

No. 23-980

In the Supreme Court of the United States

FACEBOOK, INC., ET AL., PETITIONERS

v.

AMALGAMATED BANK, ET AL.

*ON WRIT OF CERTIORARI
TO THE UNITED STATES COURT OF APPEALS
FOR THE NINTH CIRCUIT*

**JOINT APPENDIX
VOLUME 2 (PAGES 410-670)**

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**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

Commission File Number: 001-35551

FACEBOOK, INC.

* * *

**NOTE ABOUT FORWARD-LOOKING
STATEMENTS**

This Annual Report on Form 10-K contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. All statements contained in this Annual Report on Form 10-K other than statements of historical fact, including statements regarding our future results of operations and financial position, our business strategy and plans, and our objectives for future operations, are forward-looking statements. The words “believe,” “may,” “will,” “estimate,” “continue,” “anticipate,” “intend,” “expect,” and similar expressions are intended to identify forward-looking statements. We have based these forward-looking statements largely on our current expectations and projections about future events and trends that we believe may affect our financial condition, results of operations, business strategy, short-

term and long-term business operations and objectives, and financial needs. These forward-looking statements are subject to a number of risks, uncertainties and assumptions, including those described in Part I, Item 1A, “Risk Factors” in this Annual Report on Form 10-K. Moreover, we operate in a very competitive and rapidly changing environment. New risks emerge from time to time. It is not possible for our management to predict all risks, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements we may make. In light of these risks, uncertainties and assumptions, the future events and trends discussed in this Annual Report on Form 10-K may not occur and actual results could differ materially and adversely from those anticipated or implied in the forward-looking statements.

We undertake no obligation to revise or publicly re-release the results of any revision to these forward-looking statements, except as required by law. Given these risks and uncertainties, readers are cautioned not to place undue reliance on such forward-looking statements.

Unless expressly indicated or the context requires otherwise, the terms “Facebook,” “company,” “we,” “us,” and “our” in this document refer to Facebook, Inc., a Delaware corporation, and, where appropriate, its wholly owned subsidiaries. The term “Facebook” may also refer to our products, regardless of the manner in which they are accessed. For references to accessing Facebook on the “web” or via a “website,” such terms refer to accessing Facebook on personal computers. For references to accessing Facebook on “mobile,” such term refers to access-

ing Facebook via a mobile application or via a mobile-optimized version of our website such as m.facebook.com, whether on a mobile phone or tablet.

LIMITATIONS OF KEY METRICS AND OTHER DATA

The numbers for our key metrics, which include our daily active users (DAUs), monthly active users (MAUs), and average revenue per user (ARPU), are calculated using internal company data based on the activity of user accounts. While these numbers are based on what we believe to be reasonable estimates of our user base for the applicable period of measurement, there are inherent challenges in measuring usage of our products across large online and mobile populations around the world. In addition, we are continually seeking to improve our estimates of our user base, and such estimates may change due to improvements or changes in our methodology. For example, the number of duplicate or false accounts maintained by users in violation of our terms of service may change as our methodologies evolve. In 2016, we estimate that “duplicate” accounts (an account that a user maintains in addition to his or her principal account) may have represented approximately 6% of our worldwide MAUs. We also seek to identify “false” accounts, which we divide into two categories: (1) user-misclassified accounts, where users have created personal profiles for a business, organization, or non-human entity such as a pet (such entities are permitted on Facebook using a Page rather than a personal profile under our terms of service); and (2) undesirable accounts, which represent user profiles that we determine are intended to be used for purposes that violate our terms of service, such as spamming. In 2016, for example, we estimate user-misclassified and undesirable accounts may have represented approximately 1% of our

worldwide MAUs. We believe the percentage of accounts that are duplicate or false is meaningfully lower in developed markets such as the United States or United Kingdom and higher in developing markets such as India and Turkey. However, these estimates are based on an internal review of a limited sample of accounts and we apply significant judgment in making this determination, such as identifying names that appear to be fake or other behavior that appears inauthentic to the reviewers. As such, our estimation of duplicate or false accounts may not accurately represent the actual number of such accounts.

Our data limitations may affect our understanding of certain details of our business. For example, while user-provided data indicates a decline in usage among younger users, this age data is unreliable because a disproportionate number of our younger users register with an inaccurate age. Accordingly, our understanding of usage by age group may not be complete.

In addition, our data regarding the geographic location of our users is estimated based on a number of factors, such as the user's IP address and self-disclosed location. These factors may not always accurately reflect the user's actual location. For example, a user may appear to be accessing Facebook from the location of the proxy server that the user connects to rather than from the user's actual location. The methodologies used to measure user metrics may also be susceptible to algorithm or other technical errors. Our estimates for revenue by user location and revenue by user device are also affected by these factors. For example, we discovered an error in the algorithm we used to attribute our revenue by user geography in late 2015. While this issue did not affect our overall worldwide revenue, it did affect our attribution of revenue to different geographic regions. The fourth quarter

of 2015 revenue by user geography and ARPU amounts were adjusted to reflect this reclassification. We regularly review our processes for calculating these metrics, and from time to time we may discover inaccuracies in our metrics or make adjustments to improve their accuracy, including adjustments that may result in the recalculation of our historical metrics. We believe that any such inaccuracies or adjustments are immaterial unless otherwise stated. In addition, our DAU and MAU estimates will differ from estimates published by third parties due to differences in methodology.

The numbers of DAUs and MAUs discussed in this Annual Report on Form 10-K, as well as ARPU, do not include Instagram, WhatsApp, or Oculus users unless they would otherwise qualify as such users, respectively, based on their other activities on Facebook. In addition, other user engagement metrics included herein do not include Instagram, WhatsApp, or Oculus unless otherwise specifically stated.

PART I

Item 1. Business

Overview

Our mission is to give people the power to share and make the world more open and connected.

Our top priority is to build useful and engaging products that enable people to connect and share through mobile devices, personal computers, and other surfaces. We also help people discover and learn about what is going on in the world around them, enable people to share their opinions, ideas, photos and videos, and other activities with audiences ranging from their closest friends to the

public at large, and stay connected everywhere by accessing our products, including:

- **Facebook.** Facebook enables people to connect, share, discover, and communicate with each other on mobile devices and personal computers. There are a number of different ways to engage with people on Facebook, the most important of which is News Feed which displays an algorithmically-ranked series of stories and advertisements individualized for each person.
- **Instagram.** Instagram enables people to take photos or videos, customize them with filter effects, and share them with friends and followers in a photo feed or send them directly to friends.
- **Messenger.** Messenger allows for a rich and expressive way to communicate with people and businesses alike across a variety of platforms and devices, which makes it easy to reach almost everyone seamlessly and securely.
- **WhatsApp.** WhatsApp Messenger is a fast, simple and reliable messaging application that is used by people around the world and is available on a variety of mobile platforms.
- **Oculus.** Our Oculus virtual reality technology and content platform power products that allow people to enter a completely immersive and interactive environment to play games, consume content, and connect with others.

We generate substantially all of our revenue from selling advertising placements to marketers. Our ads let marketers reach people based on a variety of factors including age, gender, location, interests, and behaviors.

Marketers purchase ads that can appear in multiple places including on Facebook, Instagram, and third-party applications and websites.

We are also investing in a number of longer-term initiatives, such as connectivity efforts and artificial intelligence research, to develop technologies that we believe will help us better serve our communities and pursue our mission to make the world more open and connected.

Competition

Our business is characterized by innovation, rapid change, and disruptive technologies. We compete with companies that sell advertising, as well as with companies that provide social and communication products and services that are designed to engage users and capture time spent on mobile devices and online. We face significant competition in every aspect of our business, including from companies that facilitate communications and the sharing of content and information, companies that enable marketers to display advertising, and companies that provide development platforms for application developers. We compete to attract, engage, and retain people who use our products, to attract and retain marketers, and to attract and retain developers to build compelling mobile and web applications that integrate with our products.

We also compete with the following:

- Companies that offer products across broad platforms that replicate key capabilities we provide. For example, Google has integrated social functionality into a number of its products, including search, video and Android.
- Companies that develop applications, particularly mobile applications, that provide social or other

communications functionality, such as messaging, photo- and video-sharing, and micro-blogging.

- Companies that provide regional social networks that have strong positions in particular countries.
- Traditional, online, and mobile businesses that provide media for marketers to reach their audiences and/or develop tools and systems for managing and optimizing advertising campaigns.
- Companies that develop and deliver virtual reality products and services.

As we introduce or acquire new products, as our existing products evolve, or as other companies introduce new products and services, we may become subject to additional competition.

Technology

Our product development philosophy is centered on continuous innovation in creating and improving products that are social by design, which means that our products are designed to place people and their social interactions at the core of the product experience. As our user base grows, and the level of engagement from the people who use our products continues to increase, including with video, our computing needs continue to expand. We make significant investments in technology both to improve our existing products and services and to develop new ones, as well as for our marketers and developers.

Our research and development expenses were \$5.92 billion, \$4.82 billion, and \$2.67 billion in 2016, 2015, and 2014, respectively. For information about our research and development expenses, see Part II, Item 7, “Management’s Discussion and Analysis of Financial Condition

and Results of Operations—Results of Operations—Research and development” of this Annual Report on Form 10-K.

Sales and Operations

The majority of our marketers use our self-service ad platform to launch and manage their advertising campaigns. We also have a global sales force that is focused on attracting and retaining advertisers and providing support to them throughout the stages of the marketing cycle from pre-purchase decision-making to real-time optimizations to post-campaign analytics. We work directly with these advertisers, through traditional advertising agencies, and with an ecosystem of specialized agencies and partners. We currently operate five support offices and more than 40 sales offices around the globe. We also invest in and rely on self-service tools to provide direct customer support to our users and partners.

We own and lease data centers throughout the United States and in various locations internationally.

Marketing

To date, our communities have grown organically with people inviting their friends to connect with them, supported by internal efforts to stimulate awareness and interest. In addition, we have invested and will continue to invest in marketing our products and services to build our brand, grow our user base, and increase engagement around the world. We leverage the utility of our products and our social distribution channels as our most effective marketing tools.

Intellectual Property

To establish and protect our proprietary rights, we rely on a combination of patents, patent applications,

trademarks, copyrights, trade secrets, including know-how, license agreements, confidentiality procedures, non-disclosure agreements with third parties, employee disclosure and invention assignment agreements, and other contractual rights. In addition, to further protect our proprietary rights, from time to time we have purchased patents and patent applications from third parties. We do not believe that our proprietary technology is dependent on any single patent or copyright or groups of related patents or copyrights. We believe the duration of our patents is adequate relative to the expected lives of our products.

Government Regulation

We are subject to a number of U.S. federal and state and foreign laws and regulations that affect companies conducting business on the Internet. Many of these laws and regulations are still evolving and being tested in courts, and could be interpreted in ways that could harm our business. These may involve user privacy, data protection, and personal information, rights of publicity, content, intellectual property, advertising, marketing, distribution, data security, data retention and deletion, personal information, electronic contracts and other communications, competition, protection of minors, consumer protection, telecommunications, product liability, taxation, economic or other trade prohibitions or sanctions, securities law compliance, and online payment services. In particular, we are subject to federal, state, and foreign laws regarding privacy and protection of people's data. Foreign data protection, privacy, competition, and other laws and regulations can be more restrictive than those in the United States. U.S. federal and state and foreign laws and regulations, which in some cases can be enforced by

private parties in addition to government entities, are constantly evolving and can be subject to significant change. As a result, the application, interpretation, and enforcement of these laws and regulations are often uncertain, particularly in the new and rapidly-evolving industry in which we operate, and may be interpreted and applied inconsistently from country to country and inconsistently with our current policies and practices.

Proposed or new legislation and regulations could also significantly affect our business. There currently are a number of proposals pending before federal, state, and foreign legislative and regulatory bodies, including a data protection regulation, known as the General Data Protection Regulation (GDPR), which has been finalized and is due to come into force in or around May 2018. The GDPR will include operational requirements for companies that receive or process personal data of residents of the European Union that are different than those currently in place in the European Union, and that will include significant penalties for non-compliance. Similarly, there are a number of legislative proposals in the United States, at both the federal and state level, that could impose new obligations in areas affecting our business, such as liability for copyright infringement by third parties. In addition, some countries are considering or have passed legislation implementing data protection requirements or requiring local storage and processing of data or similar requirements that could increase the cost and complexity of delivering our services.

We are currently, and may in the future, be subject to regulatory orders or consent decrees. Violation of existing or future regulatory orders or consent decrees could

subject us to substantial monetary fines and other penalties that could negatively affect our financial condition and results of operations.

Various laws and regulations in the United States and abroad, such as the U.S. Bank Secrecy Act, the Dodd-Frank Act, the USA PATRIOT Act, and the Credit CARD Act, impose certain anti-money laundering requirements on companies that are financial institutions or that provide financial products and services. Under these laws and regulations, financial institutions are broadly defined to include money services businesses such as money transmitters, check cashers, and sellers or issuers of stored value or prepaid access products. Requirements imposed on financial institutions under these laws include customer identification and verification programs, record retention policies and procedures, and transaction reporting. To increase flexibility in how our online payments infrastructure (Payments) may evolve and to mitigate regulatory uncertainty, we have received certain money transmitter licenses in the United States and an Electronic Money (E-Money) license that allows us to conduct certain regulated payment activities in the participating member countries of the European Economic Area, which will generally require us to demonstrate compliance with many domestic and foreign laws relating to money transmission, gift cards and other prepaid access instruments, electronic funds transfers, anti-money laundering, charitable fundraising, counter-terrorist financing, gambling, banking and lending, financial privacy and data security, and import and export restrictions.

Employees

As of December 31, 2016, we had 17,048 employees.

Corporate Information

We were incorporated in Delaware in July 2004. We completed our initial public offering in May 2012 and our Class A common stock is listed on The NASDAQ Global Select Market under the symbol “FB.” Our principal executive offices are located at 1601 Willow Road, Menlo Park, California 94025, and our telephone number is (650) 543-4800.

Facebook, the Facebook logo, FB, the Like button, Instagram, Oculus, WhatsApp, and our other registered or common law trademarks, service marks, or trade names appearing in this Annual Report on Form 10-K are the property of Facebook, Inc. or its affiliates. Other trademarks, service marks, or trade names appearing in this Annual Report on Form 10-K are the property of their respective owners.

Information about Segment and Geographic Revenue

Information about segment and geographic revenue is set forth in Notes 1 and 13 of our Notes to Consolidated Financial Statements included in Part II, Item 8, “Financial Statements and Supplementary Data” of this Annual Report on Form 10-K.

Available Information

Our website address is www.facebook.com. Our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and amendments to reports filed pursuant to Sections 13(a) and 15(d) of the Securities Exchange Act of 1934, as amended (Exchange Act), are filed with the U.S. Securities and Exchange Commission (SEC). We are subject to the informational requirements of the Exchange Act and file or furnish reports, proxy statements, and other information with the

SEC. Such reports and other information filed by us with the SEC are available free of charge on our website at investor.fb.com when such reports are available on the SEC's website. We use our investor.fb.com and newsroom.fb.com websites as well as Mark Zuckerberg's Facebook Page (<https://www.facebook.com/zuck>) as means of disclosing material non-public information and for complying with our disclosure obligations under Regulation FD.

The public may read and copy any materials filed by Facebook with the SEC at the SEC's Public Reference Room at 100 F Street, NE, Room 1580, Washington, DC 20549. The public may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. The SEC maintains an Internet site that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC at www.sec.gov.

The contents of the websites referred to above are not incorporated into this filing. Further, our references to the URLs for these websites are intended to be inactive textual references only.

