance-based RSU awards to Ms. Mayer and other senior officers, and established the 2016 annual performance goals for these awards as well as for the similar performance-based RSUs

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granted in February 2013, February 2014, and March 2015. The 2013, 2014, 2015, and 2016 performance-based RSU awards are generally eligible to vest in equal annual target amounts over four years (three years for Ms. Mayer) based on the Company's attainment of annual financial performance goals as well as the executive's continued employment through each vesting date. The number of shares that ultimately vest each year will range from 0 percent to 200 percent of the annual target amount, based on the Company's performance. Annual financial performance metrics and goals are established for these RSU awards at the beginning of each year and the tranche of each RSU award related to that year's performance goal is treated as a separate annual grant for accounting purposes. The 2016 financial performance metrics (and their weightings) established for the performance RSUs are: GAAP revenue (one-third), revenue ex-TAC (one-third), and adjusted EBITDA (one-third). The grant date fair value of the first tranche of the March 2016 performance RSUs was \$10 million, the grant date fair value of the second tranche of the March 2015 performance RSUs was \$8 million, the grant date fair value of the third tranche of the February 2014 performance RSUs was \$4 million, and the grant date fair value of the fourth tranche of the February 2013 performance RSUs was \$8 million. These values are being recognized over the tranches' twelve-month service periods. The Company began recording stock-based compensation expense for these tranches in March 2016, when the financial performance goals were established.

Note 15 Restructuring Charges, Net

Restructuring charges, net consists of employee severance pay and related costs, accelerations of stock-based compensation expense, facility restructuring costs, contract termination and other non-cash charges associated with the exit of facilities, as well as reversals of restructuring charges arising from changes in estimates.

For the years ended December 31, 2014, 2015, and 2016, restructuring charges, net was comprised of the following (in thousands):

	Years Ended December 31,		
	2014	2015	2016
Employee severance pay and related costs	\$ 30,749	\$ 69,042	\$ 57,940
Non-cancelable lease, contract termination, and other charges	79,317	36,526	26,126
Reversals of previous charges	(3,222)	(7,404)	(4,038)
Non-cash accelerations of stock-based compensation expense	—	2,705	7,374
Other non-cash (credits) charges, net	(3,394)	3,150	1,227
Restructuring charges, net	<u>\$ 103,450</u>	<u>\$ 104,019</u>	<u>\$ 88,629</u>

Although the Company does not allocate restructuring charges to its segments, the amounts of the restructuring charges relating to each segment are presented below. For the years ended December 31, 2014, 2015, and 2016, restructuring charges, net consists of the following (in thousands):

	Years Ended December 31,		
	2014	2015	2016
Americas	\$ 76,134	\$ 68,637	\$ 65,300
EMEA	25,612	31,251	19,379
Asia Pacific	1,704	4,131	3,950
Restructuring charges, net	<u>\$ 103,450</u>	<u>\$ 104,019</u>	<u>\$ 88,629</u>

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The Company has implemented multiple restructuring plans to reduce its cost structure, align resources with its product strategy and improve efficiency, which have resulted in workforce reductions and the consolidation of certain real estate facilities and data centers.

The amounts recorded during the year ended December 31, 2016 were primarily related to the Company's plan announced in February 2016 to reduce its workforce by approximately 15 percent by the end of 2016 and exit six offices in Dubai, Mexico City, Buenos Aires, Madrid, Milan and Burbank, California, subject to applicable laws and consultation processes, as a part of the strategic plan to simplify the Company's product portfolio. During the year ended December 31, 2016, in connection with this action, the Company incurred pre-tax cash charges of \$47 million for severance pay expenses and related cash expenditures, pre-tax cash charges of \$17 million related to the consolidation and exit of facilities related to non-cancelable lease costs and other related costs, pre-tax non-cash charges of \$7 million related to stock-based compensation expense and less than \$1 million related to impairment costs.

The Company's restructuring accrual activity for the years ended December 31, 2015 and 2016 is summarized as follows (in thousands):

	Total
Accrual balance as of December 31, 2014	\$ 83,608
Restructuring charges	104,019
Cash paid	(114,749)
Non-cash accelerations of stock-based compensation expense	(2,705)
Foreign currency translation and other adjustments	(4,282)
Accrual balance as of December 31, 2015	\$ 65,891
Restructuring charges	88,629
Cash paid	(102,277)
Non-cash accelerations of stock-based compensation expense	(7,374)
Foreign currency translation and other adjustments	(1,411)
Accrual balance as of December 31, 2016	<u>\$ 43,458</u>

The \$43 million restructuring liability as of December 31, 2016 consisted of \$3 million for employee severance expenses, which the Company expects to substantially pay out by the end of second quarter of 2017, and \$40 million related to non-cancelable lease costs, which the Company expects to pay over the terms of the related obligations through the fourth quarter of 2025, less estimated sublease income.

As of December 31, restructuring accruals were included on the Company's consolidated balance sheets as follows (in thousands):

	2015	2016
Accrued expenses and other current liabilities	\$ 40,283	\$ 27,041
Other long-term liabilities	25,608	16,417
Total restructuring accruals	<u>\$ 65,891</u>	<u>\$ 43,458</u>

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As of December 31, restructuring accruals by segment consisted of the following (in thousands):

	2015	2016
Americas	\$ 47,054	\$ 38,041
EMEA	18,389	5,263
Asia Pacific	448	154
Total restructuring accruals	<u>\$ 65,891</u>	<u>\$ 43,458</u>

Note 16 Income Taxes

The components of income (loss) before income taxes and earnings in equity interests are as follows (in thousands):

	Years Ended December 31,		
	2014	2015	2016
United States	\$ 10,572,290	\$ (4,394,462)	\$ (819,838)
Foreign	(59,909)	(429,814)	120,864
Income (loss) before income taxes and earnings in equity interests	<u>\$ 10,512,381</u>	<u>\$ (4,824,276)</u>	<u>\$ (698,974)</u>

The provision (benefit) for income taxes is composed of the following (in thousands):

	Years Ended December 31,		
	2014	2015	2016
Current:			
United States federal	\$ 3,067,395	\$ (89,498)	\$ 73,484
State	454,261	9,426	(1,619)
Foreign	50,573	32,815	26,644
Total current provision (benefit) for income taxes	<u>\$ 3,572,229</u>	<u>\$ (47,257)</u>	<u>\$ 98,509</u>
Deferred:			
United States federal	348,887	(20,507)	(206,096)
State	120,938	(31,374)	(18,007)
Foreign	(3,952)	9,540	(634)
Total deferred provision (benefit) for income taxes	<u>\$ 465,873</u>	<u>\$ (42,341)</u>	<u>\$ (224,737)</u>
Provision (benefit) for income taxes	<u>\$ 4,038,102</u>	<u>\$ (89,598)</u>	<u>\$ (126,228)</u>

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The provision (benefit) for income taxes differs from the amount computed by applying the federal statutory income tax rate to income before income taxes and earnings in equity interests as follows (in thousands):

	Years Ended December 31,		
	2014	2015	2016
Income tax at the U.S. federal statutory rate of 35 percent	\$ 3,679,333	\$ (1,688,496)	\$ (244,641)
State income taxes, net of federal benefit	400,824	(7,912)	2,514
Stock-based compensation expense	8,132	9,508	10,482
Research tax credits	(23,775)	(15,659)	(17,291)
Effect of non-U.S. operations	(53,079)	165,203	(18,499)
Settlement with tax authorities	(24,870)	(1,981)	(8,400)
Remeasurement of prior year tax positions	—	(5,286)	—
Acquisition related non-deductible expenses	16,881	15,970	13,059
Tax liquidation of acquired entities	—	(56,170)	—
Goodwill impairment charge	30,945	1,486,792	138,215
Intangible assets impairment charge	—	2,468	—
Other	3,711	5,965	(1,667)
Provision (benefit) for income taxes	<u>\$ 4,038,102</u>	<u>\$ (89,598)</u>	<u>\$ (126,228)</u>

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Deferred income taxes reflect the tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. The components of deferred income tax assets and liabilities are as follows (in thousands):

	December 31,	
	2015	2016
Deferred income tax assets:		
Net operating loss and tax credit carryforwards	\$ 185,425	\$ 136,929
Stock-based compensation expense	34,644	39,211
Non-deductible accrued expenses	114,519	172,224
Deferred revenue	10,153	12,345
Fixed assets	14,096	12,181
Federal benefits relating to tax positions	308,347	336,963
Other	8,580	7,281
Gross deferred income tax assets	675,764	717,134
Valuation allowance	(29,001)	(36,354)
Deferred income tax assets	<u>\$ 646,763</u>	<u>\$ 680,780</u>
Deferred income tax liabilities:		
Purchased intangible assets	\$ (86,905)	\$ (25,833)
Fixed assets	(146,234)	(89,344)
Alibaba unrealized gains	(12,611,867)	(13,633,988)
Unrealized income in investments	(85,761)	(8,837)
Restructuring liabilities	(4,046)	(95)
Other	(2,216)	(1,278)
Deferred income tax liabilities	<u>\$ (12,937,029)</u>	<u>\$ (13,759,375)</u>
Net deferred income tax liabilities	<u>\$ (12,290,266)</u>	<u>\$ (13,078,595)</u>

As of December 31, 2016, the Company's federal and California net operating loss carryforwards for income tax purposes were approximately \$172 million and \$134 million, respectively. The federal and California net operating loss carryforwards are subject to various limitations under Section 382 of the Internal Revenue Code and applicable state tax law. If not utilized, the federal and California net operating loss carryforwards will begin to expire in 2021.

In the three months ended March 31, 2015, the Company satisfied the \$3.3 billion income tax liability related to the sale by Yahoo! Hong Kong Holdings Limited, the Company's wholly-owned subsidiary, of Alibaba Group ADSs in the Alibaba Group IPO on September 24, 2014. As of December 31, 2016 the Company accrued deferred tax liabilities of \$13.6 billion associated with the 384 million ordinary shares of Alibaba Group ("Alibaba Group shares") retained by the Company. Such deferred tax liabilities are subject to periodic adjustments due to changes in the fair value of the Alibaba Group shares.

The Company's state research tax credit carryforward for income tax purposes is approximately \$200 million and it can be carried forward indefinitely. Tax credit carryforwards that result from the exercise of employee stock options are not recorded on the Company's consolidated balance sheets

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and are accounted for as a credit to additional paid-in capital if and when realized through a reduction in income taxes payable.

The Company has a valuation allowance of approximately \$29 million and \$36 million as of December 31, 2015 and 2016 against certain deferred income tax assets that are not more likely than not to be realized in future periods. In evaluating the Company's ability to realize its deferred income tax assets, the Company considers all available positive and negative evidence, including operating results, ongoing tax planning, and forecasts of future taxable income on a jurisdiction by jurisdiction basis. The valuation allowance as of December 31, 2016 relates to certain foreign and some U.S. states deferred tax assets that are not more likely than not to be realized. The Company continues to monitor its business strategies, weighing positive and negative evidences in assessing its realization of deferred tax assets.

As of December 31, 2016, the Company repatriated cumulative earnings from its wholly-owned foreign subsidiaries and recorded a \$17 million tax expense (primarily related to \$172 million of dividend income recognizable in the U.S. with an associated \$67 million U.S. tax credit for foreign income taxes that have been paid on such earnings) related to this repatriation that is included in "effect of non-U.S. operations." This \$17 million tax expense is included as part of the total income tax benefit for the year ended December 31, 2016. The Company also intends to repatriate its future earnings from these foreign subsidiaries. As of December 31, 2016, the Company does not anticipate a repatriation of its undistributed foreign earnings of approximately \$3.3 billion. Those earnings are principally related to its equity method investment in Yahoo Japan. If these earnings were to be repatriated in the future, the Company may be subject to additional U.S. income taxes. It is not practicable to determine the income tax liability that might be incurred if these earnings were to be repatriated.

The total amount of gross unrecognized tax benefits was \$1.1 billion as of December 31, 2016, of which up to \$0.7 billion would affect the Company's effective tax rate if realized. A reconciliation of the beginning and ending amount of unrecognized tax benefits in 2014, 2015, and 2016 is as follows (in thousands):

	2014	2015	2016
Unrecognized tax benefits balance at January 1	\$ 695,285	\$ 1,023,626	\$ 1,067,109
Gross increase for tax positions of prior years	65,606	27,583	10,848
Gross decrease for tax positions of prior years	(9,954)	(17,748)	(24,529)
Gross increase for tax positions of current year	358,434	41,428	44,556
Settlements	(84,942)	(4,700)	(17,957)
Lapse of statute of limitations	(803)	(3,080)	(6,278)
Unrecognized tax benefits balance at December 31	<u>\$ 1,023,626</u>	<u>\$ 1,067,109</u>	<u>\$ 1,073,749</u>

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The remaining balances are recorded on the Company's consolidated balance sheets as follows (in thousands):

	December 31,	
	2015	2016
Total unrecognized tax benefits balance	\$ 1,067,109	\$ 1,073,749
Amounts netted against related deferred tax assets	(64,601)	(77,024)
Unrecognized tax benefits recorded on consolidated balance sheets	\$ 1,002,508	\$ 996,725
Amounts classified as accrued expenses and other current liabilities	\$ 12,586	\$ 2,409
Amounts classified as deferred and other long-term tax liabilities, net	989,922	994,316
Unrecognized tax benefits recorded on consolidated balance sheets	\$ 1,002,508	\$ 996,725

The Company's gross amount of unrecognized tax benefits as of December 31, 2016 increased by \$7 million from the recorded balance as of December 31, 2015 primarily related to transfer prices among entities in different tax jurisdictions. The Company recognizes interest and/or penalties related to uncertain tax positions in income tax expense. To the extent accrued interest and penalties do not ultimately become payable, amounts accrued will be reduced and reflected as a reduction of the overall income tax provision in the period that such determination is made. During 2014, 2015, and 2016, interest and penalties recorded in the consolidated statements of operations were a charge of \$83 million, \$7 million, and \$24 million (including interest paid of \$5 million), respectively. The amounts of accrued interest and penalties recorded on the consolidated balance sheets as of December 31, 2015 and 2016 were approximately \$167 million and \$186 million, respectively.

The Company is in various stages of examination and appeal in connection with its taxes both in the U.S. and in foreign jurisdictions. Those audits generally span tax years 2005 through 2015. As of December 31, 2016, the Company's 2011 through 2015 U.S. federal income tax returns are currently under examination. The Company has appealed the proposed California Franchise Tax Board's adjustments to the 2005 through 2008 returns, but no conclusions have been reached to date. The Company's 2009 through 2010 California tax returns are currently under examination. The Company's 2011 through 2015 tax years remain subject to examination by the California Franchise Tax Board for California tax purposes. While it is difficult to determine when the examinations will be settled or their final outcomes, certain audits in various jurisdictions are expected to be resolved in the foreseeable future. The Company believes that it has adequately provided for any reasonably foreseeable adverse adjustment to its tax returns and that any settlement will not have a material adverse effect on its consolidated financial position, results of operations, or cash flows. It is reasonably possible that the Company's unrecognized tax benefits could be reduced by up to approximately \$20 million in the next twelve months.

The Company may have additional tax liabilities in China related to the sale to Alibaba Group of 523 million Alibaba Group shares that took place during the year ended December 31, 2012 and related to the sale of the 140 million Alibaba Group ADSs sold in the Alibaba Group IPO that took place during the year ended December 31, 2014. Any taxes assessed and paid in China are expected to be ultimately offset and recovered in the U.S. through the use of foreign tax credits.

Tax authorities from the Brazilian State of Sao Paulo have assessed certain indirect taxes against the Company's Brazilian subsidiary, Yahoo! do Brasil Internet Ltda., related to online advertising services. The assessment is for calendar years 2008 through 2012 and as of December 31, 2016 totals approximately \$140 million. The Company currently believes the assessment is without merit. The Company believes the risk of loss is remote and has not recorded an accrual for the assessment.

Note 17 Transactions with Related Parties

Revenue from related parties, excluding Yahoo Japan, represented approximately 1 percent of total revenue for the years ended December 31, 2014, 2015, and 2016. Management believes that the terms of the agreements with these related parties are comparable to the terms obtained in arm's-length transactions with unrelated similarly situated customers of the Company.

See Note 8—"Investments in Equity Interests Accounted for Using the Equity Method of Accounting" for additional information related to transactions involving Yahoo Japan.

Note 18 Segments

The Company continues to manage its business geographically. The primary areas of measurement and decision-making are Americas, EMEA (Europe, Middle East, and Africa), and Asia Pacific. Management relies on an internal reporting process that provides revenue, revenue ex-TAC (which is defined as revenue less cost of revenue—TAC), direct costs excluding TAC by segment, and consolidated income (loss) from operations for making decisions related to the evaluation of the financial performance of, and allocating resources to, the Company's segments.

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The following tables present summarized information by segment (in thousands):

	Years Ended December 31,		
	2014	2015	2016
Revenue by segment⁽¹⁾:			
Americas	\$ 3,517,861	\$ 3,976,770	\$ 4,172,836
EMEA	374,833	343,646	397,768
Asia Pacific	725,439	647,885	598,531
Total Revenue	4,618,133	4,968,301	5,169,135
TAC by segment⁽¹⁾:			
Americas	166,545	788,725	1,463,221
EMEA	36,867	57,284	144,547
Asia Pacific	14,119	31,505	43,018
Total TAC	217,531	877,514	1,650,786
Revenue ex-TAC by segment:			
Americas	3,351,316	3,188,045	2,709,615
EMEA	337,966	286,362	253,221
Asia Pacific	711,320	616,380	555,513
Total Revenue ex-TAC	4,400,602	4,090,787	3,518,349
Direct costs by segment⁽²⁾:			
Americas	249,971	284,875	263,010
EMEA	87,490	95,789	51,597
Asia Pacific	198,910	196,056	185,195
Global operating costs⁽³⁾			
Gains on sales of patents and land	(97,894)	(11,100)	(121,559)
Asset impairment charge	—	44,381	—
Goodwill impairment charge	88,414	4,460,837	394,901
Intangible assets impairment charge	—	15,423	87,335
Depreciation and amortization	606,568	609,613	507,555
Stock-based compensation expense	420,174	457,153	491,902
Restructuring charges, net	103,450	104,019	88,629
Income (loss) from operations	<u>\$ 142,942</u>	<u>\$ (4,748,494)</u>	<u>\$ (645,058)</u>

(1) Commencing in the second quarter of 2016, TAC payments related to the Microsoft Search Agreement, which previously would have been recorded as a reduction to revenue, began to be recorded as cost of revenue—TAC due to a required change in revenue presentation. See Note 1—“The Company and Summary of Significant Accounting Policies” and Note 19—“Microsoft Search Agreement” for additional information.

(2) Direct costs for each segment include certain cost of revenue—other and costs associated with the local sales teams. Prior to the second quarter of 2016, certain account management costs associated with Yahoo Properties were managed locally and included as direct costs for each segment. Prior period amounts have been revised to conform to the current presentation.

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- (3) Global operating costs include product development, marketing, real estate workplace, general and administrative, account management costs, and other corporate expenses that are managed on a global basis and that are not directly attributable to any particular segment. Beginning in the second quarter of 2016, certain account management costs associated with Yahoo Properties are managed globally and included as global costs. Prior period amounts have been revised to conform to the current presentation.

	Years Ended December 31,		
	2014	2015	2016
Capital expenditures, net:			
Americas (1)	\$ 357,512	\$ 490,780	\$ (46,455)
EMEA	20,034	25,479	14,637
Asia Pacific	18,069	26,728	21,140
Total capital expenditures, net	<u>\$ 395,615</u>	<u>\$ 542,987</u>	<u>\$ (10,678)</u>

- (1) 2016 includes net proceeds of \$246 million associated with the sale of certain property assets located in Santa Clara, California. See Note 4 —“Acquisitions and Dispositions” for additional information.