Item 1A. Risk Factors

Certain factors may have a material adverse effect on our business, financial condition, and results of operations. You should consider carefully the risks and uncertainties described below, in addition to other information contained in this Annual Report on Form 10-K, including our consolidated financial statements and related notes. The risks and uncertainties described below are not the only ones we face. Additional risks and uncertainties that we are unaware of, or that we currently be-

lieve are not material, may also become important factors that adversely affect our business. If any of the following risks actually occurs, our business, financial condition, results of operations, and future prospects could be materially and adversely affected. In that event, the trading price of our Class A common stock could decline, and you could lose part or all of your investment.

Risks Related to Our Business and Industry

If we fail to retain existing users or add new users, or if our users decrease their level of engagement with our products, our revenue, financial results, and business may be significantly harmed.

The size of our user base and our users' level of engagement are critical to our success. Our financial performance has been and will continue to be significantly determined by our success in adding, retaining, and engaging active users of our products, particularly for Facebook and Instagram. We anticipate that our active user growth rate will continue to decline over time as the size of our active user base increases, and as we achieve higher market penetration rates. If people do not perceive our products to be useful, reliable, and trustworthy, we may not be able to attract or retain users or otherwise maintain or increase the frequency and duration of their engagement. A number of other social networking companies that achieved early popularity have since seen their active user bases or levels of engagement decline, in some cases precipitously. There is no guarantee that we will not experience a similar erosion of our active user base or engagement levels. Our user engagement patterns have changed over time, and user engagement can be difficult to measure, particularly as we introduce new and different products and services. Any number of factors could potentially

negatively affect user retention, growth, and engagement, including if:

- users increasingly engage with other competitive products or services;
- we fail to introduce new products or services that users find engaging or if we introduce new products or services that are not favorably received;
- users feel that their experience is diminished as a result of the decisions we make with respect to the frequency, prominence, format, size, and quality of ads that we display;
- users have difficulty installing, updating, or otherwise accessing our products on mobile devices as a result of actions by us or third parties that we rely on to distribute our products and deliver our services;
- user behavior on any of our products changes, including decreases in the quality and frequency of content shared on our products and services;
- we are unable to continue to develop products for mobile devices that users find engaging, that work with a variety of mobile operating systems and networks, and that achieve a high level of market acceptance;
- there are decreases in user sentiment about the quality or usefulness of our products or concerns related to privacy and sharing, safety, security, or other factors;
- we are unable to manage and prioritize information to ensure users are presented with content that is

appropriate, interesting, useful, and relevant to them;

- we are unable to obtain or attract engaging third-party content;
- users adopt new technologies where our products may be displaced in favor of other products or services, or may not be featured or otherwise available;
- there are adverse changes in our products that are mandated by legislation, regulatory authorities, or litigation, including settlements or consent decrees;
- technical or other problems prevent us from delivering our products in a rapid and reliable manner or otherwise affect the user experience, such as security breaches or failure to prevent or limit spam or similar content;
- we adopt terms, policies, or procedures related to areas such as sharing or user data that are perceived negatively by our users or the general public;
- we elect to focus our user growth and engagement efforts more on longer-term initiatives, or if initiatives designed to attract and retain users and engagement are unsuccessful or discontinued, whether as a result of actions by us, third parties, or otherwise;
- we fail to provide adequate customer service to users, marketers, developers, or other partners;
- we, developers whose products are integrated with our products, or other partners and companies in

our industry are the subject of adverse media reports or other negative publicity; or

- our current or future products, such as our development tools and application programming interfaces that enable developers to build, grow, and monetize mobile and web applications, reduce user activity on our products by making it easier for our users to interact and share on third-party mobile and web applications.

If we are unable to maintain or increase our user base and user engagement, our revenue and financial results may be adversely affected. Any decrease in user retention, growth, or engagement could render our products less attractive to users, marketers, and developers, which is likely to have a material and adverse impact on our revenue, business, financial condition, and results of operations. If our active user growth rate continues to slow, we will become increasingly dependent on our ability to maintain or increase levels of user engagement and monetization in order to drive revenue growth.

We generate substantially all of our revenue from advertising. The loss of marketers, or reduction in spending by marketers, could seriously harm our business.

Substantially all of our revenue is currently generated from third parties advertising on Facebook and Instagram. For 2016, 2015, and 2014, advertising accounted for 97%, 95% and 92%, respectively, of our revenue. As is common in the industry, our marketers do not have long-term advertising commitments with us. Many of our marketers spend only a relatively small portion of their overall advertising budget with us. In addition, marketers may view some of our products as experimental and unproven. Marketers will not continue to do business with

us, or they will reduce the prices they are willing to pay to advertise with us or the budgets they are willing to commit to us, if we do not deliver ads in an effective manner, or if they do not believe that their investment in advertising with us will generate a competitive return relative to other alternatives.

Our advertising revenue could also be adversely affected by a number of other factors, including:

- decreases in user engagement, including time spent on our products;
- our inability to continue to increase user access to and engagement with our mobile products;
- product changes or inventory management decisions we may make that change the size, format, frequency, or relative prominence of ads displayed on our products or of other unpaid content shared by marketers on our products;
- our inability to maintain or increase marketer demand, the pricing of our ads, or both;
- our inability to maintain or increase the quantity or quality of ads shown to users;
- changes to third-party policies that limit our ability to deliver or target advertising on mobile devices;
- the availability, accuracy, and utility of analytics and measurement solutions offered by us or third parties that demonstrate the value of our ads to marketers, or our ability to further improve such tools;
- loss of advertising market share to our competitors, including if prices for purchasing ads increase

or if competitors offer lower priced or more integrated products;

- adverse legal developments relating to advertising, including legislative and regulatory developments and developments in litigation;
- decisions by marketers to reduce their advertising as a result of adverse media reports or other negative publicity involving us, our advertising metrics, content on our products, developers with mobile and web applications that are integrated with our products, or other companies in our industry;
- the effectiveness of our ad targeting or degree to which users opt out of certain types of ad targeting;
- the degree to which users cease or reduce the number of times they click on our ads;
- changes in the way advertising on mobile devices or on personal computers is measured or priced; and
- the impact of macroeconomic conditions, whether in the advertising industry in general, or among specific types of marketers or within particular geographies.

The occurrence of any of these or other factors could result in a reduction in demand for our ads, which may reduce the prices we receive for our ads, or cause marketers to stop advertising with us altogether, either of which would negatively affect our revenue and financial results.

Our user growth, engagement, and monetization on mobile devices depend upon effective operation with

mobile operating systems, networks, and standards that we do not control.

The substantial majority of our revenue is generated from advertising on mobile devices. There is no guarantee that popular mobile devices will continue to feature Facebook or our other products, or that mobile device users will continue to use our products rather than competing products. We are dependent on the interoperability of Facebook and our other products with popular mobile operating systems, networks, and standards that we do not control, such as the Android and iOS operating systems. Any changes, bugs, or technical issues in such systems, or changes in our relationships with mobile operating system partners, handset manufacturers, or mobile carriers, or in their terms of service or policies that degrade our products' functionality, reduce or eliminate our ability to distribute our products, give preferential treatment to competitive products, limit our ability to deliver, target, or measure the effectiveness of ads, or charge fees related to the distribution of our products or our delivery of ads could adversely affect the usage of Facebook or our other products and monetization on mobile devices. Additionally, in order to deliver high quality mobile products, it is important that our products work well with a range of mobile technologies, systems, networks, and standards that we do not control, and that we have good relationships with handset manufacturers and mobile carriers. We may not be successful in maintaining or developing relationships with key participants in the mobile ecosystem or in developing products that operate effectively with these technologies, systems, networks, or standards. In the event that it is more difficult for our users to access and use Facebook or our other products on their mobile devices, or if our users choose not to access or use Facebook or our other products on their mobile devices or use

mobile products that do not offer access to Facebook or our other products, our user growth and user engagement could be harmed. From time to time, we may also take actions regarding the distribution of our products or the operation of our business based on what we believe to be in our long-term best interests. Such actions may adversely affect our users and our relationships with the operators of mobile operating systems, handset manufacturers, mobile carriers, or other business partners, and there is no assurance that these actions will result in the anticipated long-term benefits. In the event that our users are adversely affected by these actions or if our relationships with such third parties deteriorate, our user growth, engagement, and monetization could be adversely affected and our business could be harmed.

Our business is highly competitive. Competition presents an ongoing threat to the success of our business.

We compete with companies that sell advertising, as well as with companies that provide social and communication products and services that are designed to engage users and capture time spent on mobile devices and online. We face significant competition in every aspect of our business, including from companies that facilitate communication and the sharing of content and information, companies that enable marketers to display advertising, and companies that provide development platforms for applications developers. We compete with companies that offer products across broad platforms that replicate capabilities we provide. For example, Google has integrated social functionality into a number of its products, including search, video, and Android. We also compete with companies that develop applications, particularly mobile applications, that provide social or other communications functionality, such as messaging, photo-

and video-sharing, and micro-blogging, as well as companies that provide regional social networks that have strong positions in particular countries. In addition, we face competition from traditional, online, and mobile businesses that provide media for marketers to reach their audiences and/or develop tools and systems for managing and optimizing advertising campaigns. We also compete with companies that develop and deliver virtual reality products and services.

Some of our current and potential competitors may have significantly greater resources or better competitive positions in certain product segments, geographic regions or user demographics than we do. These factors may allow our competitors to respond more effectively than us to new or emerging technologies and changes in market conditions. We believe that some of our users, particularly our younger users, are aware of and actively engaging with other products and services similar to, or as a substitute for, Facebook products and services, and we believe that some of our users have reduced their use of and engagement with Facebook in favor of these other products and services. In the event that our users increasingly engage with other products and services, we may experience a decline in use and engagement in key user demographics or more broadly, in which case our business would likely be harmed.

Our competitors may develop products, features, or services that are similar to ours or that achieve greater acceptance, may undertake more far-reaching and successful product development efforts or marketing campaigns, or may adopt more aggressive pricing policies. In addition, developers whose mobile and web applications are integrated with Facebook or our other products may use information shared by our users through our products

in order to develop products or features that compete with us. Some competitors may gain a competitive advantage against us in areas where we operate, including: by integrating competing platforms, applications, or features into products they control such as mobile device operating systems, search engines, or web browsers; by making acquisitions; by limiting or denying our access to advertising measurement or delivery systems; by limiting our ability to deliver, target, or measure the effectiveness of ads; by imposing fees or other charges related to our delivery of ads; by making access to our products more difficult; or by making it more difficult to communicate with our users. As a result, our competitors may acquire and engage users or generate advertising or other revenue at the expense of our own efforts, which may negatively affect our business and financial results. In addition, from time to time, we may take actions in response to competitive threats, but we cannot assure you that these actions will be successful or that they will not negatively affect our business and financial results.

We believe that our ability to compete effectively depends upon many factors both within and beyond our control, including:

- the popularity, usefulness, ease of use, performance, and reliability of our products compared to our competitors' products;
- the size and composition of our user base;
- the engagement of our users with our products and competing products;
- the timing and market acceptance of products, including developments and enhancements to our or our competitors' products;

- our ability to distribute our products to new and existing users;
- our ability to monetize our products;
- the frequency, size, format, quality, and relative prominence of the ads displayed by us or our competitors;
- customer service and support efforts;
- marketing and selling efforts, including our ability to measure the effectiveness of our ads and to provide marketers with a compelling return on their investments;
- our ability to establish and maintain developers' interest in building mobile and web applications that integrate with Facebook and our other products;
- our ability to establish and maintain publisher interest in integrating their content with Facebook and our other products;
- changes mandated by legislation, regulatory authorities, or litigation, including settlements and consent decrees, some of which may have a disproportionate effect on us;
- acquisitions or consolidation within our industry, which may result in more formidable competitors;
- our ability to attract, retain, and motivate talented employees, particularly software engineers, designers, and product managers;
- our ability to cost-effectively manage and grow our operations; and
- our reputation and brand strength relative to those of our competitors.

If we are not able to compete effectively, our user base and level of user engagement may decrease, we may become less attractive to developers and marketers, and our revenue and results of operations may be materially and adversely affected.

Action by governments to restrict access to Facebook or our other products in their countries could substantially harm our business and financial results.

It is possible that governments of one or more countries may seek to censor content available on Facebook or our other products in their country, restrict access to our products from their country entirely, or impose other restrictions that may affect the accessibility of our products in their country for an extended period of time or indefinitely. For example, access to Facebook has been or is currently restricted in whole or in part in China, Iran, and North Korea. In addition, government authorities in other countries may seek to restrict access to our products if they consider us to be in violation of their laws, and certain of our products have been restricted by governments in other countries from time to time. In the event that content shown on Facebook or our other products is subject to censorship, access to our products is restricted, in whole or in part, in one or more countries, or other restrictions are imposed on our products, or our competitors are able to successfully penetrate new geographic markets or capture a greater share of existing geographic markets that we cannot access or where we face other restrictions, our ability to retain or increase our user base and user engagement may be adversely affected, we may not be able to maintain or grow our revenue as anticipated, and our financial results could be adversely affected.

Our new products and changes to existing products could fail to attract or retain users or generate revenue and profits.

Our ability to retain, increase, and engage our user base and to increase our revenue depends heavily on our ability to continue to evolve our existing products and to create successful new products, both independently and in conjunction with developers or other third parties. We may introduce significant changes to our existing products or acquire or introduce new and unproven products, including using technologies with which we have little or no prior development or operating experience. For example, in March 2016, we shipped our first virtual reality hardware product, the Oculus Rift. We do not have prior experience with consumer hardware products or virtual reality technology, which may adversely affect our ability to successfully develop and market the Oculus Rift and related products or technology, and we will incur increased costs in connection with the development and marketing of such products and technology. In addition, we have invested significant resources in growing our WhatsApp and Messenger products. We have historically monetized messaging in only a very limited fashion, and we may not be successful in our efforts to generate meaningful revenue from messaging over the long term. If these or other new or enhanced products fail to engage users, marketers, or developers, or if we are unsuccessful in our monetization efforts, we may fail to attract or retain users or to generate sufficient revenue, operating margin, or other value to justify our investments, and our business may be adversely affected.

We make product and investment decisions that may not prioritize short-term financial results.

We frequently make product and investment decisions that may not prioritize short-term financial results if we believe that the decisions are consistent with our mission and benefit the aggregate user experience and will thereby improve our financial performance over the long term. For example, from time to time we may change the size, frequency, or relative prominence of ads in order to improve ad quality and overall user experience. Similarly, from time to time we update our News Feed ranking algorithm to deliver the most relevant content to our users, which may adversely affect the distribution of content of marketers and developers and could reduce their incentive to invest in their development and marketing efforts on Facebook. We also may introduce changes to existing products, or introduce new stand-alone products, that direct users away from properties, formats, or use cases where we have a proven means of monetization. For example, we have taken action to redirect users who send messages from within the Facebook application to our stand-alone Messenger application, although we do not monetize the stand-alone Messenger application in any significant manner. In addition, we plan to continue focusing on growing the user base for WhatsApp and potentially other stand-alone applications that may have limited or no near-term monetization, and it is possible that these efforts may reduce engagement with the core Facebook application. We are also investing in new experiences using video, including Facebook Live, and we may not successfully monetize such experiences. We also may take steps that result in limiting distribution of mobile products and services in the short term in order to attempt to ensure the availability of our products and services to users over the long term. These decisions may not produce

the long-term benefits that we expect, in which case our user growth and engagement, our relationships with marketers and developers, and our business and results of operations could be harmed.

If we are not able to maintain and enhance our brands, or if events occur that damage our reputation and brands, our ability to expand our base of users, marketers, and developers may be impaired, and our business and financial results may be harmed.