	December 31,	
	2015	2016
Property and equipment, net:		
Americas:		
U.S.	\$ 1,447,995	\$ 1,120,124
Other	353	3,086
Total Americas	<u>\$ 1,448,348</u>	<u>\$ 1,123,210</u>
EMEA	33,940	28,360
Asia Pacific	65,035	58,367
Total property and equipment, net	<u>\$ 1,547,323</u>	<u>\$ 1,209,937</u>

See also Note 5—“Goodwill” and Note 15—“Restructuring Charges, Net” for additional information regarding segments.

Enterprise Wide Disclosures:

The following table presents revenue for groups of similar services (in thousands):

	Years Ended December 31,		
	2014	2015	2016
Search(1)(2)	\$ 1,831,985	\$ 2,113,848	\$ 2,673,100
Display(2)	1,880,117	2,085,754	1,981,535
Other(2)	906,031	768,699	514,500
Total revenue	<u>\$ 4,618,133</u>	<u>\$ 4,968,301</u>	<u>\$ 5,169,135</u>

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	Years Ended December 31,		
	2014	2015	2016
Revenue ⁽¹⁾ :			
U.S.	\$ 3,380,310	\$ 3,865,772	\$ 4,048,156
International	<u>1,237,823</u>	<u>1,102,529</u>	<u>1,120,979</u>
Total revenue	<u>\$ 4,618,133</u>	<u>\$ 4,968,301</u>	<u>\$ 5,169,135</u>

- (1) Commencing in the second quarter of 2016, TAC payments related to the Microsoft Search Agreement, which previously would have been recorded as a reduction to revenue, began to be recorded as cost of revenue—TAC due to a required change in revenue presentation. See Note 1—“The Company and Summary of Significant Accounting Policies” and Note 19—“Microsoft Search Agreement” for additional information.
- (2) At the beginning of 2016, the Company reclassified certain amounts from other revenue to either search or display revenue. Prior period amounts have been revised to conform to the current presentation as follows: for the year ended December 31, 2014, the Company reclassified \$39.1 million and \$12.1 million to search and display revenue, respectively, previously included in other revenue; and for the year ended December 31, 2015, the Company reclassified \$29.7 million and \$11.6 million to search and display revenue, respectively, previously included in other revenue.

Revenue is attributed to individual countries according to the online property that generated the revenue. No single foreign country accounted for more than 10 percent of the Company’s revenue in 2014, 2015, and 2016, respectively.

Note 19 Microsoft Search Agreement

On December 4, 2009, the Company entered into the Microsoft Search Agreement. On February 18, 2010, the Company received regulatory clearance from both the U.S. Department of Justice and the European Commission and on February 23, 2010 the Company commenced implementation of the Microsoft Search Agreement on a market-by-market basis.

On April 15, 2015, the Company and Microsoft entered into the Eleventh Amendment, pursuant to which the terms of the Microsoft Search Agreement were amended. Previously under the Microsoft Search Agreement, Microsoft was the exclusive algorithmic and paid search services provider to Yahoo on personal computers for Yahoo Properties and for search services provided by Yahoo to Affiliate sites. Microsoft was the non-exclusive provider on mobile devices. Pursuant to the Eleventh Amendment, Microsoft will provide such services on a non-exclusive basis for Yahoo Properties and Affiliate sites on all devices. Commencing on May 1, 2015, Yahoo agreed to the Volume Commitment and displays only Microsoft’s paid search results on such search result pages.

Prior to the Eleventh Amendment, the Company was entitled to receive the Revenue Share Rate with respect to revenue generated from paid search results on Yahoo Properties and on Affiliate sites after deduction of the Affiliate sites’ share of revenue and certain Microsoft costs. The Revenue Share Rate was 88 percent for the first five years of the Microsoft Search Agreement and then increased to 90 percent on February 23, 2015. Pursuant to the Eleventh Amendment, the Revenue Share Rate increased to 93 percent, but Microsoft now receives its 7 percent revenue share before deduction of the Affiliate site’s share of revenue. The Company is responsible for paying the Affiliate for the Affiliate site’s share of revenue.

Additionally, pursuant to the Eleventh Amendment, the Company has the ability in response to queries on both personal computers and mobile devices to request algorithmic listings only, paid

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listings only or both algorithmic and paid listings from Microsoft. To the extent the Company requests algorithmic listings only or requests paid listings but elects not to display such paid listings, the Company pays Microsoft serving costs but not a revenue share. In other cases and with respect to the Volume Commitment, the Revenue Share Rate applies.

Previously under the Microsoft Search Agreement, Yahoo had sales exclusivity for both the Company's and Microsoft's premium advertisers. For reporting periods ending December 31, 2014 and 2015, and March 31, 2016, TAC related to the Company's Microsoft Search Agreement was recorded as a reduction to revenue. Pursuant to the Eleventh Amendment, the Company completed the transition of its exclusive sales responsibilities to Microsoft for Microsoft's paid search services to premium advertisers in the United States, Canada, and Europe on April 1, 2016 and in its remaining markets (other than Taiwan and Hong Kong) on June 1, 2016. Following the transition in each respective market, Yahoo is considered the principal in the sale of traffic to Microsoft and other customers because Yahoo is the primary obligor in its arrangements with Microsoft and has discretion in how search queries from Affiliate sites will be fulfilled and monetized. As a result, the amounts paid to Affiliates under the Microsoft Search Agreement in the transitioned markets are recorded as cost of revenue—TAC rather than as a reduction to GAAP revenue, resulting in GAAP revenue from the Microsoft Search Agreement being reported on a gross rather than net basis.

Effective June 3, 2016, the Company and Microsoft further amended the Microsoft Search Agreement to provide that sales responsibilities for premium advertisers in Taiwan and Hong Kong will not be transitioned. TAC in those markets will continue to be reported as a reduction to revenue.

The term of the Microsoft Search Agreement is 10 years from its commencement date, February 23, 2010, subject to earlier termination as provided in the Microsoft Search Agreement. As of October 1, 2015, either the Company or Microsoft may terminate the Microsoft Search Agreement by delivering a written notice of termination to the other party. The Microsoft Search Agreement will remain in effect for four months from the date of the termination notice to provide for a transition period; however, the Company's Volume Commitment will not apply in the third and fourth months of this transition period.

Approximately 35 percent, 35 percent, and 37 percent of the Company's revenue for the years ended December 31, 2014, 2015, and 2016, respectively, was attributable to the Microsoft Search Agreement. Commencing in the second quarter of 2016, TAC payments related to the Microsoft Search Agreement for transitioned markets, which previously would have been recorded as a reduction to revenue, began to be recorded as a cost of revenue due to a required change in revenue presentation. During the year ended December 31, 2016, \$812 million of GAAP revenue and cost of revenue—TAC was due to the change in revenue presentation. See Note 1—"The Company and Summary of Significant Accounting Policies" for additional information on change in revenue presentation.

The Company's uncollected revenue share in connection with the Microsoft Search Agreement was \$267 million and \$392 million, which is included in accounts receivable, net, as of December 31, 2015 and 2016, respectively.

On December 4, 2009, in connection with entering into the Microsoft Search Agreement, the Company also entered into a License Agreement with Microsoft (as amended, the "License Agreement"). Under the License Agreement, Microsoft acquired an exclusive 10-year license to the Company's core search technology and has the ability to integrate this technology into its existing web search platforms. Pursuant to the Eleventh Amendment, the exclusive licenses granted to Microsoft under the License Agreement became non-exclusive. The Company also agreed pursuant to the Eleventh Amendment to license certain sales tools to Microsoft to use solely in connection with Microsoft's paid search services pursuant to the terms of the License Agreement.

Schedule II—Valuation and Qualifying Accounts
Years Ended December 31, 2014, 2015, and 2016

	Balance at Beginning of Year	Charged to Expenses	Write-Offs/ Adjustments, Net of Recoveries	Balance at End of Year
(In thousands)				
Accounts receivable				
Allowance for doubtful accounts				
2014	\$ 35,549	\$ 15,406	\$ (11,156)	\$39,799
2015	\$ 39,799	\$ 26,793	\$ (9,089)	\$57,503
2016	\$ 57,503	\$ 14,301	\$ (39,267)	\$32,537
(In thousands)				
	Balance at Beginning of Year	Charged (Credited) to Expenses	Charged (Credited) to Other Accounts(*)	Balance at End of Year
Deferred tax asset valuation allowance				
2014	\$ 36,690	\$ (10,427)	\$ (2,410)	\$23,853
2015	\$ 23,853	\$ 7,150	\$ (2,002)	\$29,001
2016	\$ 29,001	\$ 8,369	\$ (1,016)	\$36,354

(*) Amounts not charged (credited) to expenses are charged (credited) to stockholders' equity, deferred tax assets (liabilities), or goodwill.