We believe that our brands have significantly contributed to the success of our business. We also believe that maintaining and enhancing our brands is critical to expanding our base of users, marketers, and developers. Many of our new users are referred by existing users. Maintaining and enhancing our brands will depend largely on our ability to continue to provide useful, reliable, trustworthy, and innovative products, which we may not do successfully. We may introduce new products or terms of service or policies that users do not like, which may negatively affect our brands. Additionally, the actions of our developers or advertisers may affect our brands if users do not have a positive experience using third-party mobile and web applications integrated with our products or interacting with parties that advertise through our products. We will also continue to experience media, legislative, or regulatory scrutiny of our decisions regarding user privacy and other issues, which may adversely affect our reputation and brands. We also may fail to provide adequate customer service, which could erode confidence in our brands. Our brands may also be negatively affected by the actions of users that are deemed to be hostile or inappropriate to other users, by the actions of users acting under false or inauthentic identities, by the use of our products or services to disseminate information

that is deemed to be misleading (or intended to manipulate opinions), by perceived or actual efforts by governments to obtain access to user information for security-related purposes, or by the use of our products or services for illicit, objectionable, or illegal ends. Maintaining and enhancing our brands may require us to make substantial investments and these investments may not be successful. Certain of our past actions have eroded confidence in our brands, and if we fail to successfully promote and maintain our brands or if we incur excessive expenses in this effort, our business and financial results may be adversely affected.

Security breaches and improper access to or disclosure of our data or user data, or other hacking and phishing attacks on our systems, could harm our reputation and adversely affect our business.

Our industry is prone to cyber-attacks by third parties seeking unauthorized access to our data or users' data. Any failure to prevent or mitigate security breaches and improper access to or disclosure of our data or user data could result in the loss or misuse of such data, which could harm our business and reputation and diminish our competitive position. In addition, computer malware, viruses, social engineering (predominantly spear phishing attacks), and general hacking have become more prevalent in our industry, have occurred on our systems in the past, and will occur on our systems in the future. As a result of our prominence, we believe that we are a particularly attractive target for such breaches and attacks. Such attacks may cause interruptions to the services we provide, degrade the user experience, cause users to lose confidence and trust in our products, or result in financial harm to us. Our efforts to protect our company data or the in-

formation we receive may also be unsuccessful due to software bugs or other technical malfunctions; employee, contractor, or vendor error or malfeasance; government surveillance; or other threats that evolve. In addition, third parties may attempt to fraudulently induce employees or users to disclose information in order to gain access to our data or our users' data. Although we have developed systems and processes that are designed to protect our data and user data, to prevent data loss, and to prevent or detect security breaches, we cannot assure you that such measures will provide absolute security.

In addition, some of our developers or other partners, such as those that help us measure the effectiveness of ads, may receive or store information provided by us or by our users through mobile or web applications integrated with Facebook. We provide limited information to such third parties based on the scope of services provided to us. However, if these third parties or developers 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 accessed, used, or disclosed.

Affected users or government authorities could initiate legal or regulatory actions against us in connection with any security breaches or improper disclosure of data, which could cause us to incur significant expense and liability or result in orders or consent decrees forcing us to modify our business practices. Any of these events could have a material and adverse effect on our business, reputation, or financial results.

Unfavorable media coverage could negatively affect our business.

We receive a high degree of media coverage around the world. Unfavorable publicity regarding, for example, our privacy practices, terms of service, product changes, product quality, litigation or regulatory activity, government surveillance, the actions of our advertisers, the actions of our developers whose products are integrated with our products, the use of our products or services for illicit, objectionable, or illegal ends, the actions of our users, the quality and integrity of content shared on our platform, or the actions of other companies that provide similar services to us, could adversely affect our reputation. Such negative publicity also could have an adverse effect on the size, engagement, and loyalty of our user base and result in decreased revenue, which could adversely affect our business and financial results.

Our financial results will fluctuate from quarter to quarter and are difficult to predict.

Our quarterly financial results have fluctuated in the past and will fluctuate in the future. Additionally, we have a limited operating history with the current scale of our business, which makes it difficult to forecast our future results. As a result, you should not rely upon our past quarterly financial results as indicators of future performance. You should take into account the risks and uncertainties frequently encountered by companies in rapidly evolving markets. Our financial results in any given quarter can be influenced by numerous factors, many of which we are unable to predict or are outside of our control, including:

- our ability to maintain and grow our user base and user engagement;

- our ability to attract and retain marketers in a particular period;
- fluctuations in spending by our marketers due to seasonality, such as historically strong spending in the fourth quarter of each year, episodic regional or global events, or other factors;
- the frequency, prominence, size, format, and quality of ads shown to users;
- the success of technologies designed to block the display of ads;
- the pricing of our ads and other products;
- the diversification and growth of revenue sources beyond advertising on Facebook and Instagram;
- our ability to generate revenue from Payments, or the sale of Oculus products and services or other products we may introduce in the future;
- the development and introduction of new products or services by us or our competitors;
- increases in marketing, sales, and other operating expenses that we will incur to grow and expand our operations and to remain competitive;
- costs and expenses related to the development and delivery of Oculus products and services;
- our ability to maintain gross margins and operating margins;
- costs related to acquisitions, including costs associated with amortization and additional investments to develop the acquired technologies;
- charges associated with impairment of any assets on our balance sheet;

- our ability to obtain equipment, components, and labor for our data centers and other technical infrastructure in a timely and cost-effective manner;
- system failures or outages, which could prevent us from serving ads for any period of time;
- breaches of security or privacy, and the costs associated with any such breaches and remediation;
- changes in the manner in which we distribute our products or inaccessibility of our products due to third-party actions;
- fees paid to third parties for content or the distribution of our products;
- share-based compensation expense, including acquisition-related expense;
- adverse litigation judgments, settlements, or other litigation-related costs;
- changes in the legislative or regulatory environment, including with respect to privacy and data protection, or enforcement by government regulators, including fines, orders, or consent decrees;
- the overall tax rate for our business, which may be affected by a number of factors, including the financial results of our international subsidiaries and the timing, size, and integration of acquisitions we may make from time to time;
- tax obligations that may arise from changes in laws or resolutions of tax examinations, including the examination we are currently under by the Internal Revenue Service (IRS), that materially differ from the amounts we have anticipated;

- fluctuations in currency exchange rates and changes in the proportion of our revenue and expenses denominated in foreign currencies;
- fluctuations in the market values of our portfolio investments and in interest rates;
- changes in U.S. generally accepted accounting principles; and
- changes in global business or macroeconomic conditions.

We expect our rates of growth to decline in the future.

We expect that our user growth and revenue growth rates will decline over time as the size of our active user base increases and as we achieve greater market penetration. We expect our revenue growth rate will generally decline over time as our revenue increases to higher levels. As our growth rates decline, investors' perceptions of our business may be adversely affected and the trading price of our Class A common stock could decline.

Our costs are continuing to grow, which could harm our business and profitability.

Operating our business is costly, and we expect our expenses to continue to increase in the future as we broaden our user base, as users increase the amount of content they consume and the data they share with us, for example with respect to video, as we develop and implement new products, as we continue to expand our technical infrastructure, and as we continue to hire additional employees to support our expanding operations. We expect to continue to invest in our global connectivity efforts and other initiatives, which may not have clear paths to monetization. We may also be subject to increased costs in

order to obtain and attract third-party content or to facilitate the distribution of our products. In addition, we will incur increased costs in connection with the development and marketing of our Oculus products and services. Any such investments may not be successful, and any such increases in our costs may adversely affect our business and profitability.

Our business is subject to complex and evolving U.S. and foreign laws and regulations regarding privacy, data protection, competition, consumer protection, and other matters. Many of these laws and regulations are subject to change and uncertain interpretation, and could result in claims, changes to our business practices, monetary penalties, increased cost of operations, or declines in user growth or engagement, or otherwise harm our business.

We are subject to a variety of laws and regulations in the United States and abroad that involve matters central to our business, including privacy, data protection, and personal information, rights of publicity, content, intellectual property, advertising, marketing, distribution, data security, data retention and deletion, personal information, electronic contracts and other communications, competition, protection of minors, consumer protection, telecommunications, product liability, taxation, economic or other trade prohibitions or sanctions, securities law compliance, and online payment services. The introduction of new products, expansion of our activities in certain jurisdictions, or other actions that we may take may subject us to additional laws, regulations, or other government scrutiny. In addition, foreign data protection, privacy, competition, and other laws and regulations can impose different obligations or be more restrictive than those in the United States.

These U.S. federal and state and foreign laws and regulations, which in some cases can be enforced by private parties in addition to government entities, are constantly evolving and can be subject to significant change. As a result, the application, interpretation, and enforcement of these laws and regulations are often uncertain, particularly in the new and rapidly evolving industry in which we operate, and may be interpreted and applied inconsistently from country to country and inconsistently with our current policies and practices. For example, regulatory or legislative actions affecting the manner in which we display content to our users or obtain consent to various practices could adversely affect user growth and engagement. Such actions could affect the manner in which we provide our services or adversely affect our financial results.

We are also subject to laws and regulations that dictate whether, how, and under what circumstances we can transfer, process and/or receive transnational data that is critical to our operations, including data relating to users, customers, or partners outside the United States, and those laws and regulations are uncertain and subject to change. For example, in October 2015, the European Court of Justice invalidated the European Commission's 2000 Safe Harbour Decision as a legitimate basis on which Facebook could rely for the transfer of data from the European Union to the United States. The European Union and United States recently agreed to an alternative transfer framework for data transferred from the European Union to the United States, called the Privacy Shield, but this new framework is subject to an annual review that could result in changes to our obligations and also may be challenged by national regulators or private parties. In addition, the other bases on which Facebook relies to le-

gitimize the transfer of data, such as standard Model Contractual Clauses (MCCs), have been subjected to regulatory or judicial scrutiny. For example, the Irish Data Protection Commissioner is investigating and has challenged the legal grounds for transfers of user data to Facebook, Inc. If one or more of the legal bases for transferring data from Europe to the United States is invalidated, or if Facebook is unable to transfer personal data between and among countries and regions in which it operates, it could affect the manner in which we provide our services or adversely affect our financial results.

Proposed or new legislation and regulations could also significantly affect our business. There currently are a number of proposals pending before federal, state, and foreign legislative and regulatory bodies. In addition, the European Commission has approved a data protection regulation, known as the General Data Protection Regulation (GDPR), which has been finalized and is due to come into force in or around May 2018. The GDPR will include operational requirements for companies that receive or process personal data of residents of the European Union that are different than those currently in place in the European Union, and that will include significant penalties for non-compliance. Similarly, there are a number of legislative proposals in the United States, at both the federal and state level, that could impose new obligations in areas affecting our business, such as liability for copyright infringement by third parties. In addition, some countries are considering or have passed legislation implementing data protection requirements or requiring local storage and processing of data or similar requirements that could increase the cost and complexity of delivering our services.

These laws and regulations, as well as any associated inquiries or investigations or any other government actions, may be costly to comply with and may delay or impede the development of new products, result in negative publicity, increase our operating costs, require significant management time and attention, and subject us to remedies that may harm our business, including fines or demands or orders that we modify or cease existing business practices.

We have been subject to regulatory investigations and settlements, and we expect to continue to be subject to such proceedings and other inquiries in the future, which could cause us to incur substantial costs or require us to change our business practices in a manner materially adverse to our business.

From time to time, we receive formal and informal inquiries from government authorities and regulators regarding our compliance with laws and regulations, many of which are evolving and subject to interpretation. We are and expect to continue to be the subject of investigations, inquiries, actions, and audits in the United States, Europe, and around the world, particularly in the areas of privacy, data protection, consumer protection, and competition, as we continue to grow and expand our operations. For example, several data protection authorities in the European Union have initiated actions, investigations, or administrative orders seeking to assert jurisdiction over Facebook, Inc. and our subsidiaries and to restrict the ways in which we collect and use information, and other data protection authorities may do the same. Further, the European Commission's Directorate General for Competition has issued a Statement of Objections in connection with our 2014 acquisition of WhatsApp and is in-

investigating whether Facebook provided incorrect or misleading information during the merger review process (though the investigation will not have an impact on the merger approval). Orders issued by, or inquiries or enforcement actions initiated by, government or regulatory authorities could cause us to incur substantial costs, expose us to unanticipated civil and criminal liability or penalties (including substantial monetary fines), or require us to change our business practices in a manner materially adverse to our business.

If we are unable to protect our intellectual property, the value of our brands and other intangible assets may be diminished, and our business may be adversely affected.

We rely and expect to continue to rely on a combination of confidentiality, assignment, and license agreements with our employees, consultants, and third parties with whom we have relationships, as well as trademark, copyright, patent, trade secret, and domain name protection laws, to protect our proprietary rights. In the United States and internationally, we have filed various applications for protection of certain aspects of our intellectual property, and we currently hold a number of issued patents in multiple jurisdictions and have acquired patents and patent applications from third parties. In addition, in the future we may acquire additional patents or patent portfolios, which could require significant cash expenditures. Third parties may knowingly or unknowingly infringe our proprietary rights, third parties may challenge proprietary rights held by us, and pending and future trademark and patent applications may not be approved. In addition, effective intellectual property protection may not be available in every country in which we operate or intend to operate our business. In any or all of these

cases, we may be required to expend significant time and expense in order to prevent infringement or to enforce our rights. Although we have generally taken measures to protect our proprietary rights, there can be no assurance that others will not offer products or concepts that are substantially similar to ours and compete with our business. In addition, we regularly contribute software source code under open source licenses and have made other technology we developed available under other open licenses, and we include open source software in our products. For example, we have contributed certain specifications and designs related to our data center equipment to the Open Compute Project Foundation, a non-profit entity that shares and develops such information with the technology community, under the Open Web Foundation License. As a result of our open source contributions and the use of open source in our products, we may license or be required to license or disclose code and/or innovations that turn out to be material to our business and may also be exposed to increased litigation risk. If the protection of our proprietary rights is inadequate to prevent unauthorized use or appropriation by third parties, the value of our brands and other intangible assets may be diminished and competitors may be able to more effectively mimic our products, services, and methods of operations. Any of these events could have an adverse effect on our business and financial results.

We are currently, and expect to be in the future, party to patent lawsuits and other intellectual property rights claims that are expensive and time consuming and, if resolved adversely, could have a significant impact on our business, financial condition, or results of operations.

Companies in the Internet, technology, and media industries own large numbers of patents, copyrights, trademarks, and trade secrets, and frequently enter into litigation based on allegations of infringement, misappropriation, or other violations of intellectual property or other rights. In addition, various “non-practicing entities” that own patents and other intellectual property rights often attempt to aggressively assert their rights in order to extract value from technology companies. Furthermore, from time to time we may introduce or acquire new products, including in areas where we historically have not competed, which could increase our exposure to patent and other intellectual property claims from competitors and non-practicing entities.

From time to time, we receive notice letters from patent holders alleging that certain of our products and services infringe their patent rights. We presently are involved in a number of intellectual property lawsuits, and as we face increasing competition and gain an increasingly high profile, we expect the number of patent and other intellectual property claims against us to grow. Defending patent and other intellectual property litigation is costly and can impose a significant burden on management and employees, and there can be no assurances that favorable final outcomes will be obtained in all cases. In addition, plaintiffs may seek, and we may become subject to, preliminary or provisional rulings in the course of any such litigation, including potential preliminary injunctions requiring us to cease some or all of our operations. We may decide to settle such lawsuits and disputes on terms that are unfavorable to us. Similarly, if any litigation to which we are a party is resolved adversely, we may be subject to an unfavorable judgment that may not be reversed upon appeal. The terms of such a settlement or judgment may require us to cease some or all of our operations or pay

substantial amounts to the other party. In addition, we may have to seek a license to continue practices found to be in violation of a third party's rights, which may not be available on reasonable terms, or at all, and may significantly increase our operating costs and expenses. As a result, we may also be required to develop alternative non-infringing technology or practices or discontinue the practices. The development of alternative non-infringing technology or practices could require significant effort and expense or may not be feasible. Our business, financial condition, and results of operations could be adversely affected as a result of an unfavorable resolution of the disputes and litigation referred to above.

We are involved in numerous class action lawsuits and other litigation matters that are expensive and time consuming, and, if resolved adversely, could harm our business, financial condition, or results of operations.

In addition to intellectual property claims, we are also involved in numerous other lawsuits, including putative class action lawsuits, many of which claim statutory damages and/or seek significant changes to our business operations, and we anticipate that we will continue to be a target for numerous lawsuits in the future. Because of the scale of our user base, the plaintiffs in class action cases filed against us typically claim enormous monetary damages even if the alleged per-user harm is small or non-existent. In addition, we may be subject to additional class action lawsuits based on product performance or other claims related to the use of consumer hardware and software, as well as virtual reality technology and products, which are new and unproven. Any negative outcome from any such lawsuits could result in payments of substantial monetary damages or fines, or undesirable changes to our

products or business practices, and accordingly our business, financial condition, or results of operations could be materially and adversely affected. Although the results of such lawsuits and claims cannot be predicted with certainty, we do not believe that the final outcome of those matters relating to our products that we currently face will have a material adverse effect on our business, financial condition, or results of operations. In addition, we are currently the subject of stockholder class action suits in connection with our IPO and with our intention to create a new class of capital stock (Class C capital stock) and to declare and pay a dividend of two shares of Class C capital stock for each outstanding share of Class A and Class B common stock (the Reclassification). We believe these lawsuits are without merit and are vigorously defending these lawsuits.

There can be no assurances that a favorable final outcome will be obtained in all our cases, and defending any lawsuit is costly and can impose a significant burden on management and employees. Any litigation to which we are a party may result in an onerous or unfavorable judgment that may not be reversed upon appeal or in payments of substantial monetary damages or fines, or we may decide to settle lawsuits on similarly unfavorable terms, which could adversely affect our business, financial conditions, or results of operations.

We may incur liability as a result of information retrieved from or transmitted over the Internet or published using our products or as a result of claims related to our products.

We have faced, currently face, and will continue to face claims relating to information that is published or made available on our products. In particular, the nature of our

business exposes us to claims related to defamation, dissemination of misinformation or news hoaxes, intellectual property rights, rights of publicity and privacy, personal injury torts, or local laws regulating hate speech or other types of content. This risk is enhanced in certain jurisdictions outside the United States where our protection from liability for third-party actions may be unclear and where we may be less protected under local laws than we are in the United States. We could incur significant costs investigating and defending such claims and, if we are found liable, significant damages. We could also face orders restricting or blocking our services in particular geographies as a result of content hosted on our services. If any of these events occur, our business and financial results could be adversely affected.

Our CEO has control over key decision making as a result of his control of a majority of the voting power of our outstanding capital stock.

Mark Zuckerberg, our founder, Chairman, and CEO, is able to exercise voting rights with respect to a majority of the voting power of our outstanding capital stock and therefore has the ability to control the outcome of matters submitted to our stockholders for approval, including the election of directors and any merger, consolidation, or sale of all or substantially all of our assets. This concentrated control could delay, defer, or prevent a change of control, merger, consolidation, or sale of all or substantially all of our assets that our other stockholders support, or conversely this concentrated control could result in the consummation of such a transaction that our other stockholders do not support. This concentrated control could also discourage a potential investor from acquiring our Class A common stock, which has limited voting power relative to the Class B common stock, or if issued, our

Class C capital stock, which will generally have no voting power, and might harm the trading price of our Class A common stock and, if issued, our Class C capital stock. In addition, Mr. Zuckerberg has the ability to control the management and major strategic investments of our company as a result of his position as our CEO and his ability to control the election or replacement of our directors. In the event of his death, the shares of our capital stock that Mr. Zuckerberg owns will be transferred to the persons or entities that he has designated. As a board member and officer, Mr. Zuckerberg owes a fiduciary duty to our stockholders and must act in good faith in a manner he reasonably believes to be in the best interests of our stockholders. As a stockholder, even a controlling stockholder, Mr. Zuckerberg is entitled to vote his shares, and shares over which he has voting control as governed by a voting agreement, in his own interests, which may not always be in the interests of our stockholders generally.

Moreover, since our Class C capital stock, if issued, will generally have no voting power, the issuance of the Class C capital stock, including in connection with future financings, acquisitions, or the issuance of future equity awards, could have the effect of prolonging the duration of Mr. Zuckerberg's ability to exercise voting rights with respect to a majority of the voting power of our outstanding capital stock and therefore his ability to control the outcome of matters submitted to our stockholders for approval, including the election of directors, and any merger, consolidation, or sale of all or substantially all of our assets. We believe that Mr. Zuckerberg's continued control of a majority of the voting power of our outstanding capital stock is beneficial to us and is in the best interests of our stockholders. In the event that Mr. Zuckerberg no longer controls a majority of the voting power, whether as a result of the disposition of some or all his shares of Class

A or Class B common stock or otherwise, our business or the trading price of our Class A common stock and, if issued, our Class C capital stock may be adversely affected.

We plan to continue to make acquisitions, which could harm our financial condition or results of operations and may adversely affect the price of our common stock.

As part of our business strategy, we have made and intend to continue to make acquisitions to add specialized employees and complementary companies, products, or technologies. We may not be able to find suitable acquisition candidates, and we may not be able to complete acquisitions on favorable terms, if at all. In some cases, the costs of such acquisitions may be substantial. For example, in 2014 we paid approximately \$4.6 billion in cash and issued 178 million shares of our Class A common stock in connection with our acquisition of WhatsApp, and we paid approximately \$400 million in cash and issued 23 million shares of our Class B common stock in connection with our acquisition of Oculus. We also issued a substantial number of RSUs to help retain the employees of these companies. There is no assurance that we will receive a favorable return on investment for these or other acquisitions.

We may pay substantial amounts of cash or incur debt to pay for acquisitions, which could adversely affect our liquidity. The incurrence of indebtedness would also result in increased fixed obligations, increased interest expense, and could also include covenants or other restrictions that would impede our ability to manage our operations. We may also issue equity securities to pay for acquisitions and we regularly grant RSUs to retain the employees of acquired companies, which could increase our expenses, adversely affect our financial results, and

result in dilution to our stockholders. In addition, any acquisitions we announce could be viewed negatively by users, marketers, developers, or investors, which may adversely affect our business or the price of our Class A common stock.

In the future, we may use shares of Class C capital stock as consideration in connection with acquisitions. However, we may not be able to issue shares of Class C capital stock because companies that we are interested in acquiring may not agree to accept shares that carry no voting rights, or for other reasons. If the Class C capital stock trades at a discount to the Class A common stock, companies that we seek to acquire may also demand more shares of Class C capital stock in exchange for accepting such stock as consideration. In such instances, we may need to pay cash, issue shares of our Class A or Class B common stock as consideration, or issue a relatively greater number of shares of Class C capital stock to consummate the acquisitions.

We may also discover liabilities or deficiencies associated with the companies or assets we acquire that were not identified in advance, which may result in significant unanticipated costs. The effectiveness of our due diligence review and our ability to evaluate the results of such due diligence are dependent upon the accuracy and completeness of statements and disclosures made or actions taken by the companies we acquire or their representatives, as well as the limited amount of time in which acquisitions are executed. In addition, we may fail to accurately forecast the financial impact of an acquisition transaction, including tax and accounting charges. Acquisitions may also result in our recording of significant additional expenses to our results of operations and recording of substantial finite-lived intangible assets on our balance sheet

upon closing. Any of these factors may adversely affect our financial condition or results of operations.

We may not be able to successfully integrate our acquisitions, and we may incur significant costs to integrate and support the companies we acquire.

The integration of acquisitions requires significant time and resources, and we may not manage these processes successfully. Our ability to successfully integrate complex acquisitions is unproven, particularly with respect to companies that have significant operations or that develop products where we do not have prior experience. For example, Oculus and WhatsApp are larger and more complex than companies we have historically acquired. In particular, Oculus builds technology and products that are new to Facebook and with which we did not have significant experience or structure in place to support prior to the acquisition. We are making substantial investments of resources to support these acquisitions, which will result in significant ongoing operating expenses and may divert resources and management attention from other areas of our business. We cannot assure you that these investments will be successful. If we fail to successfully integrate the companies we acquire, we may not realize the benefits expected from the transaction and our business may be harmed.

If our goodwill or finite-lived intangible assets become im-paired, we may be required to record a significant charge to earnings.

We review our finite-lived intangible assets for impairment when events or changes in circumstances indicate the carrying value may not be recoverable, such as a decline in stock price and market capitalization. We test

goodwill for impairment at least annually. If such goodwill or finite-lived intangible assets are deemed to be impaired, an impairment loss equal to the amount by which the carrying amount exceeds the fair value of the assets would be recognized. We may be required to record a significant charge in our financial statements during the period in which any impairment of our goodwill or finite-lived intangible assets is determined, which would negatively affect our results of operations.

Our business is dependent on our ability to maintain and scale our technical infrastructure, and any significant disruption in our service could damage our reputation, result in a potential loss of users and engagement, and adversely affect our financial results.

Our reputation and ability to attract, retain, and serve our users is dependent upon the reliable performance of our products and our underlying technical infrastructure. Our systems may not be adequately designed with the necessary reliability and redundancy to avoid performance delays or outages that could be harmful to our business. If our products are unavailable when users attempt to access them, or if they do not load as quickly as expected, users may not use our products as often in the future, or at all, and our ability to serve ads may be disrupted. As our user base and engagement continue to grow, and the amount and types of information shared on Facebook and our other products continue to grow and evolve, such as increased engagement with video, we will need an increasing amount of technical infrastructure, including network capacity and computing power, to continue to satisfy the needs of our users. It is possible that we may fail to continue to effectively scale and grow our technical infrastructure to accommodate these increased

demands. In addition, our business may be subject to interruptions, delays, or failures resulting from earthquakes, adverse weather conditions, other natural disasters, power loss, terrorism, cyber-attacks, or other catastrophic events. If such an event were to occur, users may be subject to service disruptions or outages and we may not be able to recover our technical infrastructure and user data in a timely manner to restart or provide our services, which may adversely affect our financial results.

A substantial portion of our network infrastructure is provided by third parties. Any disruption or failure in the services we receive from these providers, including as a result of cyber-attacks, could harm our ability to handle existing or increased traffic and could significantly harm our business. Any financial or other difficulties these providers face may adversely affect our business, and we exercise little control over these providers, which increases our vulnerability to problems with the services they provide.

We could experience unforeseen difficulties in building and operating key portions of our technical infrastructure.

We have designed and built our own data centers and key portions of our technical infrastructure through which we serve our products, and we plan to continue to significantly expand the size of our infrastructure primarily through data centers and other projects. The infrastructure expansion we are undertaking is complex, and unanticipated delays in the completion of these projects, including due to any shortage of labor necessary in building portions of such projects, or availability of components may lead to increased project costs, operational inefficiencies, or interruptions in the delivery or degradation of the quality of our products. In addition, there may be issues

related to this infrastructure that are not identified during the testing phases of design and implementation, which may only become evident after we have started to fully utilize the underlying equipment, that could further degrade the user experience or increase our costs.

Our products and internal systems rely on software that is highly technical, and if it contains undetected errors or vulnerabilities, our business could be adversely affected.

Our products and internal systems rely on software, including software developed or maintained internally and/or by third parties, that is highly technical and complex. In addition, our products and internal systems depend on the ability of such software to store, retrieve, process, and manage immense amounts of data. The software on which we rely has contained, and will in the future contain, undetected errors, bugs, or vulnerabilities. Some errors may only be discovered after the code has been released for external or internal use. Errors, vulnerabilities, or other design defects within the software on which we rely may result in a negative experience for users and marketers who use our products, delay product introductions or enhancements, result in targeting, measurement, or billing errors, compromise our ability to protect the data of our users and/or our intellectual property or lead to reductions in our ability to provide some or all of our services. In addition, any errors, bugs, vulnerabilities, or defects discovered in the software on which we rely, and any associated degradations or interruptions of service, could result in damage to our reputation, loss of users, loss of revenue, or liability for damages, any of which could adversely affect our business and financial results.

Technologies have been developed that can block the display of our ads, which could adversely affect our financial results.

Technologies have been developed, and will likely continue to be developed, that can block the display of our ads, particularly advertising displayed on personal computers. We generate substantially all of our revenue from advertising, including revenue resulting from the display of ads on personal computers. Revenue generated from the display of ads on personal computers has been impacted by these technologies from time to time. As a result, these technologies have had an adverse effect on our financial results and, if such technologies continue to proliferate, in particular with respect to mobile platforms, our future financial results may be harmed.

Real or perceived inaccuracies in our user and other metrics may harm our reputation and negatively affect our business.

The numbers for our key metrics, which include our DAUs, MAUs, and average revenue per user (ARPU), are calculated using internal company data based on the activity of user accounts. While these numbers are based on what we believe to be reasonable estimates of our user base for the applicable period of measurement, there are inherent challenges in measuring usage of our products across large online and mobile populations around the world. In addition, we are continually seeking to improve our estimates of our user base, and such estimates may change due to improvements or changes in our methodology. For example, the number of duplicate or false accounts maintained by users in violation of our terms of service may change as our methodologies evolve. In 2016, we estimate that “duplicate” accounts (an account that a user maintains in addition to his or her principal account)

may have represented approximately 6% of our worldwide MAUs. We also seek to identify “false” accounts, which we divide into two categories: (1) user-misclassified accounts, where users have created personal profiles for a business, organization, or non-human entity such as a pet (such entities are permitted on Facebook using a Page rather than a personal profile under our terms of service); and (2) undesirable accounts, which represent user profiles that we determine are intended to be used for purposes that violate our terms of service, such as spamming. In 2016, for example, we estimate that such user-misclassified and undesirable accounts may have represented approximately 1% of our worldwide MAUs. We believe the percentage of accounts that are duplicate or false is meaningfully lower in developed markets such as the United States or United Kingdom and higher in developing markets such as India and Turkey. However, these estimates are based on an internal review of a limited sample of accounts and we apply significant judgment in making this determination, such as identifying names that appear to be fake or other behavior that appears inauthentic to the reviewers. As such, our estimation of duplicate or false accounts may not accurately represent the actual number of such accounts.

Our data limitations may affect our understanding of certain details of our business. For example, while user-provided data indicates a decline in usage among younger users, this age data is unreliable because a disproportionate number of our younger users register with an inaccurate age. Accordingly, our understanding of usage by age group may not be complete.

In addition, our data regarding the geographic location of our users is estimated based on a number of fac-

tors, such as the user's IP address and self-disclosed location. These factors may not always accurately reflect the user's actual location. For example, a user may appear to be accessing Facebook from the location of the proxy server that the user connects to rather than from the user's actual location. The methodologies used to measure user metrics may also be susceptible to algorithm or other technical errors. Our estimates for revenue by user location and revenue by user device are also affected by these factors. For example, we discovered an error in the algorithm we used to attribute our revenue by user geography in late 2015. While this issue did not affect our overall worldwide revenue, it did affect our attribution of revenue to different geographic regions. The fourth quarter of 2015 revenue by user geography and ARPU amounts were adjusted to reflect this reclassification. We regularly review our processes for calculating these metrics, and from time to time we may discover inaccuracies in our metrics or make adjustments to improve their accuracy, including adjustments that may result in the recalculation of our historical metrics. We believe that any such inaccuracies or adjustments are immaterial unless otherwise stated. In addition, our DAU and MAU estimates will differ from estimates published by third parties due to differences in methodology.