**Selected Quarterly Financial Data
(Unaudited)**

	Quarters Ended							
	March 31, 2015 ⁽¹⁾	June 30, 2015 ⁽²⁾	September 30, 2015 ⁽³⁾	December 31, 2015 ⁽⁴⁾	March 31, 2016 ⁽⁵⁾	June 30, 2016 ⁽⁶⁾	September 30, 2016 ⁽⁷⁾	December 31, 2016 ⁽⁸⁾
	(In thousands, except per share amounts)							
Revenue ⁽⁹⁾	\$ 1,225,970	\$ 1,243,265	\$ 1,225,673	\$ 1,273,393	\$ 1,087,152	\$ 1,307,637	\$ 1,305,206	\$ 1,469,140
Total operating expenses	\$ 1,313,324	\$ 1,288,059	\$ 1,311,985	\$ 5,803,427	\$ 1,254,366	\$ 1,797,313	\$ 1,357,525	\$ 1,404,989
(Loss) Income from operations	\$ (87,354)	\$ (44,794)	\$ (86,312)	\$ (4,530,034)	\$ (167,214)	\$ (489,676)	\$ (52,319)	\$ 64,151
Other (expense) income, net	\$ (31,063)	\$ (11,741)	\$ (23,955)	\$ (9,023)	\$ (47,416)	\$ 15,062	\$ (6,122)	\$ (15,440)
Benefit (provision) for income taxes	\$ 40,900	\$ (58,495)	\$ 93,208	\$ 13,985	\$ 34,766	\$ (15,543)	\$ 105,513	\$ 1,492
Earnings in equity interests	\$ 99,690	\$ 95,841	\$ 95,195	\$ 92,845	\$ 81,574	\$ 51,777	\$ 116,228	\$ 113,704
Net income (loss) attributable to Yahoo! Inc.	<u>\$ 21,198</u>	<u>\$ (21,554)</u>	<u>\$ 76,261</u>	<u>\$ (4,434,987)</u>	<u>\$ (99,232)</u>	<u>\$ (439,913)</u>	<u>\$ 162,826</u>	<u>\$ 161,998</u>
Net income (loss) attributable to Yahoo! Inc. common stockholders per share—basic	<u>\$ 0.02</u>	<u>\$ (0.02)</u>	<u>\$ 0.08</u>	<u>\$ (4.70)</u>	<u>\$ (0.10)</u>	<u>\$ (0.46)</u>	<u>\$ 0.17</u>	<u>\$ 0.17</u>
Net income (loss) attributable to Yahoo! Inc. common stockholders per share—diluted	<u>\$ 0.02</u>	<u>\$ (0.02)</u>	<u>\$ 0.08</u>	<u>\$ (4.70)</u>	<u>\$ (0.10)</u>	<u>\$ (0.46)</u>	<u>\$ 0.17</u>	<u>\$ 0.17</u>
Shares used in per share calculation—basic	<u>934,748</u>	<u>937,569</u>	<u>940,822</u>	<u>943,425</u>	<u>945,719</u>	<u>948,432</u>	<u>951,421</u>	<u>953,798</u>
Shares used in per share calculation—diluted	<u>947,976</u>	<u>937,569</u>	<u>946,934</u>	<u>943,425</u>	<u>945,719</u>	<u>948,432</u>	<u>957,304</u>	<u>958,624</u>

- (1) Net income attributable to Yahoo! Inc. for the quarter ended March 31, 2015 includes a gain on sale of patents of \$2 million, a loss of \$12 million due to the decline in fair value of the Hortonworks warrants, and net restructuring charges of \$51 million.
- (2) Net loss attributable to Yahoo! Inc. for the quarter ended June 30, 2015 includes a gain on sale of patents of \$9 million, a gain of \$5 million due to the increase in fair value of the Hortonworks warrants, net restructuring charges of \$20 million, and advisory fees of \$8 million.
- (3) Net income attributable to Yahoo! Inc. for the quarter ended September 30, 2015 includes, a loss of \$13 million due to the decline in fair value of the Hortonworks warrants, asset impairment charge of \$42 million related to the acquired and originally developed content, and net restructuring charges of \$26 million.
- (4) Net loss attributable to Yahoo! Inc. for the quarter ended December 31, 2015 includes goodwill impairment charge of \$4.5 billion, asset impairment charge of \$2 million related to the originally developed content, intangible assets impairment charge of \$15 million, net restructuring charges of \$7 million, and advisory fees of \$1 million.

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- (5) Net loss attributable to Yahoo! Inc. for the quarter ended March 31, 2016 includes net restructuring charges of \$57 million, advisory fees of \$9 million and a loss of \$39 million due to the decline in fair value of the Hortonworks warrants.
- (6) Net loss attributable to Yahoo! Inc. for the quarter ended June 30, 2016 includes goodwill impairment charge of \$395 million and intangible assets impairment charge of \$87 million related to Tumblr reporting unit, net restructuring charges of \$19 million, advisory fees of \$15 million and a gain of \$120 million on the sale of land.
- (7) Net income attributable to Yahoo! Inc. for the quarter ended September 30, 2016 includes advisory fees of \$27 million, net restructuring charges of \$10 million and a loss of \$8 million due to the decline in fair value of the Hortonworks warrants.
- (8) Net income attributable to Yahoo! Inc. for the quarter ended December 31, 2016 includes security incidents costs of \$10 million, advisory fees of \$6 million and net restructuring charges of \$2 million.
- (9) Commencing in the second quarter of 2016, TAC payments related to the Microsoft Search Agreement, which previously would have been recorded as a reduction to revenue, began to be recorded as cost of revenue—TAC due to a required change in revenue presentation. See Note 1—“The Company and Summary of Significant Accounting Policies” and Note 19—“Microsoft Search Agreement” in the Notes to the Company’s consolidated financial statements for additional information.

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

None.

Item 9A. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

The Company’s management, with the participation of the Company’s principal executive officer and principal financial officer, has evaluated the effectiveness of the Company’s disclosure controls and procedures (as such term is defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the “Exchange Act”), as of the end of the period covered by this Annual Report on Form 10-K. Based on such evaluation, the Company’s principal executive officer and principal financial officer have concluded (based on the findings and recommendations of the Independent Committee set forth in Item 7 —“Management’s Discussion and Analysis of Financial Condition and Results of Operations—Security Incidents”) that, due exclusively to deficiencies in the Company’s existing security incident response protocols related to the 2014 Security Incident, the Company’s disclosure controls and procedures were not effective at December 31, 2016. The conclusion that the Company’s disclosure controls and procedures at December 31, 2016 were not effective did not affect our conclusion that our internal control over financial reporting was effective as of December 31, 2016. Further, the Company’s principal executive officer and principal financial officer have also concluded (based on the findings and recommendations of the Independent Committee as set forth in Item 7 —“Management’s Discussion and Analysis of Financial Condition and Results of Operations—Security Incidents”) that, due exclusively to deficiencies in the Company’s

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existing security incident response protocols related to the 2014 Security Incident, the Company's disclosure controls and procedures for each of the annual and quarterly periods ended December 31, 2014 through September 30, 2016 were not effective at the end of each such period. When the Company's principal executive officer and principal financial officer concluded that our disclosure controls and procedures were effective for each of the annual and quarterly periods ended December 31, 2014 through September 30, 2016, such conclusions were based on such persons' knowledge at the time of certification.

The Company is in the process of remediating deficiencies in its existing disclosure controls and procedures related to its security incident response protocols consistent with the Independent Committee's recommendations described in Item 7—"Management's Discussion and Analysis of Financial Condition and Results of Operations—Security Incidents," including revising the design of its technical and legal information security incident response protocols to ensure that material information about cybersecurity incidents we are required to disclose in reports filed or submitted under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms.

Management's Report on Internal Control Over Financial Reporting

The Company's management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act. Under the supervision and with the participation of the Company's management, including its principal executive officer and principal financial officer, the Company conducted an evaluation of the effectiveness of its internal control over financial reporting based on criteria established in the framework in *Internal Control—Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework). Based on this evaluation, the Company's management concluded that its internal control over financial reporting was effective as of December 31, 2016.

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

The Company's independent registered public accounting firm has issued an attestation report regarding its assessment of the Company's internal control over financial reporting as of December 31, 2016, which appears on page 93.

Changes in Internal Control Over Financial Reporting

There have been no changes in Yahoo's internal control over financial reporting (as such term is defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) during the quarter ended December 31, 2016 that have materially affected, or are reasonably likely to materially affect, internal control over financial reporting.

Item 9B. Other Information

The information under "Item 7—"Management's Discussion and Analysis of Financial Condition and Results of Operations—Security Incidents—Management Changes" with respect to the resignation of the Company's General Counsel is incorporated herein by reference.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

The information required by this item is incorporated by reference to Yahoo's Proxy Statement for its 2017 Annual Meeting of Shareholders to be filed with the SEC within 120 days after the end of the fiscal year ended December 31, 2016.

In addition, the Board has adopted a code of ethics, which is posted on the Company's website at investor.yahoo.net. The code of ethics may be found as follows: from the web address listed above, first click on "Corporate Governance" in the middle of the page, then on "Documents," and then click on " Code of Ethics".

The Company's code of ethics applies to the Company's directors and employees, including our Chief Executive Officer, Chief Financial Officer, Principal Accounting Officer and Global Controller, and to contractors of the Company. The code of ethics sets forth the fundamental principles and key policies and procedures that govern the conduct of the Company's business. The Company's employees receive training on the code of ethics. We intend to disclose any amendment to, or waiver from, the code of ethics for our directors and executive officers, including our Principal Executive Officer, Principal Financial Officer, Principal Accounting Officer or Global Controller or persons performing similar functions, to the extent disclosure is required by applicable rules of the SEC and NASDAQ Stock Market LLC by posting such information on our website, at the address and location specified above.

Item 11. Executive Compensation

The information required by this item is incorporated by reference to Yahoo's Proxy Statement for its 2017 Annual Meeting of Shareholders to be filed with the SEC within 120 days after the end of the fiscal year ended December 31, 2016.

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

The information required by this item is incorporated by reference to Yahoo's Proxy Statement for its 2017 Annual Meeting of Shareholders to be filed with the SEC within 120 days after the end of the fiscal year ended December 31, 2016.

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

The information required by this item is incorporated by reference to Yahoo's Proxy Statement for its 2017 Annual Meeting of Shareholders to be filed with the SEC within 120 days after the end of the fiscal year ended December 31, 2016.

Item 14. Principal Accounting Fees and Services

The information required by this item is incorporated by reference to Yahoo's Proxy Statement for its 2017 Annual Meeting of Shareholders to be filed with the SEC within 120 days after the end of the fiscal year ended December 31, 2016.