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. All of our metrics are subject to software bugs, inconsistencies in our systems, and human error. If marketers, developers, or investors do not perceive our metrics to be accurate, or if we discover material inaccuracies in our metrics, we may be subject to liability, our reputation may be harmed, and marketers and developers may be less willing to allocate their

budgets or resources to Facebook, which could negatively affect our business and financial results.

We cannot assure you that we will effectively manage our growth.

Our employee headcount and the scope and complexity of our business have increased significantly, with the number of employees increasing to 17,048 as of December 31, 2016 from 12,691 as of December 31, 2015, and we expect headcount growth to continue for the foreseeable future. The growth and expansion of our business and products create significant challenges for our management, operational, and financial resources, including managing multiple relations with users, marketers, developers, and other third parties. In the event of continued growth of our operations or in the number of our third-party relationships, our information technology systems or our internal controls and procedures may not be adequate to support our operations. In addition, some members of our management do not have significant experience managing a large global business operation, so our management may not be able to manage such growth effectively. To effectively manage our growth, we must continue to improve our operational, financial, and management processes and systems and to effectively expand, train, and manage our employee base. As our organization continues to grow, and we are required to implement more complex organizational management structures, we may find it increasingly difficult to maintain the benefits of our corporate culture, including our ability to quickly develop and launch new and innovative products. This could negatively affect our business performance.

The loss of one or more of our key personnel, or our failure to attract and retain other highly qualified personnel in the future, could harm our business.

We currently depend on the continued services and performance of our key personnel, including Mark Zuckerberg and Sheryl K. Sandberg. Although we have entered into employment agreements with Mr. Zuckerberg and Ms. Sandberg, the agreements have no specific duration and constitute at-will employment. In addition, many of our key technologies and systems are custom-made for our business by our personnel. The loss of key personnel, including members of management as well as key engineering, product development, marketing, and sales personnel, could disrupt our operations and have an adverse effect on our business.

As we continue to grow, we cannot guarantee we will continue to attract the personnel we need to maintain our competitive position. In particular, we intend to continue to hire a significant number of technical personnel in the foreseeable future, and we expect to continue to face significant competition from other companies in hiring such personnel, particularly in the San Francisco Bay Area, where our headquarters are located and where the cost of living is high. As we continue to mature, the incentives to attract, retain, and motivate employees provided by our equity awards or by future arrangements may not be as effective as in the past, and if we issue significant equity to attract additional employees, the ownership of our existing stockholders may be further diluted. Our ability to attract, retain, and motivate employees may also be adversely affected by stock price volatility. Additionally, we have a number of current employees whose equity ownership in our company has provided them a substantial

amount of personal wealth, which could affect their decisions about whether or not to continue to work for us. As a result of these factors, it may be difficult for us to continue to retain and motivate our employees. If we do not succeed in attracting, hiring, and integrating excellent personnel, or retaining and motivating existing personnel, we may be unable to grow effectively.

We may not be able to continue to successfully grow usage of and engagement with mobile and web applications that integrate with Facebook and our other products.

We have made and are continuing to make investments to enable developers to build, grow, and monetize mobile and web applications that integrate with Facebook and our other products. Such existing and prospective developers may not be successful in building, growing, or monetizing mobile and/or web applications that create and maintain user engagement. Additionally, developers may choose to build on other platforms, including mobile platforms controlled by third parties, rather than building products that integrate with Facebook and our other products. We are continuously seeking to balance the distribution objectives of our developers with our desire to provide an optimal user experience, and we may not be successful in achieving a balance that continues to attract and retain such developers. For example, from time to time, we have taken actions to reduce the volume of communications from these developers to users on Facebook and our other products with the objective of enhancing the user experience, and such actions have reduced distribution from, user engagement with, and our monetization opportunities from, mobile and web applications integrated with our products. In some instances, these ac-

tions, as well as other actions to enforce our policies applicable to developers, have adversely affected our relationships with such developers. If we are not successful in our efforts to continue to grow the number of developers that choose to build products that integrate with Facebook and our other products or if we are unable to continue to build and maintain good relations with such developers, our user growth and user engagement and our financial results may be adversely affected.

We currently generate substantially all of our Payments revenue from developers that use Facebook on personal computers, and we expect that our Payments revenue will continue to decline in the future as usage of Facebook on personal computers continues to decline.

We currently generate substantially all of our Payments revenue from developers that use Facebook on personal computers. Specifically, applications built by developers of social games are currently responsible for substantially all of our revenue derived from Payments, and the majority of the revenue from these applications has historically been generated by a limited number of the most popular games. We have experienced and expect to see the continued decline in usage of Facebook on personal computers for the foreseeable future, which we expect will result in a continuing decline in Payments revenue. In addition, a relatively small percentage of our users have transacted with Facebook Payments. If the Facebook-integrated applications fail to grow or maintain their users and engagement, whether as a result of the continued decline in the usage of Facebook on personal computers or otherwise, if developers do not continue to introduce new applications that attract users and create

engagement on Facebook, or if Facebook-integrated applications outside of social games do not gain popularity and generate significant revenue for us, our financial performance could be adversely affected.

Payment transactions may subject us to additional regulatory requirements and other risks that could be costly and difficult to comply with or that could harm our business.

Our users can purchase virtual and digital goods from developers that offer applications using our Payments infrastructure on the Facebook website. In addition, certain of our users can use our Payments infrastructure, including on Messenger, for other activities, such as sending money to other users and making donations to certain charitable organizations. We are subject to a variety of laws and regulations in the United States, Europe, and elsewhere, including those governing anti-money laundering and counter-terrorist financing, money transmission, gift cards and other prepaid access instruments, electronic funds transfer, charitable fundraising, and import and export restrictions. Depending on how our Payments product evolves, we may also be subject to other laws and regulations including those governing gambling, banking, and lending. In some jurisdictions, the application or interpretation of these laws and regulations is not clear. To increase flexibility in how our use of Payments may evolve and to mitigate regulatory uncertainty, we have received certain money transmitter licenses in the United States and an Electronic Money (E-Money) license that allows us to conduct certain regulated payment activities in the participating member countries of the European Economic Area, which will generally require us to demonstrate compliance with many domestic and foreign laws in these areas. Our efforts to comply with these laws

and regulations could be costly and result in diversion of management time and effort and may still not guarantee compliance. In the event that we are found to be in violation of any such legal or regulatory requirements, we may be subject to monetary fines or other penalties such as a cease and desist order, or we may be required to make product changes, any of which could have an adverse effect on our business and financial results.

In addition, we may be subject to a variety of additional risks as a result of Payments transactions, including:

- increased costs and diversion of management time and effort and other resources to deal with bad transactions or customer disputes;
- potential fraudulent or otherwise illegal activity by users, developers, employees, or third parties;
- restrictions on the investment of consumer funds used to transact Payments; and
- additional disclosure and reporting requirements.

We have significant international operations and plan to continue expanding our operations abroad where we have limited operating experience, and this may subject us to increased business and economic risks that could affect our financial results.

We have significant international operations and plan to continue the international expansion of our business operations and the translation of our products. We currently make Facebook available in more than 100 different languages, and we have offices or data centers in more than 30 different countries. We may enter new international markets where we have limited or no experience in marketing, selling, and deploying our products. Our products are generally available globally through the web and

on mobile, but some or all of our products or functionality may not be available in certain markets due to legal and regulatory complexities. For example, Facebook is not generally available in China. We also outsource certain operational functions to third-party vendors globally. If we fail to deploy, manage, or oversee our international operations successfully, our business may suffer. In addition, we are subject to a variety of risks inherent in doing business internationally, including:

- political, social, or economic instability;
- risks related to legal, regulatory, and other government scrutiny applicable to U.S. companies with sales and operations in foreign jurisdictions, including with respect to privacy, tax, law enforcement, content, trade compliance, intellectual property, and terrestrial infrastructure matters;
- potential damage to our brand and reputation due to compliance with local laws, including potential censorship or requirements to provide user information to local authorities;
- fluctuations in currency exchange rates and compliance with currency controls;
- foreign exchange controls and tax regulations that might prevent us from repatriating cash earned in countries outside the United States or otherwise limit our ability to move cash freely, and impede our ability to invest such cash efficiently;
- higher levels of credit risk and payment fraud;
- enhanced difficulties of integrating any foreign acquisitions;
- burdens of complying with a variety of foreign laws;
- reduced protection for intellectual property rights in some countries;

- difficulties in staffing, managing, and overseeing global operations and the increased travel, infrastructure, and legal compliance costs associated with multiple international locations;
- compliance with the U.S. Foreign Corrupt Practices Act, the U.K. Bribery Act, and similar laws in other jurisdictions; and
- compliance with statutory equity requirements and management of tax consequences.

If we are unable to expand internationally and manage the complexity of our global operations successfully, our financial results could be adversely affected.

We face design, manufacturing, and supply chain risks that, if not properly managed, could adversely impact our financial results.

We face a number of risks related to design, manufacturing, and supply chain management with respect to our Oculus products. For example, the Oculus products we sell may have quality issues resulting from the design or manufacture of the products, or from the software used in the products. Sometimes, these issues may be caused by components we purchase from other manufacturers or suppliers. If the quality of our Oculus products does not meet our customers' expectations or such products are found to be defective, then our financial results could be adversely affected.

We rely on third parties to manufacture our Oculus products. We may experience supply shortages or other supply chain disruptions in the future that could result in shipping delays and negatively impact our operations. We could be negatively affected if we are not able to engage third parties with the necessary capabilities or capacity on reasonable terms, or if those we engage with fail to meet their obligations (whether due to financial difficulties or

other reasons), or make adverse changes in the pricing or other material terms of such arrangements with them.

We also require the suppliers and business partners of our Oculus products to comply with laws and certain company policies regarding sourcing practices, but we do not control them or their practices. If any of them violates laws or implements practices regarded as unethical or corrupt, we could experience supply chain disruptions, canceled orders, or damage to our reputation.

In addition, the Securities and Exchange Commission's conflict minerals rule requires disclosure by public companies of information relating to the origin, source and chain of custody of specified minerals, known as conflict minerals, that are necessary to the functionality or production of products manufactured or contracted to be manufactured. We may incur significant costs associated with complying with the rule, such as costs related to the determination of the origin, source and chain of custody of the minerals used in Oculus products, the adoption of conflict minerals-related governance policies, processes and controls, and possible changes to products or sources of supply as a result of such activities.

We may face inventory risk with respect to our Oculus products.

We may be exposed to inventory risks with respect to our Oculus products as a result of rapid changes in product cycles and pricing, unsafe or defective merchandise, changes in consumer demand and consumer spending patterns, changes in consumer tastes with respect to Oculus products, and other factors. We endeavor to accurately predict these trends and avoid overstocking or understocking products Oculus may sell. Demand for products, however, can change significantly between the time

inventory or components are ordered and the date of sale. In addition, when we begin selling or manufacturing a new Oculus product, it may be difficult to establish vendor relationships, determine appropriate product or component selection, and accurately forecast demand. The acquisition of certain types of inventory or components may require significant lead-time and prepayment and they may not be returnable. Any one of these factors may adversely affect our operating results.

We may have exposure to greater than anticipated tax liabilities.

Our income tax obligations are based in part on our corporate operating structure and intercompany arrangements, including the manner in which we operate our business, develop, value, manage, protect, and use our intellectual property and the valuations of our intercompany transactions. The tax laws applicable to our business, including the laws of the United States and other jurisdictions, are subject to interpretation and certain jurisdictions are aggressively interpreting their laws in new ways in an effort to raise additional tax revenue from companies such as Facebook. The taxing authorities of the jurisdictions in which we operate may challenge our methodologies for valuing developed technology or intercompany arrangements, which could increase our worldwide effective tax rate and harm our financial position and results of operations. For example, the IRS recently issued us a formal assessment relating to transfer pricing with our foreign subsidiaries in conjunction with the examination of the 2010 tax year, and although we disagree with the IRS's position and are contesting this issue, the ultimate resolution is uncertain and, if resolved in a manner unfavorable to us, may adversely affect our financial results. We are subject to regular review and audit by U.S. federal

and state and foreign tax authorities. Tax authorities may disagree with certain positions we have taken and any adverse outcome of such a review or audit could have a negative effect on our financial position and results of operations. In addition, the determination of our worldwide provision for income taxes and other tax liabilities requires significant judgment by management, and there are many transactions where the ultimate tax determination is uncertain. Our provision for income taxes is also determined by the manner in which we operate our business, and any changes to such operations or laws applicable to such operations may affect our effective tax rate. Although we believe that our provision for income taxes is reasonable, the ultimate tax outcome may differ from the amounts recorded in our financial statements and may materially affect our financial results in the period or periods for which such determination is made. In addition, our future 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. For example, we have previously incurred losses in certain international subsidiaries that resulted in an effective tax rate that is significantly higher than the statutory tax rate in the United States and this could continue to happen in the future.

Changes in tax laws or tax rulings could materially affect our financial position and results of operations.

The tax regimes we are subject to or operate under are unsettled and may be subject to significant change. Changes in tax laws or tax rulings, or changes in interpre-

tations of existing laws, could materially affect our financial position and results of operations. Many countries in Europe, as well as a number of other countries and organizations, have recently proposed or recommended changes to existing tax laws or have enacted new laws that could significantly increase our tax obligations in many countries where we do business or require us to change the manner in which we operate our business. The Organization for Economic Cooperation and Development has been working on a Base Erosion and Profit Sharing Project, and has issued in 2015, and is expected to continue to issue, guidelines and proposals that may change various aspects of the existing framework under which our tax obligations are determined in many of the countries in which we do business. The European Commission has conducted investigations in multiple countries focusing on whether local country tax rulings or tax legislation provides preferential tax treatment that violates European Union state aid rules and concluded that certain countries, including Ireland, have provided illegal state aid in certain cases. These investigations may result in changes to the tax treatment of our foreign operations. In addition, the current U.S. administration and key members of Congress have made public statements indicating that tax reform is a priority. Certain changes to U.S. tax laws, including limitations on the ability to defer U.S. taxation on earnings outside of the United States until those earnings are repatriated to the United States, could affect the tax treatment of our foreign earnings. Due to the large and expanding scale of our international business activities, many of these types of changes to the taxation of our activities could increase our worldwide effective tax rate and harm our financial position and results of operations.

We cannot guarantee that our recently announced share repurchase program will be fully consummated or that it will enhance long-term stockholder value. Share repurchases could also increase the volatility of the trading price of our stock and could diminish our cash reserves.

In November 2016, our board of directors authorized the repurchase of up to \$6 billion of our Class A common stock commencing in 2017. The repurchase program does not have an expiration date. Although our board of directors has authorized this share repurchase program, the program does not obligate us to repurchase any specific dollar amount or to acquire any specific number of shares. The program could affect the trading price of our stock and increase volatility, and any announcement of a termination of this program may result in a decrease in the trading price of our stock. In addition, this program could diminish our cash reserves.

Risks Related to Ownership of Our Class A Common Stock

The trading price of our Class A common stock has been and will likely continue to be volatile, and if the creation and dividend of Class C capital stock is effected, the trading price of that class will likely be volatile and may impact the trading price for the Class A common stock.