PART IV

Item 15. Exhibits, Financial Statement Schedules

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

1. *Consolidated Financial Statements:*

	Page
<i>Index To Consolidated Financial Statements</i>	
Consolidated Financial Statements:	
Report of Independent Registered Public Accounting Firm	93
Consolidated Balance Sheets as of December 31, 2015 and 2016	94
Consolidated Statements of Operations for each of the three years in the period ended December 31, 2016	95
Consolidated Statements of Comprehensive Income (Loss) for each of the three years in the period ended December 31, 2016	96
Consolidated Statements of Stockholders' Equity for each of the three years in the period ended December 31, 2016	97
Consolidated Statements of Cash Flows for each of the three years in the period ended December 31, 2016	99
Notes to Consolidated Financial Statements	101

2. *Financial Statement Schedules:*

Financial Statement Schedules:	
II—Valuation and Qualifying Accounts for each of the three years in the period ended December 31, 2016	168
All other schedules are omitted because they are not applicable or the required information is shown in the Consolidated Financial Statements or Notes thereto	
Supplementary Financial Data:	
Selected Quarterly Financial Data (unaudited) for the two years ended December 31, 2016	169

3. *Exhibits:*

The exhibits listed in the Exhibit Index (following the signatures page of this report) are filed with, or incorporated by reference in, this report.

Item 16. Form 10-K Summary

None.

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<u>Signature</u>		<u>Title</u>	<u>Date</u>
<u>/s/ EDDY W. HARTENSTEIN</u> Eddy W. Hartenstein	Director		March 1, 2017
<u>/s/ RICHARD S. HILL</u> Richard S. Hill	Director		March 1, 2017
<u>/s/ THOMAS J. MCINERNEY</u> Thomas J. McInerney	Director		March 1, 2017
<u>/s/ JANE E. SHAW</u> Jane E. Shaw	Director		March 1, 2017
<u>/s/ JEFFREY C. SMITH</u> Jeffrey C. Smith	Director		March 1, 2017

EXHIBIT INDEX

The following exhibits are included, or incorporated by reference, in this Annual Report on Form 10-K (and are numbered in accordance with Item 601 of Regulation S-K). Pursuant to Item 601(a)(2) of Regulation S-K, this exhibit index immediately precedes the exhibits.

Exhibit Number	Description
2.1	Share Repurchase and Preference Share Sale Agreement, by and between Alibaba Group Holding Limited, the Registrant, and Yahoo! Hong Kong Holdings Limited, dated as of May 20, 2012 (previously filed as Exhibit 2.1 to the Registrant's Current Report on Form 8-K filed May 24, 2012 and incorporated herein by reference).
2.2	First Amendment to Share Repurchase and Preference Share Sale Agreement, by and between Alibaba Group Holding Limited, the Registrant, and Yahoo! Hong Kong Holdings Limited, dated as of September 11, 2012 (previously filed as Exhibit 2.2 to the Registrant's Current Report on Form 8-K filed September 19, 2012 and incorporated herein by reference).
2.3	Second Amendment to Share Repurchase and Preference Share Sale Agreement, by and among Alibaba Group Holding Limited, the Registrant, and Yahoo! Hong Kong Holdings Limited, dated as of October 14, 2013 (previously filed as Exhibit 2.3 to the Registrant's Current Report on Form 8-K filed October 15, 2013 and incorporated herein by reference).
2.4	Third Amendment to Share Repurchase and Preference Share Sale Agreement, by and among Alibaba Group Holding Limited, the Registrant, and Yahoo! Hong Kong Holdings Limited, dated as of July 14, 2014 (previously filed as Exhibit 2.4 to the Registrant's Current Report on Form 8-K filed July 15, 2014 and incorporated herein by reference).
2.5§	Stock Purchase Agreement, dated July 23, 2016, by and between the Registrant and Verizon Communications Inc. (previously filed as Exhibit 2.1 to the Registrant's Current Report on Form 8-K filed July 25, 2016 and incorporated herein by reference).
2.6§	Reorganization Agreement, dated July 23, 2016, by and between the Registrant and Yahoo Holdings, Inc. (previously filed as Exhibit 2.2 to the Registrant's Current Report on Form 8-K filed July 25, 2016 and incorporated herein by reference).
2.7§	Amendment to Stock Purchase Agreement, dated February 20, 2017, by and between Yahoo! Inc. and Verizon Communications Inc. (previously filed as Exhibit 2.1 to the Registrant's Current Report on Form 8-K filed February 21, 2017 and incorporated herein by reference).
2.8§	Amendment to Reorganization Agreement, dated February 20, 2017, by and between Yahoo! Inc. and Yahoo Holdings, Inc. (previously filed as Exhibit 2.2 to the Registrant's Current Report on Form 8-K filed February 21, 2017 and incorporated herein by reference).
3.1(A)	Amended and Restated Certificate of Incorporation of the Registrant (previously filed as Exhibit 3.1 to the Registrant's Quarterly Report on Form 10-Q filed July 28, 2000 and incorporated herein by reference).
3.1(B)	Certificate of Designation, Preferences and Rights of Series A Junior Participating Preferred Stock of the Registrant (previously filed as Exhibit 4.8 to the Registrant's Quarterly Report on Form 10-Q filed May 4, 2001 and incorporated herein by reference).

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Exhibit Number	Description
3.2	Amended and Restated Bylaws of the Registrant (previously filed as Exhibit 3.2 to the Registrant's Current Report on Form 8-K filed March 30, 2016 and incorporated herein by reference).
4.1	Form of the Registrant's Common Stock certificate (previously filed as Exhibit 4.1 to the Registrant's Quarterly Report on Form 10-Q filed November 12, 2013 and incorporated herein by reference).
4.2	Indenture (including form of Notes) with respect to Yahoo's 0.00% Convertible Senior Notes due 2018, dated as of November 26, 2013, between the Registrant and The Bank of New York Mellon Trust Company, N.A., as trustee (previously filed as Exhibit 4.2 to the Registrant's Annual Report on Form 10-K filed February 28, 2014 and incorporated herein by reference) (reflects minor corrections to Edgar conversion errors where a plus (+) was reflected as a minus (-) in certain conversion formulas in Section 14.04 of the indenture).
10.1+	Form of Indemnification Agreement between the Registrant and each of its directors and executive officers (previously filed as Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q filed November 6, 2009 and incorporated herein by reference).
10.2(A)+	Yahoo! Inc. Stock Plan, as amended and restated on April 8, 2014 (and effective June 25, 2014) (previously referred to as the "1995 Stock Plan" and filed as Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed June 27, 2014 and incorporated herein by reference).
10.2(B)+	Form of Stock Option Agreement, including Notice of Stock Option Grant, under the Yahoo! Inc. Stock Plan (previously filed as Exhibit 10.2(B) to the Registrant's Quarterly Report on Form 10-Q filed August 8, 2013 and incorporated herein by reference).
10.2(C)+	Form of Stock Option Agreement for Executives, including Notice of Stock Option Grant to Executive, under the Yahoo! Inc. Stock Plan (previously filed as Exhibit 10.2(C) to the Registrant's Quarterly Report on Form 10-Q filed August 8, 2013 and incorporated herein by reference).
10.2(D)+	Form of Restricted Stock Unit Award Agreement, including Notice of Grant, under the Yahoo! Inc. Stock Plan (previously filed as Exhibit 10.2(D) to the Registrant's Quarterly Report on Form 10-Q filed August 8, 2013 and incorporated herein by reference).
10.2(E)+	Form of Restricted Stock Unit Award Agreement for Executives (version 1), including Notice of Grant, under the Yahoo! Inc. Stock Plan (previously filed as Exhibit 10.4 to the Registrant's Current Report on Form 8-K filed March 6, 2013 and incorporated herein by reference).
10.2(F)+	Form of Restricted Stock Unit Award Agreement for Executives (version 2), including the Notice of Grant, under the Yahoo! Inc. Stock Plan (previously filed as Exhibit 10.2(R) to the Registrant's Quarterly Report on Form 10-Q filed May 8, 2014 and incorporated herein by reference).
10.2(G)+	Form of Restricted Stock Unit Award Agreement Letter Amendment between the Registrant and executives regarding tax withholding elections (previously filed as Exhibit 10.2(P) to the Registrant's Quarterly Report on Form 10-Q filed November 12, 2013 and incorporated herein by reference).
10.2(H)+	Form of Performance Restricted Stock Unit Award Agreement for Executives (version 1), including Notice of Grant, under the Yahoo! Inc. Stock Plan (previously filed as Exhibit 10.2 to the Registrant's Current Report on Form 8-K filed March 6, 2013 and incorporated herein by reference).

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Exhibit Number	Description
10.2(I)+	Form of Performance Restricted Stock Unit Award Agreement for Executives (version 2), including the Notice of Grant, under the Yahoo! Inc. Stock Plan (previously filed as Exhibit 10.2(S) to the Registrant's Quarterly Report on Form 10-Q filed May 8, 2014 and incorporated herein by reference).
10.2(J)+	Form of Restricted Stock Unit Award Agreement for Executives (NEO Version), including the Notice of Grant, under the Yahoo! Inc. Stock Plan (previously filed as Exhibit 10.2(J) to the Registrant's Quarterly Report on Form 10-Q filed May 10, 2016 and incorporated herein by reference).
10.2(K)+	Form of Performance Restricted Stock Unit Award Agreement for Executives (NEO Version), including the Notice of Grant, under the Yahoo! Inc. Stock Plan (previously filed as Exhibit 10.2(K) to the Registrant's Quarterly Report on Form 10-Q filed May 10, 2016 and incorporated herein by reference).
10.2(L)+	Form of equity award agreement letter amendment, dated April 10, 2016, between the Registrant and executives clarifying the definition of "change in control" for purposes of outstanding awards under the Yahoo! Inc. Stock Plan (previously filed as Exhibit 10.2(L) to the Registrant's Quarterly Report on Form 10-Q filed May 10, 2016 and incorporated herein by reference).
10.2(M)+	Form of Restricted Stock Unit Award Agreement, including Notice of Grant (for certain grants made after the Registrant's entry into the Stock Purchase Agreement with Verizon), under the Yahoo! Inc. Stock Plan (previously filed as Exhibit 10.2(M) to the Registrant's Quarterly Report on Form 10-Q filed November 9, 2016 and incorporated herein by reference).
10.3+	Yahoo! Inc. 1996 Employee Stock Purchase Plan (as amended on October 15, 2014) (previously filed as Exhibit 10.3(A) to the Registrant's Annual Report on Form 10-K filed February 27, 2015 and incorporated herein by reference).
10.4(A)+	Yahoo! Inc. Directors' Stock Plan, as amended and restated on October 16, 2014 (and effective January 1, 2015) (previously referred to as the "1996 Directors' Stock Plan" and filed as Exhibit 10.4(A) to the Registrant's Quarterly Report on Form 10-Q filed November 7, 2014 and incorporated herein by reference).
10.4(B)+	Form of Director Nonstatutory Stock Option Agreement, including Notice of Grant, under the Yahoo! Inc. Directors' Stock Plan (previously filed as Exhibit 10.4(B) to the Registrant's Annual Report on Form 10-K filed February 27, 2015 and incorporated herein by reference).
10.4(C)+	Form of Notice of Restricted Stock Unit Grant and Director Restricted Stock Unit Award Agreement, including Notice of Grant, under the Yahoo! Inc. Directors' Stock Plan (previously filed as Exhibit 10.4(C) to the Registrant's Annual Report on Form 10-K filed February 27, 2015 and incorporated herein by reference).
10.5	Joint Venture Agreement dated April 1, 1996 by and between the Registrant and SOFTBANK Corporation (previously filed as Exhibit 10.7 to the Registrant's Annual Report on Form 10-K filed March 21, 2003 and incorporated herein by reference).
10.6	Amendment Agreement dated September 17, 1997 by and between Registrant and SOFTBANK Corporation (previously filed as Exhibit 10.11 to the Registrant's Annual Report on Form 10-K filed March 21, 2003 and incorporated herein by reference).
10.7	Amendment Agreement No. 2 to Joint Venture Agreement, dated June 17, 2015, by and between the Registrant and Softbank Corporation (previously filed as Exhibit 10.7 to the Registrant's Quarterly Report on Form 10-Q filed August 7, 2015 and incorporated herein by reference).

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Exhibit Number	Description
10.8	Yahoo Japan License Agreement dated April 1, 1996 by and between the Registrant and Yahoo Japan Corporation (previously filed as Exhibit 10.43 to Amendment No. 2 to the Registrant's Registration Statement on Form S-3, Registration No. 333-100298, filed on December 23, 2002 and incorporated herein by reference).
10.9	Amendment to Yahoo Japan License Agreement dated September 12, 1997 by and between the Registrant and Yahoo Japan Corporation (previously filed as Exhibit 10.40 to Amendment No. 1 of the Registrant's Registration Statement on Form S-3, Registration No. 333-100298, filed on November 27, 2002 and incorporated herein by reference).
10.10	Amendment No. 2 to Yahoo Japan License Agreement dated January 31, 2005 by and between the Registrant and Yahoo Japan Corporation (previously filed as Exhibit 10.30 to the Registrant's Annual Report on Form 10-K filed March 11, 2005 and incorporated herein by reference).
10.11†	Amendment No. 3 to Yahoo! Japan License Agreement, effective as of April 29, 2016, by and between the Registrant and Yahoo Japan Corporation (previously filed as Exhibit 10.11 to the Registrant's Quarterly Report on Form 10-Q filed August 8, 2016 and incorporated herein by reference).
10.12+	Yahoo! Inc. Executive Incentive Plan for 2016 (previously filed as Exhibit 10.11(B) to the Registrant's Quarterly Report on Form 10-Q filed May 10, 2016 and incorporated herein by reference).
10.13(A)+	Form of Severance Agreement (2013 version) (previously filed as Exhibit 10.6 to the Registrant's Current Report on Form 8-K filed March 6, 2013 and incorporated herein by reference).
10.13(B)+	Form of Amendment to Executive Severance Agreement (previously filed as Exhibit 10.12(B) to the Registrant's Quarterly Report on Form 10-Q filed May 10, 2016 and incorporated herein by reference).
10.14(A)+	Yahoo! Inc. Change in Control Employee Severance Plan for Level I and Level II Employees, as amended on December 10, 2008 (previously filed as Exhibit 10.15 to the Registrant's Annual Report on Form 10-K filed February 27, 2009 and incorporated herein by reference).
10.14(B)+	Amendment, dated April 10, 2016, to Amended and Restated Yahoo! Inc. Change in Control Employee Severance Plan for Level I and Level II Employees (previously filed as Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed April 14, 2016 and incorporated herein by reference).
10.15(A)†	Letter Agreement, dated July 29, 2009, between the Registrant and Microsoft Corporation (previously filed as Exhibit 10.21(A) to the Registrant's Quarterly Report on Form 10-Q filed November 6, 2009 and incorporated herein by reference).
10.15(B)†	Search and Advertising Services and Sales Agreement, dated December 4, 2009, between the Registrant and Microsoft Corporation (previously filed as Exhibit 10.18(B) to the Registrant's Annual Report on Form 10-K filed February 26, 2010 and incorporated herein by reference).
10.15(C)†	License Agreement, dated December 4, 2009, between the Registrant and Microsoft Corporation (previously filed as Exhibit 10.18(C) to the Registrant's Annual Report on Form 10-K filed February 26, 2010 and incorporated herein by reference).

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Exhibit Number	Description
10.15(D)†	First Amendment to Search and Advertising Services and Sales Agreement, dated as of July 14, 2010, by and between the Registrant and Microsoft Corporation (previously filed as Exhibit 10.18(D) to the Registrant's Quarterly Report on Form 10-Q filed May 10, 2011 and incorporated herein by reference).
10.15(E)†	Second Amendment to Search and Advertising Services and Sales Agreement, dated as of October 10, 2010, by and between the Registrant and Microsoft Corporation (previously filed as Exhibit 10.18(E) to the Registrant's Quarterly Report on Form 10-Q filed May 10, 2011 and incorporated herein by reference).
10.15(F)†	Third Amendment to Search and Advertising Services and Sales Agreement, dated as of March 31, 2011, by and between the Registrant and Microsoft Corporation (previously filed as Exhibit 10.18(F) to the Registrant's Quarterly Report on Form 10-Q filed May 10, 2011 and incorporated herein by reference).
10.15(G)†	Amendment No. 1 to License Agreement, dated as of October 10, 2010, by and between the Registrant and Microsoft Corporation (previously filed as Exhibit 10.18(G) to the Registrant's Quarterly Report on Form 10-Q filed May 10, 2011 and incorporated herein by reference).
10.15(H)†	Fourth Amendment to Search and Advertising Services and Sales Agreement, dated as of December 13, 2010, by and between the Registrant and Microsoft Corporation (previously filed as Exhibit 10.18(H) to Amendment No. 1 to the Registrant's Quarterly Report on Form 10-Q filed December 2, 2011 and incorporated herein by reference).
10.15(I)†	Fifth Amendment to Search and Advertising Services and Sales Agreement, dated as of July 2, 2011, by and between the Registrant and Microsoft Corporation (previously filed as Exhibit 10.18(I) to Amendment No. 1 to the Registrant's Quarterly Report on Form 10-Q filed December 2, 2011 and incorporated herein by reference).
10.15(J)†	Sixth Amendment to Search and Advertising Services and Sales Agreement, dated as of October 14, 2011, by and between the Registrant and Microsoft Corporation (previously filed as Exhibit 10.18(J) to the Registrant's Quarterly Report on Form 10-Q filed November 7, 2011 and incorporated herein by reference).
10.15(K)†	Seventh Amendment to Search and Advertising Services and Sales Agreement, dated as of January 1, 2012, by and between the Registrant and Microsoft Corporation (previously filed as Exhibit 10.16(K) to the Registrant's Quarterly Report on Form 10-Q filed August 9, 2012 and incorporated herein by reference).
10.15(L)†	Eighth Amendment to Search and Advertising Services and Sales Agreement, dated as of June 6, 2012, by and between the Registrant and Microsoft Corporation (previously filed as Exhibit 10.16(L) to the Registrant's Quarterly Report on Form 10-Q filed August 9, 2012 and incorporated herein by reference).
10.15(M)†	Ninth Amendment to Search and Advertising Services and Sales Agreement, dated as of June 27, 2013, by and between the Registrant and Microsoft Corporation (previously filed as Exhibit 10.16(M) to the Registrant's Quarterly Report on Form 10-Q filed August 8, 2013 and incorporated herein by reference).
10.15(N)†	Tenth Amendment to Search and Advertising Services and Sales Agreement, effective as of March 23, 2015, by and between the Registrant and Microsoft Corporation (previously filed as Exhibit 10.13(N) to the Registrant's Quarterly Report on Form 10-Q filed May 7, 2015 and incorporated herein by reference).