The trading price of our Class A common stock has been, and is likely to continue to be, volatile. Since shares of our Class A common stock were sold in our IPO in May 2012 at a price of \$38.00 per share, our stock price has ranged from \$17.55 to \$133.50 through December 31, 2016. In addition to the factors discussed in this Annual Report on Form 10-K, the trading price of our Class A

common stock may fluctuate significantly in response to numerous factors, many of which are beyond our control, including:

- actual or anticipated fluctuations in our revenue and other operating results;
- the financial projections we may provide to the public, any changes in these projections or our failure to meet these projections;
- actions of securities analysts who initiate or maintain coverage of us, changes in financial estimates by any securities analysts who follow our company, or our failure to meet these estimates or the expectations of investors;
- additional shares of our stock being sold into the market by us, our existing stockholders, or in connection with acquisitions, including shares sold by our employees to cover tax liabilities in connection with RSU vesting events, or the anticipation of such sales;
- investor sentiment with respect to our competitors, our business partners, and our industry in general;
- announcements by us or our competitors of significant products or features, technical innovations, acquisitions, strategic partnerships, joint ventures, or capital commitments;
- announcements by us or estimates by third parties of actual or anticipated changes in the size of our user base, the level of user engagement, or the effectiveness of our ad products;

- changes in operating performance and stock market valuations of technology companies in our industry, including our developers and competitors;
- price and volume fluctuations in the overall stock market, including as a result of trends in the economy as a whole;
- the inclusion, exclusion, or deletion of our stock from any trading indices, such as the S&P 500 Index;
- media coverage of our business and financial performance;
- lawsuits threatened or filed against us;
- developments in anticipated or new legislation and pending lawsuits or regulatory actions, including interim or final rulings by tax, judicial, or regulatory bodies;
- trading activity in our share repurchase program; and
- other events or factors, including those resulting from war or incidents of terrorism, or responses to these events.

In addition, we recently announced a proposal to create a new class of non-voting capital stock, known as Class C capital stock, and to distribute two shares of Class C capital stock as a dividend to the holders of our Class A and Class B common stock. While this proposal has been approved by our stockholders, the record and payment dates for this dividend will be determined by our board of directors in its discretion and there can be no assurance as to the timing of such dates. Once the dividend is distributed, we expect that the market price for the shares of

our Class A common stock will generally reflect the effect of a three-for-one stock split. The pending Reclassification is currently subject to class action lawsuits that were filed on behalf of our stockholders.

If issued, we plan to list the Class C capital stock on the NASDAQ Stock Market LLC. The trading price for the Class C capital stock may be volatile and affected by the factors noted with respect to our Class A common stock above. The trading price of the Class C capital stock may also be affected by the difference in voting rights compared to our Class A and Class B common shares, the liquidity of the market for Class C capital stock, and investor demand for Class C capital stock, including that of institutional investors that may be unwilling, unable, or choose not to hold non-voting shares of our capital stock.

In addition, the stock markets have experienced extreme price and volume fluctuations that have affected and continue to affect the market prices of equity securities of many technology companies. Stock prices of many technology companies have fluctuated in a manner unrelated or disproportionate to the operating performance of those companies. We are currently subject to securities litigation in connection with our IPO. We may experience more such litigation following future periods of volatility. Any securities litigation could subject us to substantial costs, divert resources and the attention of management from our business, and adversely affect our business.

We do not intend to pay cash dividends for the foreseeable future.

We have never declared or paid cash dividends on our capital stock. We currently intend to retain any future earnings to finance the operation and expansion of our business, and we do not expect to declare or pay any cash

dividends in the foreseeable future. As a result, you may only receive a return on your investment in our Class A common stock and, if issued, our Class C capital stock if the trading price of your shares increases.

The dual class structure of our common stock and a voting agreement between certain stockholders have the effect of concentrating voting control with our CEO and certain other holders of our Class B common stock; this will limit or preclude your ability to influence corporate matters.

Our Class B common stock has ten votes per share, and our Class A common stock has one vote per share, and we intend to create Class C capital stock that generally has no voting rights. Stockholders who hold shares of Class B common stock, including certain of our executive officers, employees, and directors and their affiliates, together hold a substantial majority of the voting power of our outstanding capital stock. Because of the ten-to-one voting ratio between our Class B and Class A common stock, the holders of our Class B common stock collectively control a majority of the combined voting power of our common stock and therefore are able to control all matters submitted to our stockholders for approval so long as the shares of Class B common stock represent at least 9.1% of all outstanding shares of our Class A and Class B common stock. This concentrated control will limit or preclude your ability to influence corporate matters for the foreseeable future.

Transfers by holders of Class B common stock will generally result in those shares converting to Class A common stock, subject to limited exceptions, such as certain transfers effected for estate planning or charitable purposes. The conversion of Class B common stock to Class A common stock will have the effect, over time, of

increasing the relative voting power of those holders of Class B common stock who retain their shares in the long term. If, for example, Mr. Zuckerberg retains a significant portion of his holdings of Class B common stock for an extended period of time, he could, in the future, continue to control a majority of the combined voting power of our outstanding capital stock.

Our status as a “controlled company” could make our Class A common stock less attractive to some investors or otherwise harm our stock price.

Because we qualify as a “controlled company” under the corporate governance rules for NASDAQ-listed companies, we are not required to have a majority of our board of directors be independent, nor are we required to have a compensation committee or an independent nominating function. In connection with the pending Reclassification, we intend to amend our corporate governance guidelines to provide that we will not avail ourselves of the “controlled company” exemption with respect to the independence of the members of our compensation & governance committee. However, we do not have a separate and independent nominating function and will continue to have the full board of directors be directly responsible for nominating members of our board. In addition, in the future we could elect not to have a majority of our board of directors be independent or not to have a compensation committee. Accordingly, should the interests of our controlling stockholder differ from those of other stockholders, the other stockholders may not have the same protections afforded to stockholders of companies that are subject to all of the corporate governance rules for NASDAQ-listed companies. Our status as a controlled company could make our Class A common stock and, if issued, our

Class C capital stock less attractive to some investors or otherwise harm our stock price.

Delaware law and provisions in our restated certificate of incorporation and bylaws could make a merger, tender offer, or proxy contest difficult, thereby depressing the trading price of our Class A common stock.

Our status as a Delaware corporation and the anti-takeover provisions of the Delaware General Corporation Law may discourage, delay, or prevent a change in control by prohibiting us from engaging in a business combination with an interested stockholder for a period of three years after the person becomes an interested stockholder, even if a change of control would be beneficial to our existing stockholders. In addition, our current restated certificate of incorporation and bylaws contain provisions that may make the acquisition of our company more difficult, including the following:

- until the first date on which the outstanding shares of our Class B common stock represent less than 35% of the combined voting power of our common stock, any transaction that would result in a change in control of our company requires the approval of a majority of our outstanding Class B common stock voting as a separate class;
- we currently have a dual class common stock structure, which provides Mr. Zuckerberg with the ability to control the outcome of matters requiring stockholder approval, even if he owns significantly less than a majority of the shares of our outstanding Class A and Class B common stock;
- when the outstanding shares of our Class B common stock represent less than a majority of the combined voting power of common stock, certain amendments to our restated certificate of incorporation or bylaws will require the approval of two-

thirds of the combined vote of our then-outstanding shares of Class A and Class B common stock;

- when the outstanding shares of our Class B common stock represent less than a majority of the combined voting power of our common stock, vacancies on our board of directors will be able to be filled only by our board of directors and not by stockholders;
- when the outstanding shares of our Class B common stock represent less than a majority of the combined voting power of our common stock, our board of directors will be classified into three classes of directors with staggered three-year terms and directors will only be able to be removed from office for cause;
- when the outstanding shares of our Class B common stock represent less than a majority of the combined voting power of our common stock, our stockholders will only be able to take action at a meeting of stockholders and not by written consent;
- only our chairman, our chief executive officer, our president, or a majority of our board of directors are authorized to call a special meeting of stockholders;
- advance notice procedures apply for stockholders to nominate candidates for election as directors or to bring matters before an annual meeting of stockholders;
- our restated certificate of incorporation authorizes undesignated preferred stock, the terms of which may be established, and shares of which may be issued, without stockholder approval; and
- certain litigation against us can only be brought in Delaware.

We intend to amend and restate our restated certificate of incorporation to create, as further described above, a new class of non-voting capital stock which may

prolong Mr. Zuckerberg's ability to control the outcome of matters submitted to our stockholders for approval, including the election of directors and any merger, consolidation, or sale of all or substantially all of our assets.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

Our corporate headquarters are located in Menlo Park, California. As of December 31, 2016, we owned and leased approximately two million square feet of office buildings for our corporate headquarters, and 114 acres of land to be developed to accommodate anticipated future growth.

In addition, we leased offices around the world totaling approximately three million square feet. We also own and lease data centers throughout the United States and in various locations internationally.

Further, we entered into agreements to lease office buildings that are under construction. As a result of our involvement during these construction periods, we are considered for accounting purposes to be the owner of the construction projects. As such, we have excluded the square footage from the total leased space and owned properties, disclosed above.

We believe that our facilities are adequate for our current needs.

Item 3. Legal Proceedings

Beginning on May 22, 2012, multiple putative class actions, derivative actions, and individual actions were filed in state and federal courts in the United States and in

other jurisdictions against us, our directors, and/or certain of our officers alleging violation of securities laws or breach of fiduciary duties in connection with our initial public offering (IPO) and seeking unspecified damages. We believe these lawsuits are without merit, and we intend to continue to vigorously defend them. The vast majority of the cases in the United States, along with multiple cases filed against The NASDAQ OMX Group, Inc. and The Nasdaq Stock Market LLC (collectively referred to herein as NASDAQ) alleging technical and other trading-related errors by NASDAQ in connection with our IPO, were ordered centralized for coordinated or consolidated pre-trial proceedings in the U.S. District Court for the Southern District of New York. In a series of rulings in 2013 and 2014, the court denied our motion to dismiss the consolidated securities class action and granted our motions to dismiss the derivative actions against our directors and certain of our officers. On July 24, 2015, the court of appeals affirmed the dismissal of the derivative actions. On December 11, 2015, the court granted plaintiffs' motion for class certification in the consolidated securities action. In addition, the events surrounding our IPO became the subject of various state and federal government inquiries. In May 2014, the Securities and Exchange Commission (SEC) notified us that it had terminated its inquiry and that no enforcement action had been recommended by the SEC.

On April 27, 2016, we announced a proposal to create a new class of non-voting capital stock (Class C capital stock) and our intention to declare and pay a dividend of two shares of Class C capital stock for each outstanding share of Class A and Class B common stock (the Reclassification). Following our announcement of the Reclassification, beginning on April 29, 2016, multiple purported

class action lawsuits were filed on behalf of our stockholders in the Delaware Court of Chancery against us, certain of our board of directors, and Mark Zuckerberg. The lawsuits have been consolidated under the caption *In re Facebook, Inc. Class C Reclassification Litig.*, C.A. No. 12286-VCL, and the consolidated complaint generally alleges that the defendants breached their fiduciary duties in connection with the Reclassification. Among other remedies, these lawsuits seek to enjoin the Reclassification as well as unspecified money damages, costs, and attorneys' fees. We believe that the lawsuits are without merit and intend to vigorously defend against all claims asserted.

In addition, we are also currently parties to multiple other lawsuits related to our products, including intellectual property lawsuits as well as class action lawsuits brought by users and marketers. Among these matters, the *ZeniMax Media Inc. v. Oculus VR Inc.* trial was held in January 2017 in the U.S. District Court for the Northern District of Texas. In the *ZeniMax* case, the plaintiff asserted a number of claims, against us and certain individuals, including trade secret misappropriation, copyright infringement, breach of contract, tortious interference with contract, unfair competition, unjust enrichment, trademark infringement, and false designation. The plaintiff was seeking actual damages of up to \$2.0 billion, punitive damages of up to \$4.0 billion, and equitable relief, including an injunction. On February 1, 2017, the jury reached a verdict in favor of the plaintiff on claims related to copyright infringement, breach of contract, trademark infringement and false designation, and found for the defendants on all other claims. The amount of damages awarded by the jury was \$500 million in the aggregate. We believe we have multiple grounds to appeal this result and intend to vigorously pursue such appeals.

We are also involved in other claims, government and regulatory investigations, and proceedings arising from the ordinary course of our business, and we may in the future be subject to additional lawsuits and disputes.

Item 4. Mine Safety Disclosures

Not applicable.

PART II

**Item 5. Market For Registrant's Common Equity,
Related Stockholder Matters And Issuer Pur-
chases Of Equity Securities.**

Market Information for Common Stock

Our Class A common stock has been listed on the NASDAQ Global Select Market under the symbol "FB" since May 18, 2012. Prior to that time, there was no public market for our stock. The following table sets forth for the indicated periods the high and low intra-day sales prices per share for our Class A common stock on the NASDAQ Global Select Market.

	2016		2015	
	High	Low	High	Low
First Quarter	\$ 117.59	\$ 89.37	\$ 86.07	\$ 73.45
Second Quarter	\$ 121.08	\$ 106.31	\$ 89.40	\$ 76.79
Third Quarter	\$ 131.98	\$ 112.97	\$ 99.24	\$ 72.00
Fourth Quarter	\$ 133.50	\$ 113.55	\$ 110.65	\$ 88.36

Our Class B common stock is not listed nor traded on any stock exchange.

Holders of Record

As of December 31, 2016, there were 4,767 stockholders of record of our Class A common stock, and the closing price of our Class A common stock was \$115.05 per share as reported on the NASDAQ Global Select Market. Because many of our shares of Class A common stock are held by brokers and other institutions on behalf of stockholders, we are unable to estimate the total number of stockholders represented by these record holders. As of December 31, 2016, there were 72 stockholders of record of our Class B common stock.

Dividend Policy

We have never declared or paid any cash dividend on our common stock. We intend to retain any future earnings and do not expect to pay cash dividends in the foreseeable future.

Purchases of Equity Securities by the Issuer and Affiliated Purchasers

We have no share repurchase activity for the three months ended December 31, 2016.

In November 2016, our board of directors authorized a \$6.0 billion share repurchase program of our Class A common stock commencing in 2017 and does not have an expiration date. The timing and actual number of shares repurchased depend on a variety of factors, including price, general business and market conditions, and other investment opportunities, through open market purchases or privately negotiated transactions including through the use of trading plans intended to qualify under Rule 10b5-1 under the Securities Exchange Act of 1934, as amended (Exchange Act).

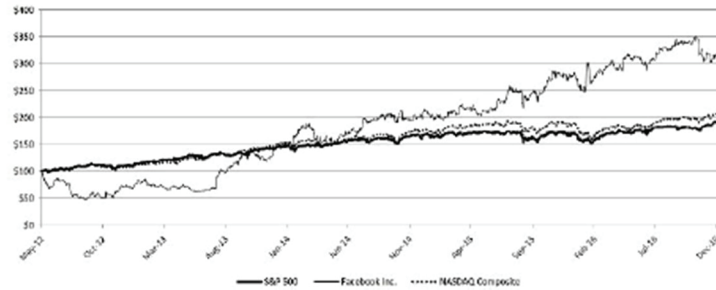
Recent Sale of Unregistered Securities and Use of Proceeds***Recent Sale of Unregistered Securities***

None.

Stock Performance Graph

This performance graph shall not be deemed “soliciting material” or to be “filed” with the SEC for purposes of Section 18 of 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 Facebook, Inc. under the Securities Act or the Exchange Act.

The following graph shows a comparison from May 18, 2012 (the date our Class A common stock commenced trading on the NASDAQ Global Select Market) through December 31, 2016 of the cumulative total return for our



Class A common stock, the Standard & Poor's 500 Stock Index (S&P 500 Index) and the Nasdaq Composite Index (NASDAQ Composite). The graph assumes that \$100 was invested at the market close on May 18, 2012 in the Class A common stock of Facebook, Inc., the S&P 500 Index and the NASDAQ Composite and data for the S&P 500 Index and the NASDAQ Composite assumes reinvestments of gross dividends. The stock price performance of the following graph is not necessarily indicative of future stock price performance.