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Exhibit Number	Description
10.15(O)†	Eleventh Amendment to Search and Advertising Services and Sales Agreement, effective as of April 15, 2015, by and between the Registrant and Microsoft Corporation (previously filed as Exhibit 10.13(O) to the Registrant's Quarterly Report on Form 10-Q filed May 7, 2015 and incorporated herein by reference).
10.15(P)†	Twelfth Amendment to Search and Advertising Services and Sales Agreement, effective as of September 18, 2015, by and between the Registrant and Microsoft Corporation (previously filed as Exhibit 10.14(P) to the Registrant's Quarterly Report on Form 10-Q filed May 10, 2016 and incorporated herein by reference).
10.15(Q)†	Thirteenth Amendment to Search and Advertising Services and Sales Agreement, effective as of November 17, 2015, by and between the Registrant and Microsoft Corporation (previously filed as Exhibit 10.14(Q) to the Registrant's Quarterly Report on Form 10-Q filed May 10, 2016 and incorporated herein by reference).
10.15(R)†	Fourteenth Amendment to Search and Advertising Services and Sales Agreement, effective as of June 3, 2016, by and between the Registrant and Microsoft Corporation (previously filed as Exhibit 10.14(R) to the Registrant's Quarterly Report on Form 10-Q filed August 8, 2016 and incorporated herein by reference).
10.16(A)†	Framework Agreement, dated as of July 29, 2011, by and among the Registrant, Alibaba Group Holding Limited, Softbank Corp., Alipay.com Co., Ltd., APN Ltd., Zhejiang Alibaba E-Commerce Co., Ltd., Jack Ma Yun, Joseph C. Tsai and certain joinder parties (previously filed as Exhibit 10.1 to Amendment No. 1 to the Registrant's Current Report on Form 8-K filed August 12, 2011 and incorporated herein by reference).
10.16(B)	Amendment to Framework Agreement, dated as of November 15, 2012, by and among the Registrant, Alibaba Group Holding Limited, Softbank Corp., Alipay.com Co., Ltd., APN Ltd., Zhejiang Alibaba E-Commerce Co., Ltd., Jack Ma Yun, Joseph C. Tsai and certain joinder parties (previously filed as Exhibit 10.18 (B) to the Registrant's Annual Report on Form 10-K filed March 1, 2013 and incorporated herein by reference).
10.16(C)	Waiver and Consent Agreement, dated January 23, 2014, by and among the Registrant, Alibaba Group Holding Limited, Softbank Corp., Alipay.com Co., Ltd., APN Ltd., Zhejiang Alibaba E-Commerce Co., Ltd., Jack Ma Yun, Joseph C. Tsai and certain joinder parties (previously filed as Exhibit 10.15(C) to the Registrant's Quarterly Report filed May 8, 2014 and incorporated herein by reference).
10.16(D)	Second Amendment to the Alipay Framework Agreement, dated as of May 3, 2014, by and among the Registrant, Alibaba Group Holding Limited, Softbank Corp., Alipay.com Co., Ltd., APN Ltd., Zhejiang Alibaba E-Commerce Co., Ltd., Jack Ma Yun, Joseph C. Tsai and certain joinder parties (previously filed as Exhibit 10.15(D) to the Registrant's Quarterly Report filed May 8, 2014 and incorporated herein by reference).
10.16(E)	Share and Asset Purchase Agreement, dated August 12, 2014, by and among the Registrant, Alibaba Group Holding Limited, Alipay.com Co., Ltd, Zhejiang Ant Small and Micro Financial Services Company, Ltd. (formerly known as Zhejiang Alibaba E-Commerce Co., Ltd.), SoftBank Corp., APN Ltd., Jack Ma Yun, Joseph Chung Tsai and certain of their affiliates (previously filed as Exhibit 10.15(D) to the Registrant's Quarterly Report on Form 10-Q filed November 7, 2014 and incorporated herein by reference).
10.17(A)+	Employment Offer Letter, dated July 16, 2012, between the Registrant and Marissa A. Mayer (previously filed as Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed July 19, 2012 and incorporated herein by reference).

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Exhibit Number	Description
10.17(B)+	Form of Severance Agreement between the Registrant and Marissa A. Mayer (previously filed as Exhibit 10.7 to the Registrant's Current Report on Form 8-K filed March 6, 2013 and incorporated herein by reference).
10.17(C)+	Form of Restricted Stock Unit Award Agreement (Retention and Grant), between the Registrant and Marissa A. Mayer (previously filed as Exhibit 10.22(C) to the Registrant's Quarterly Report on Form 10-Q filed August 9, 2012 and incorporated herein by reference).
10.17(D)+	Performance Stock Option Agreement (Retention Grant), including Notice of Grant, dated November 29, 2012, between the Registrant and Marissa A. Mayer (previously filed as Exhibit 10.21(D) to the Registrant's Annual Report on Form 10-K filed March 1, 2013 and incorporated herein by reference).
10.17(E)+	First Amendment, dated April 14, 2014, to Performance Stock Option Agreement (Retention Grant), between the Registrant and Marissa A. Mayer (previously filed as Exhibit 10.17(K) to the Registrant's Quarterly Report on Form 10-Q filed May 8, 2014 and incorporated herein by reference).
10.17(F)+	Second Amendment, dated April 17, 2015, to Performance Stock Option Agreement (Retention Grant), between the Registrant and Marissa A. Mayer (previously filed as Exhibit 10.15(O) to the Registrant's Quarterly Report on Form 10-Q filed May 7, 2015 and incorporated herein by reference).
10.17(G)+	Restricted Stock Unit Award Agreement, including Notice of Grant, dated February 27, 2014, between the Registrant and Marissa A. Mayer (previously filed as Exhibit 10.17(I) to the Registrant's Quarterly Report on Form 10-Q filed May 8, 2014 and incorporated herein by reference).
10.17(H)+	Performance Restricted Stock Unit Award Agreement, including Notice of Grant, dated February 27, 2014, between the Registrant and Marissa A. Mayer (previously filed as Exhibit 10.17(J) to the Registrant's Quarterly Report on Form 10-Q filed May 8, 2014 and incorporated herein by reference).
10.17(I)+	Restricted Stock Unit Award Agreement, including Notice of Grant, dated March 6, 2015, between the Registrant and Marissa A. Mayer (previously filed as Exhibit 10.15(N) to the Registrant's Quarterly Report on Form 10-Q filed May 7, 2015 and incorporated herein by reference).
10.17(J)+	Performance Restricted Stock Unit Award Agreement, including Notice of Grant, dated March 6, 2015, between the Registrant and Marissa A. Mayer (previously filed as Exhibit 10.15(M) to the Registrant's Quarterly Report on Form 10-Q filed May 7, 2015 and incorporated herein by reference).
10.17(K)+	Third Amendment, dated March 31, 2016, to Performance Stock Option Agreement (Retention Grant), between the Registrant and Marissa A. Mayer (previously filed as Exhibit 10.16(K) to the Registrant's Quarterly Report on Form 10-Q filed May 10, 2016 and incorporated herein by reference).
10.17(L)+	Restricted Stock Unit Award Agreement, including Notice of Grant, dated March 7, 2016, between the Registrant and Marissa A. Mayer (previously filed as Exhibit 10.16(L) to the Registrant's Quarterly Report on Form 10-Q filed May 10, 2016 and incorporated herein by reference).
10.17(M)+	Performance Restricted Stock Unit Award Agreement, including Notice of Grant, dated March 7, 2016, between the Registrant and Marissa A. Mayer (previously filed as Exhibit 10.16(M) to the Registrant's Quarterly Report on Form 10-Q filed May 10, 2016 and incorporated herein by reference).

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Exhibit Number	Description
10.18+	Employment Offer Letter, dated September 23, 2012, between the Registrant and Ken Goldman (previously filed as Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed September 26, 2012 and incorporated herein by reference).
10.19	Form of Call Option Confirmation between the Registrant and each Option Counterparty (previously filed as Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed November 26, 2013 and incorporated herein by reference).
10.20	Form of Warrant Confirmation between the Registrant and each Option Counterparty (previously filed as Exhibit 10.2 to the Registrant's Current Report on Form 8-K filed November 26, 2013 and incorporated herein by reference).
10.21+	Employment Offer Letter, dated May 31, 1999, between the Registrant and Ronald S. Bell (previously filed as Exhibit 10.24 to the Registrant's Quarterly Report on Form 10-Q filed May 8, 2014 and incorporated herein by reference).
10.22(A)†	Google Services Agreement, dated October 19, 2015, by and between the Registrant and Google Inc. (previously filed as Exhibit 10.22 to the Registrant's Annual Report on Form 10-K filed February 29, 2016 and incorporated herein by reference).
10.22(B)†	Amendment Number One to Google Services Agreement, effective as of March 1, 2016, by and between the Registrant and Google Inc. (previously filed as Exhibit 10.22(B) to the Registrant's Quarterly Report on Form 10-Q filed May 10, 2016 and incorporated herein by reference).
10.22(C)*†	Amendment Number Two to Google Services Agreement, effective as of December 1, 2016, by and between the Registrant and Google Inc.
10.23+	Employment Offer Letter, dated October 19, 2014, between the Registrant and Lisa Utzschneider (previously filed as Exhibit 10.23 to the Registrant's Annual Report on Form 10-K filed February 29, 2016 and incorporated herein by reference).
10.24	Settlement Agreement, dated April 26, 2016, among the Registrant, Starboard Value LP and each of the other persons and entities set forth on the signature pages thereto (previously filed as Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed April 27, 2016 and incorporated herein by reference).
10.25	Settlement and Release Agreement, dated February 20, 2017, by and among Yahoo! Inc., Yahoo Holdings, Inc., and Verizon Communications Inc. (previously filed as Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed February 21, 2017 and incorporated herein by reference).
21.1*	List of Subsidiaries.
23.1*	Consent of Independent Registered Public Accounting Firm.
24.1	Power of Attorney (see the signature page of this Annual Report on Form 10-K)
31.1*	Certificate of Chief Executive Officer Pursuant to Securities Exchange Act Rules 13a-14(a) and 15d-14(a) as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002, dated March 1, 2017.
31.2*	Certificate of Chief Financial Officer Pursuant to Securities Exchange Act Rules 13a-14(a) and 15d-14(a) as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002, dated March 1, 2017.
32**	Certificate of Chief Executive Officer and Chief Financial Officer Pursuant to Securities Exchange Act Rules 13a-14(b) and 15d-14(b) and 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, dated March 1, 2017.

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Exhibit Number	Description
101.INS*	XBRL Instance
101.SCH*	XBRL Taxonomy Extension Schema
101.CAL*	XBRL Taxonomy Extension Calculation
101.DEF*	XBRL Taxonomy Extension Definition
101.LAB*	XBRL Taxonomy Extension Labels
101.PRE*	XBRL Taxonomy Extension Presentation

* Filed herewith.