Securities Authorized for Issuance under Equity Compensation Plans

The information required by this item with respect to our equity compensation plans is incorporated by reference to our Proxy Statement for the 2017 Annual Meeting of Stockholders to be filed with the Securities and Exchange Commission within 120 days of the fiscal year ended December 31, 2016.

Item 6. Selected Financial Data.

You should read the following selected consolidated financial data in conjunction with Part II, Item 7, “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” and our consolidated financial statements and the related notes included in Part II, Item 8, “Financial Statements and Supplementary Data” of this Annual Report on Form 10-K.

The consolidated statements of income data for each of the years ended December 31, 2016, 2015, and 2014 and the consolidated balance sheets data as of December 31, 2016 and 2015 are derived from our audited consolidated financial statements included in Part II, Item 8, “Financial Statements and Supplementary Data” of this Annual Report on Form 10-K. The consolidated statements of income data for the years ended December 31, 2013 and 2012 and the consolidated balance sheets data as of December 31, 2014, 2013, and 2012 are derived from our audited consolidated financial statements, except as otherwise noted, that are not included in this Annual Report on Form 10-K. Our historical results are not necessarily indicative of our results in any future period.

Year Ended December 31,

2016⁽¹⁾	2015	2014	2013	2012
<i>(in millions, except per share data)</i>				
Consolidated Statements of Income Data:				
Revenue				
\$ 27,638	\$ 17,928	\$ 12,466	\$ 7,872	\$ 5,089
Total costs and expenses ⁽²⁾				
15,211	11,703	7,472	5,068	4,551
Income from operations				
12,427	6,225	4,994	2,804	538
Income before provision for income taxes				
12,518	6,194	4,910	2,754	494
Net income				
10,217	3,688	2,940	1,500	53
Net income attributable to Class A and Class B common stockholders				
10,188	3,669	2,925	1,491	32
Earnings per share attributable to Class A and Class B common stockholders:				
Basic				
\$ 3.56	\$ 1.31	\$ 1.12	\$ 0.62	\$ 0.02
Diluted				
\$ 3.49	\$ 1.29	\$ 1.10	\$ 0.60	\$ 0.01

⁽¹⁾ In the fourth quarter of 2016, we elected to early adopt Accounting Standards Update No. 2016-09, Compensation-Stock Compensation (Topic 718): Improvement to Employee Share-based Payment Accounting (ASU 2016-09) which requires us, among other items, to record excess tax benefits as a reduction of the provision for income taxes in the income statements, whereas they were previously recognized in equity. We are required to reflect any adoption adjustments as of January 1, 2016, the beginning of the annual period that includes the interim period of adoption. As such, certain consolidated statements of income data for the year ended December 31, 2016 included the impact of the ASU 2016-09 adoption. See Note 1 of the accompanying notes to our consolidated financial statements for additional information related to this adoption.

⁽²⁾ Total costs and expenses include \$3.22 billion, \$2.97 billion, \$1.84 billion, \$906 million, and \$1.57 billion of share-based compensation for the years ended December 31, 2016, 2015, 2014, 2013, and 2012, respectively.

As of December 31,

2016⁽¹⁾	2015	2014	2013	2012
(in millions)				
Consolidated Balance Sheets Data:				
Cash, cash equivalents, and marketable securities				
\$29,449	\$18,434	\$11,199	\$11,449	\$9,626
Working capital ⁽²⁾				
31,526	19,727	11,966	11,801	9,939
Property and equipment, net				
8,591	5,687	3,967	2,882	2,391
Total assets ⁽²⁾				
64,961	49,407	39,966	17,858	14,982
Capital lease obligations				
—	114	233	476	856
Long-term debt				
—	—	—	—	1,500
Total liabilities ⁽²⁾				
5,767	5,189	3,870	2,388	3,227
Additional paid-in capital				
38,227	34,886	30,225	12,297	10,094
Total stockholders' equity				
59,194	44,218	36,096	15,470	11,755

⁽¹⁾ Certain consolidated balance sheets data as of December 31, 2016 included the impact of the ASU 2016-09 which

was early adopted in 2016, including the net cumulative-effect adjustment of \$1.67 billion increase to retained earnings which was recorded as of January 1, 2016, mostly related to the recognition of the previously unrecognized excess tax benefits using the modified retrospective method. See Note 1 of the accompanying notes to our consolidated financial statements for additional information related to this adoption.

⁽²⁾ In 2015, we early adopted Accounting Standards Update No. 2015-17, Income Taxes (Topic 740): Balance Sheet Classification of Deferred Taxes (ASU 2015-17) retrospectively and reclassified all of our current deferred tax assets to noncurrent deferred tax assets on our consolidated balance sheets data for all periods presented. As a result of the reclassifications, certain noncurrent deferred tax liabilities as of December 31, 2014, 2013, and 2012 were netted with noncurrent deferred tax assets.

Free Cash Flow

In addition to other financial measures presented in accordance with U.S. generally accepted accounting principles (GAAP), we monitor free cash flow (FCF) as a non-GAAP measure to manage our business, make planning decisions, evaluate our performance, and allocate resources. We define FCF as net cash provided by operating activities reduced by purchases of property and equipment and property and equipment acquired under capital leases.

We believe that FCF is one of the key financial indicators of our business performance over the long term and provides useful information regarding how cash provided by operating activities compares to the property and equipment investments required to maintain and grow our business. We have chosen to subtract both purchases

of property and equipment and property and equipment acquired under capital leases in our calculation of FCF because we believe that these two items collectively represent the amount of property and equipment we need to procure to support our business, regardless of whether we finance such property or equipment with a capital lease. The market for financing servers and other technical equipment is dynamic and we expect our use of capital leases could vary significantly from year to year.

We have chosen our definition for FCF because we believe that this methodology can provide useful supplemental information to help investors better understand underlying trends in our business. We use FCF in discussions with our senior management and board of directors.

FCF has limitations as an analytical tool, and you should not consider it in isolation or as a substitute for analysis of other GAAP financial measures, such as net cash provided by operating activities. Some of the limitations of FCF are:

- FCF does not reflect our future contractual commitments; and
- other companies in our industry present similarly titled measures differently than we do, limiting their usefulness as comparative measures.

Management compensates for the inherent limitations associated with using the FCF measure through disclosure of such limitations, presentation of our financial statements in accordance with GAAP, and reconciliation of FCF to the most directly comparable GAAP measure, net cash provided by operating activities, as presented below.

The following is a reconciliation of FCF to the most comparable GAAP measure, net cash provided by operating activities:

Year Ended December 31,				
2016	2015	2014	2013	2012
(in millions)				
Net cash provided by operating activities ⁽¹⁾⁽²⁾				
\$16,108	\$10,320	\$7,326	\$4,831	\$2,645
Purchases of property and equipment				
(4,491)	(2,523)	(1,831)	(1,362)	(1,235)
Property and equipment acquired under capital leases				
—	—	—	(11)	(340)
Free cash flow ⁽¹⁾				
<u>\$11,617</u>	<u>\$7,797</u>	<u>\$5,495</u>	<u>\$3,458</u>	<u>\$1,070</u>

⁽¹⁾ Upon adoption of ASU 2016-09, excess tax benefits from share-based award activity is now presented as an operating activity which we adopted on a retrospective basis. Therefore, net cash provided by operating activities and free cash flow for the years ended December 31, 2015, 2014, 2013 and 2012 increased by \$1.72 billion, \$1.87 billion, \$609 million and \$1.03 billion, respectively. See Note 1 of the accompanying notes to our consolidated financial statements for additional information related to this adoption.

⁽²⁾ For the year ended December 31, 2012, net cash provided by operating activities was reduced by \$451 million of income tax refundable from income tax loss carrybacks

due to the recognition of tax benefits related to share-based compensation from restricted stock units granted prior to January 1, 2011. We received substantially all of this refund in 2013 which increased our net cash provided by operating activities and FCF for the year ended December 31, 2013.

Item 7. Management’s Discussion And Analysis Of Financial Condition And Results Of Operations

You should read the following discussion of our financial condition and results of operations in conjunction with our consolidated financial statements and the related notes included in Part II, Item 8, “Financial Statements and Supplementary Data” of this Annual Report on Form 10-K. In addition to our historical consolidated financial information, the following discussion contains forward-looking statements that reflect our plans, estimates, and beliefs. Our actual results could differ materially from those discussed in the forward-looking statements. Factors that could cause or contribute to these differences include those discussed below and elsewhere in this Annual Report on Form 10-K, particularly in Part I, Item 1A, “Risk Factors.” For a discussion of limitations in the measurement of certain of our user metrics, see the section entitled “Limitations of Key Metrics and Other Data” in this Annual Report on Form 10-K.

Certain revenue information in the section entitled “—Revenue—Foreign Exchange Impact on Revenue” is presented on a constant currency basis. This information is a non-GAAP financial measure. To calculate revenue on a constant currency basis, we translated revenue for the full year 2016 using 2015 monthly exchange rates for our settlement currencies other than the U.S. dollar. This non-GAAP financial measure is not intended to be considered in isolation or as a substitute for, or superior to,

financial information prepared and presented in accordance with GAAP. This measure may be different from non-GAAP financial measures used by other companies, limiting its usefulness for comparison purposes. Moreover, presentation of revenue on a constant currency basis is provided for year-over-year comparison purposes, and investors should be cautioned that the effect of changing foreign currency exchange rates has an actual effect on our operating results. We believe this non-GAAP financial measure provides investors with useful supplemental information about the financial performance of our business, enable comparison of financial results between periods where certain items may vary independent of business performance, and allows for greater transparency with respect to key metrics used by management in operating our business.

Executive Overview of Full Year 2016 Results

Our key user metrics and financial results for 2016 are as follows:

User growth:

- Daily active users (DAUs) were 1.23 billion on average for December 2016, an increase of 18% year-over-year.
- Monthly active users (MAUs) were 1.86 billion as of December 31, 2016, an increase of 17% year-over-year.

Financial results:

- Revenue was \$27.64 billion, up 54% year-over-year, and ad revenue was \$26.89 billion, up 57% year-over-year.
- Total costs and expenses were \$15.21 billion*.

- Income from operations was \$12.43 billion*.
- Net income was \$10.22 billion* with diluted earnings per share of \$3.49*.
- Capital expenditures were \$4.49 billion.
- Effective tax rate was 18%*.
- Cash and cash equivalents, and marketable securities were \$29.45 billion as of December 31, 2016.
- Headcount was 17,048 as of December 31, 2016.

** In the fourth quarter of 2016, we elected to early adopt Accounting Standards Update No. 2016-09, Compensation-Stock Compensation (Topic 718): Improvement to Employee Share-based Payment Accounting (ASU 2016-09) which required us to reflect any adoption adjustments as of January 1, 2016, the beginning of the annual period that includes the interim period of adoption. As such, certain full year 2016 financial results data above included the impacts of the ASU 2016-09 adoption. See Note 1 of the accompanying notes to our consolidated financial statements for additional information related to this adoption.*

In 2016, we continued to make progress on our three main revenue growth priorities: (i) continuing to capitalize on the shift to mobile, (ii) growing the number of marketers using our ad products, and (iii) making our ads more relevant and effective through continued adoption of newer ad formats and tools for marketers.

We continued to invest, based on our roadmap, in: (i) our most developed ecosystem, the Facebook app and platform as well as video, (ii) driving growth and building ecosystems around our products and features that al-

ready have significant user bases, such as Messenger, Instagram, and WhatsApp, and (iii) long-term technology initiatives that we believe will further our mission to connect the world, such as virtual reality and artificial intelligence. We intend to continue to invest based on this roadmap and we expect these investments and our increasingly global scale will drive significant overall year-over-year expense growth compared to 2016. In addition, we anticipate our expenses in 2017 will continue to grow as we execute on priorities such as (i) hiring top engineering talent, (ii) investing in research and development, content, and sales and marketing efforts, and (iii) expanding our data center capacity and office facilities to support our rapid growth.

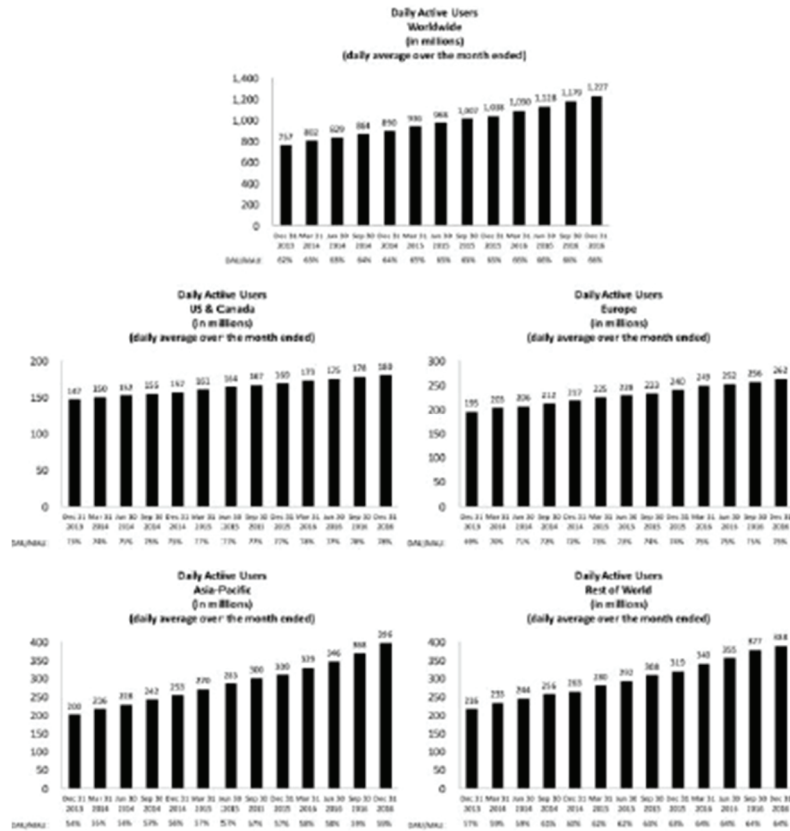
Trends in Our User Metrics

The numbers for our key metrics, our DAUs, MAUs, and average revenue per user (ARPU), do not include Instagram, WhatsApp, or Oculus users unless they would otherwise qualify as such users, respectively, based on their other activities on Facebook. In addition, other user engagement metrics do not include Instagram, WhatsApp, or Oculus unless otherwise specifically stated.

Trends in the number of users affect our revenue and financial results by influencing the number of ads we are able to show, the value of our ads to marketers, the volume of Payments transactions, as well as our expenses and capital expenditures. Substantially all of our daily and monthly active users (as defined below) access Facebook on mobile devices.