** Furnished herewith.

+ Indicates a management contract or compensatory plan or arrangement.

† Portions of this exhibit have been omitted and filed separately with the U.S. Securities and Exchange Commission pursuant to a request for confidential treatment.

§ Certain schedules and attachments have been omitted in accordance with Item 601(b)(2) of Regulation S-K. A copy of any omitted schedule and attachment will be furnished supplementally to the SEC upon request.

AMENDMENT NUMBER TWO TO GOOGLE SERVICES AGREEMENT

This Amendment Number Two to the Google Services Agreement (“**Amendment**”), effective as of December 1, 2016 (“**Amendment Two Effective Date**”), is between Yahoo! Inc. (“**Company**”) and Google Inc. (“**Google**”) and amends the Google Services Agreement that has an effective date of October 1, 2015, as amended (the “**Agreement**”). Capitalized terms not defined in this Amendment have the meanings given to those terms in the Agreement. The parties agree as follows:

1. **[*] in Search Results.** [*] of the Agreement is deleted in its entirety and replaced with the following:

5.2 [*]

(a) [*]

(b) [*], which may be approved or rejected in Google’s sole discretion, Company may [*]. Notwithstanding anything to the contrary, such content may not [*]. With 15 days’ prior written notice, Google may require Company to [*] within any such Search Results Set and, following such notice period, Company will ensure that Google’s Search Result Sets are [*].

(c) [*]

2. **General.** The parties may execute this Amendment in counterparts, including facsimile, PDF, or other electronic copies, which taken together will constitute one instrument. Except as expressly modified herein, the terms of the Agreement remain in full force and effect.

[*] Indicates that certain information in this exhibit has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

IN WITNESS WHEREOF, the parties have executed this Amendment by persons duly authorized.

GOOGLE INC.

By: /s/ Phillipp Schindler
Name: Phillipp Schindler
Title: Authorized Signatory
Date: December 8, 2016

GOOGLE ASIA PACIFIC PTE. LTD.

By: /s/ Marco Borla
Name: Marco Borla
Title: Finance Director
Date: December 8, 2016

YAHOO! INC.

By: /s/ Ian Weingarten
Name: Ian Weingarten
Title: SVP, Corporate Development & Partnerships
Date: December 7, 2016

YAHOO! SINGAPORE DIGITAL MARKETING PTE LTD.

By: /s/ Margaret Chang
Name: Margaret Chang
Title: Senior Director
Date: December 7, 2016

Subsidiaries of Yahoo! Inc.

<u>Name of Entity</u>	<u>Jurisdiction of Formation</u>	<u>Economic Interest (if not 100%)</u>
Altaba Holdings Hong Kong Limited	Hong Kong	
Aabaco Holdings, Inc.	Delaware	
Aabaco Small Business India Private Limited	India	
Aabaco Small Business, LLC	Delaware	
BrightRoll, Inc.	Delaware	
Clarityray Solutions Ltd.	Israel	
Excalibur IP, LLC	Delaware	
Flurry Analytics India Private Limited	India	
Flurry, Inc.	Delaware	
Genome, LLC.	Delaware	
interclick, LLC.	Delaware	
Java SNV Holdings LLC	Delaware	
KR3 Services Korea Yuhan Hoesa	Korea	
Lexity, Inc.	Delaware	
Luminate, Inc.	Delaware	
Maktoob.com Inc.	British Virgin Islands	
Overture Asia-Pac Services K.K.	Japan	
Overture Search Services Holdco (Ireland) Limited	Cayman Islands	
PlayerScale, LLC	Delaware	
Polyvore, Inc.	Delaware	
PT Yahoo Indonesia	Indonesia	
Right Media LLC	Delaware	
Summly Incorporated	Delaware	
Summly Limited	UK	
Tumblr, Inc.	Delaware	
Yahoo de Colombia S.A.S.	Columbia	
Yahoo de Mexico, SA de CV	Mexico	
Yahoo Holdings, Inc.	Delaware	
Yahoo Iberia S.L.	Spain	
Yahoo India Private Limited	India	
Yahoo Software Development India Private Limited	India	
Yahoo Software Research and Development (Beijing) Co., Ltd.	China	
Yahoo! Asia Pacific Pte. Ltd.	Singapore	
Yahoo! Australia & NZ (Holdings) Pty Limited	Australia	50%
Yahoo! Digital Media (Content) Pty Limited	Australia	50%
Yahoo!7 Communications Australia Pty Limited	Australia	50%
Yahoo!7 Money Hound Pty Ltd.	Australia	50%
Yahoo!7 Pty Limited	Australia	50%
Yahoo!7 Travel Pty Limited	Australia	50%
TotalTravel.com Pty Limited	Australia	50%
Yahoo! New Zealand Limited	New Zealand	50%
Yahoo! Canada Co.	Canada	
Yahoo! Cayman Asia Holdings Limited	Cayman Islands	
Yahoo! CV, LLC	Delaware	
Yahoo! de Argentina SRL	Argentina	

<u>Name of Entity</u>	<u>Jurisdiction of Formation</u>	<u>Economic Interest (if not 100%)</u>
Yahoo! Deutschland Services GmbH	Germany	
Yahoo! Digital Marketing Limited	Taiwan	
Yahoo! do Brasil Internet Ltda	Brazil	
Yahoo! Domain Services, Inc.	Delaware	
Yahoo! EMEA Limited	Ireland	
Yahoo! France Holdings SAS	France	
Yahoo! France SAS	France	
Yahoo! Hispanic Americas, LLC	Delaware	
Yahoo! Hong Kong Limited	Hong Kong	
Yahoo! Hungary Labs Kft.	Hungary	
Yahoo! International Services Holdings, Inc.	Delaware	
Yahoo! International Services, Inc.	Delaware	
Yahoo! Israel Labs Ltd.	Israel	
Yahoo! Italia S.r.l.	Italy	
Yahoo! Jordan Services PSC	Jordan	
Yahoo! Korea Yuhan Hoesa	Korea	
Yahoo! Malaysia Sdn. Bhd.	Malaysia	
Yahoo! Mauritius Holdings Limited	Mauritius	
Yahoo! Netherlands B.V.	Netherlands	
Yahoo! Netherlands Holdings C. V.	Netherlands	
Yahoo! Philippines Services Inc.	Philippines	
Yahoo! Realty Inc.	California	
Yahoo! Saudi Arabia Services Limited	Saudi Arabia	
Yahoo! Search Marketing Australia Pty Limited	Australia	
Yahoo! Singapore Digital Marketing Pte. Ltd.	Singapore	
Yahoo! Switzerland Server Services Sàrl	Switzerland	
Yahoo! Taiwan Holdings Limited	Hong Kong	
Yahoo! Taiwan Inc.	Taiwan	
Yahoo! Technologies Norway AS	Norway	
Yahoo! UK Limited	UK	
Yahoo! UK Services Limited	UK	
Yahoo! Vietnam Company Limited	Vietnam	
Zimbra Software Asia Pacific Private Limited	India	

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statements on Form S-8 (No. 333-206956, No. 333-202330, No. 333-198688, No. 333-198687, No. 333-191123, No. 333-191122, No. 333-190495, No. 333-186976, 333-179782, No. 333-174943, No. 333-174942, No. 333-170933, No. 333-168296, No. 333-166712, No. 333-163853, No. 333-161808, No. 333-161806, No. 333-149417, No. 333-149416, No. 333-147125, No. 333-147124, No. 333-145046, No. 333-145044, No. 333-140917, No. 333-138422, No. 333-132226, No. 333-127322, No. 333-126581, No. 333-120999, No. 333-118093, No. 333-118088, No. 333-118067, No. 333-112596, No. 333-109914, No. 333-104137, No. 333-39105, No. 333-46492, No. 333-54426, No. 333-56781, No. 333-60828, No. 333-66067, No. 333-76995, No. 333-79675, No. 333-80227, No. 333-81635, No. 333-83770, No. 333-89948, and No. 333-93497), and the Registration Statement on Form S-4 (No. 333-62694) of Yahoo! Inc. of our report dated March 1, 2017 relating to the consolidated financial statements, financial statement schedule and the effectiveness of internal control over financial reporting, which appears in this Form 10-K.

/s/ PricewaterhouseCoopers LLP

San Jose, California
March 1, 2017

**Certification of Chief Executive Officer Pursuant to
Securities Exchange Act Rules 13a-14(a) and 15d-14(a)
as Adopted Pursuant to
Section 302 of the Sarbanes-Oxley Act of 2002**

I, Marissa A. Mayer, certify that:

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

Dated: March 1, 2017

By: _____ /s/ **MARISSA A. MAYER**
Marissa A. Mayer
Chief Executive Officer

**Certification of Chief Financial Officer Pursuant to
Securities Exchange Act Rules 13a-14(a) and 15d-14(a)
as Adopted Pursuant to
Section 302 of the Sarbanes-Oxley Act of 2002**

I, Ken Goldman, certify that:

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

Dated: March 1, 2017

By: _____ /s/ KEN GOLDMAN
Ken Goldman
Chief Financial Officer

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

In connection with the Annual Report on Form 10-K of Yahoo! Inc. (the "Company") for the year ended December 31, 2016 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), Marissa A. Mayer, as Chief Executive Officer of the Company, and Ken Goldman, as Chief Financial Officer of the Company, each hereby certifies, pursuant to 18 U.S.C. § 1350, as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002, to the best of her or his knowledge, respectively, that:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ MARISSA A. MAYER

Name: _____
Title: Marissa A. Mayer
Dated: Chief Executive Officer
March 1, 2017

/s/ KEN GOLDMAN

Name: _____
Title: Ken Goldman
Dated: Chief Financial Officer
March 1, 2017

The foregoing certification is being furnished pursuant to 18 U.S.C. Section 1350. It is not being filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, and it is not to be incorporated by reference into any filing of the Company, regardless of any general incorporation language in such filing.