- ***Daily Active Users (DAUs)***. We define a daily active user as a registered Facebook user who logged in and visited Facebook through our website or a mobile device, or used our Messenger application

(and is also a registered Facebook user), on a given day. We view DAUs, and DAUs as a percentage of MAUs, as measures of user engagement

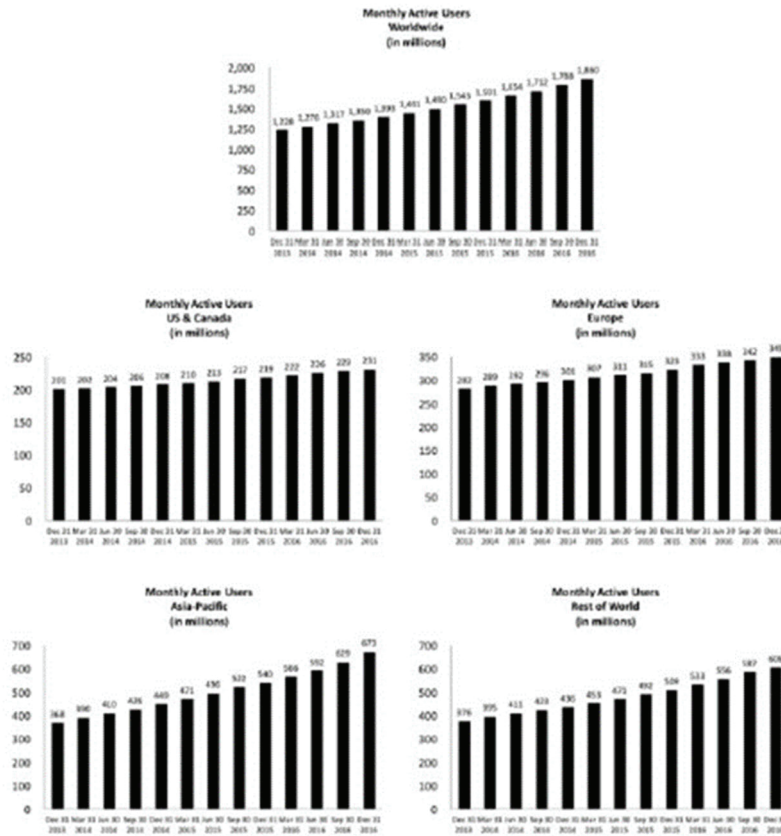


Note: For purposes of reporting DAUs, MAUs, and ARPU by geographic region, Europe includes all users in Russia and Turkey and Rest of World includes all users in Africa, Latin America, and the Middle East.

Worldwide DAUs increased 18% to 1.23 billion on average during December 2016 from 1.04 billion during December

2015. We experienced growth in DAUs across major markets, including India, Indonesia, and Brazil.

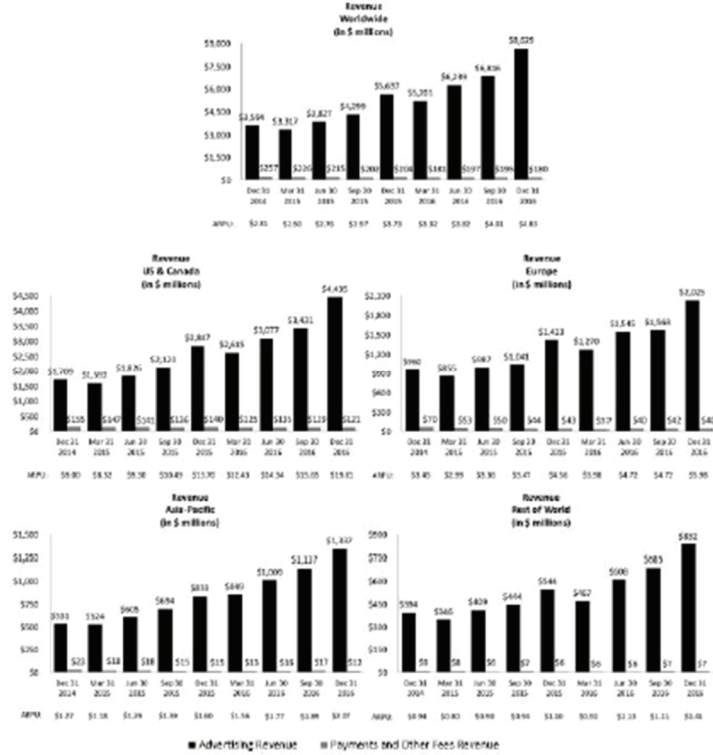
- Monthly Active Users (MAUs).** We define a monthly active user as a registered Facebook user who logged in and visited Facebook through our website or a mobile device, or used our Messenger application (and is also a registered Facebook user), in the last 30 days as of the date of measurement. MAUs are a measure of the size of our global active user community.



As of December 31, 2016, we had 1.86 billion MAUs, an increase of 17% from December 31, 2015. Users in India, Indonesia, and Brazil represented key sources of growth in 2016, relative to the same period in 2015.

Trends in Our Monetization by User Geography

We calculate our revenue by user geography based on our estimate of the geography in which ad impressions are delivered, virtual and digital goods are purchased or virtual reality platform devices are shipped. We define ARPU as our total revenue in a given geography during a given quarter, divided by the average of the number of MAUs in the geography at the beginning and end of the quarter. While ARPU includes all sources of revenue, the number of MAUs used in this calculation only includes users of Facebook and Messenger as described in the definition of MAU above. The geography of our users affects our revenue and financial results because we currently monetize users in different geographies at different average rates. Our revenue and ARPU in regions such as United States & Canada and Europe are relatively higher primarily due to the size and maturity of those online and mobile advertising markets. For example, ARPU in 2016 in the United States & Canada region was more than eight times higher than in the Asia-Pacific region.



Note: Our revenue by user geography in the charts above is geographically apportioned based on our estimation of the geographic location of our users when they perform a revenue-generating activity. This allocation differs from our revenue by geography disclosure in our consolidated financial statements where revenue is geographically apportioned based on the location of the marketer or developer. We discovered an error in the algorithm we used to attribute our revenue by user geography in late 2015. While this issue did not affect our overall worldwide revenue, it did affect our attribution of revenue to different geographic regions. The fourth quarter of 2015 revenue by user geography and ARPU amounts for all regions were adjusted to reflect this reclassification.

For 2016, worldwide ARPU was \$15.98, an increase of 34% from 2015. Over this period, ARPU increased by 49% in United States & Canada, 35% in Europe, 34% in Asia-Pacific, and 25% in Rest of World. In addition, user growth was more rapid in geographies with relatively lower ARPU, such as Asia-Pacific and Rest of World. We expect that user growth in the future will be primarily concentrated in those regions where ARPU is relatively lower, such that worldwide ARPU may continue to increase at a slower rate relative to ARPU in any geographic region, or potentially decrease even if ARPU increases in each geographic region.

Critical Accounting Policies and Estimates

Our consolidated financial statements are prepared in accordance with U.S. generally accepted accounting principles (GAAP). The preparation of these consolidated financial statements requires us to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue, costs and expenses, and related disclosures. We evaluate our estimates and assumptions on an ongoing basis. Our estimates are based on historical experience and various other assumptions that we believe to be reasonable under the circumstances. Our actual results could differ from these estimates.

An accounting policy is deemed 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, if different estimates reasonably could have been used, or if changes in the estimate that are reasonably possible could materially impact the financial statements. We believe that the assumptions and estimates associated with revenue recognition for payments and other fees, income taxes, share-based compensation, loss contingencies, and business combinations

and valuation of goodwill and other acquired intangible assets have the greatest potential impact on our consolidated financial statements. Therefore, we consider these to be our critical accounting policies and estimates. For further information on all of our significant accounting policies, see Note 1 of our accompanying Notes to Consolidated Financial Statements included in Part II, Item 8, “Financial Statements and Supplementary Data” of this Annual Report on Form 10-K.

Income Taxes

We are subject to income taxes in the United States and numerous foreign jurisdictions. Significant judgment is required in determining our provision for income taxes and income tax assets and liabilities, including evaluating uncertainties in the application of accounting principles and complex tax laws.

We record a provision for income taxes for the anticipated tax consequences of the reported results of operations using the asset and liability method. Under this method, we recognize deferred tax assets and liabilities for the expected future tax consequences of temporary differences between the financial reporting and tax bases of assets and liabilities, as well as for loss and tax credit carryforwards. Deferred tax assets and liabilities are measured using the tax rates that are expected to apply to taxable income for the years in which those tax assets and liabilities are expected to be realized or settled. We record a valuation allowance to reduce our deferred tax assets to the net amount that we believe is more likely than not to be realized.

We recognize tax benefits from uncertain tax positions only if we believe that it is more likely than not that the tax position will be sustained on examination by the taxing

authorities based on the technical merits of the position. These uncertain tax positions include our estimates for transfer pricing that have been developed based upon analyses of appropriate arms-length prices. Similarly, our estimates related to uncertain tax positions concerning research tax credits are based on an assessment of whether our available documentation corroborating the nature of our activities supporting the tax credits will be sufficient. Although we believe that we have adequately reserved for our uncertain tax positions (including net interest and penalties), we can provide no assurance that the final tax outcome of these matters will not be materially different. We make adjustments to these reserves in accordance with the income tax accounting guidance when facts and circumstances change, such as the closing of a tax audit or the refinement of an estimate. 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, and could have a material impact on our financial condition and operating results.

Share-based Compensation

We account for share-based employee compensation plans under the fair value recognition and measurement provisions in accordance with applicable accounting standards, which require all share-based payments to employees, including grants of stock options and restricted stock units (RSUs), to be measured based on the grant date fair value of the awards, with the resulting expense generally recognized on a straight-line basis over the period during which the employee is required to perform service in exchange for the award.

We elected to early adopt ASU 2016-09 in the fourth quarter of 2016, which among other items, provides an accounting policy election to account for forfeitures as they occur, rather than to account for them based on an estimate of expected forfeitures. We elected to account for forfeitures as they occur and therefore, share-based compensation expense for the year ended December 31, 2016 has been calculated based on actual forfeitures in our consolidated statements of income, rather than our previous approach which was net of estimated forfeitures. The net cumulative effect of this change was recognized as a \$39 million increase to paid-in capital as of January 1, 2016. Share-based compensation expense for the years ended December 31, 2015 and 2014 were recorded net of estimated forfeitures, which were based on historical forfeitures and adjusted to reflect changes in facts and circumstances, if any.

We have historically issued unvested restricted shares to employee stockholders of certain acquired companies. As these awards are generally subject to continued post-acquisition employment, we have accounted for them as post-acquisition share-based compensation expense. We recognize compensation expense equal to the grant date fair value of the common stock on a straight-line basis over the period during which the employee is required to perform service in exchange for the award.

Loss Contingencies

We are involved in various lawsuits, claims, investigations, and proceedings that arise in the ordinary course of business. Certain of these matters include speculative claims for substantial or indeterminate amounts of damages. We record a liability when we believe that it is both probable that a loss has been incurred and the amount can

be reasonably estimated. Significant judgment is required to determine both probability and the estimated amount. We review these provisions at least quarterly and adjust these provisions accordingly to reflect the impact of negotiations, settlements, rulings, advice of legal counsel, and updated information.

We believe that the amount or estimable range of reasonably possible loss, will not, either individually or in the aggregate, have a material adverse effect on our business, consolidated financial position, results of operations, or cash flows with respect to loss contingencies for legal and other contingencies as of December 31, 2016. However, the outcome of litigation is inherently uncertain. Therefore, if one or more of these legal matters were resolved against us for amounts in excess of management's expectations, our results of operations and financial condition, including in a particular reporting period, could be materially adversely affected.

Business Combinations and Valuation of Goodwill and Other Acquired Intangible Assets

We allocate the fair value of purchase consideration to the tangible assets acquired, liabilities assumed, and intangible assets acquired based on their estimated fair values. The excess of the fair value of purchase consideration over the fair values of these identifiable assets and liabilities is recorded as goodwill. Such valuations require management to make significant estimates and assumptions, especially with respect to intangible assets. Significant estimates in valuing certain intangible assets include, but are not limited to, future expected cash flows from acquired users, acquired technology, and trade names from a market participant perspective, useful lives, and discount rates. Management's estimates of fair value are based upon assumptions believed to be reasonable, but

which are inherently uncertain and unpredictable and, as a result, actual results may differ from estimates. During the measurement period, which is one year from the acquisition date, we may record adjustments to the assets acquired and liabilities assumed, with the corresponding offset to goodwill. Upon the conclusion of the measurement period, any subsequent adjustments are recorded to earnings.

We review goodwill for impairment at least annually or more frequently if events or changes in circumstances would more likely than not reduce the fair value of our single reporting unit below its carrying value. As of December 31, 2016, no impairment of goodwill has been identified.

Acquired finite-lived intangible assets are amortized over their estimated useful lives. We evaluate the recoverability of our intangible assets for possible impairment whenever events or circumstances indicate that the carrying amount of such assets may not be recoverable. The evaluation is performed at the lowest level for which identifiable cash flows are largely independent of the cash flows of other assets and liabilities. Recoverability of these assets is measured by a comparison of the carrying amounts to the future undiscounted cash flows the assets are expected to generate. If such review indicates that the carrying amount of property and equipment and intangible assets is not recoverable, the carrying amount of such assets is reduced to fair value. We have not recorded any significant impairment charges during the years presented.

In addition to the recoverability assessment, we routinely review the remaining estimated useful lives of our finite-lived intangible assets. If we reduce the estimated useful life assumption for any asset, the remaining

unamortized balance would be amortized over the revised estimated useful life.

Components of Results of Operations

Revenue

Advertising. We generate substantially all of our revenue from advertising. Our advertising revenue is generated by displaying ad products on Facebook, Instagram, and third-party affiliated websites or mobile applications. Marketers pay for ad products either directly or through their relationships with advertising agencies, based on the number of clicks made by people, the number of actions taken by people, or the number of impressions delivered. We recognize revenue from the delivery of click-based ads in the period in which a person clicks on the content, and action-based ads in the period in which a person takes the action the marketer contracted for. We recognize revenue from the display of impression-based ads in the contracted period in which the impressions are delivered. Impressions are considered delivered when an ad is displayed to people. The number of ads we show is subject to methodological changes as we continue to evolve our ads business and the structure of our ads products. We calculate price per ad as total ad revenue divided by the number of ads delivered, representing the effective price paid per impression by a marketer regardless of their desired objective such as impression, click, or action. For advertising revenue arrangements where we are not the primary obligor, we recognize revenue on a net basis.

Payments and other fees. We enable Payments from people to purchase virtual and digital goods from our developers. People can transact and make payments on the Facebook website by using debit and credit cards, PayPal, mobile phone payments, gift cards, or other methods. We

receive a fee from developers when people make purchases in these applications using our Payments infrastructure. We recognize revenue net of amounts remitted to our developers. We have mandated the use of our Payments infrastructure for game applications on Facebook, and fees related to Payments are generated almost exclusively from games. Our other fees revenue, which has not been significant in recent periods, consists primarily of revenue from the delivery of virtual reality platform devices and related platform sales, and our ad serving and measurement products.

Cost of Revenue and Operating Expenses

Cost of revenue. Our cost of revenue consists primarily of expenses associated with the delivery and distribution of our products. These include expenses related to the operation of our data centers, such as facility and server equipment depreciation, salaries, benefits, and share-based compensation for employees on our operations teams, and energy and bandwidth costs. Cost of revenue also includes credit card and other transaction fees related to processing customer transactions, amortization of intangible assets, costs associated with data partner arrangements, and cost of virtual reality platform device inventory sold.

Research and development. Research and development expenses consist primarily of share-based compensation, salaries, and benefits for employees on our engineering and technical teams who are responsible for building new products as well as improving existing products. We expense all of our research and development costs as they are incurred.

Marketing and sales. Our marketing and sales expenses consist of salaries, share-based compensation, and

benefits for our employees engaged in sales, sales support, marketing, business development, and customer service functions. Our marketing and sales expenses also include marketing and promotional expenditures, as well as amortization of intangible assets.

General and administrative. The majority of our general and administrative expenses consist of salaries, benefits, and share-based compensation for certain of our executives as well as our legal, finance, human resources, corporate communications and policy, and other administrative employees. In addition, general and administrative expenses include professional and legal services.

Results of Operations

The following tables set forth our consolidated statements of income data, including certain income data for the year ended December 31, 2016 that reflects the impacts of the early adoption of ASU 2016-09:

Year Ended December 31,		
2016	2015	2014
(in millions)		
Consolidated Statements of Income Data:		
Revenue		
\$ 27,638	\$ 17,928	\$ 12,466
Costs and expenses:		
Cost of revenue		
3,789	2,867	2,153
Research and development		
5,919	4,816	2,666

Marketing and sales			
	3,772	2,725	1,680
General and administrative			
	1,731	1,295	973
	<hr/>	<hr/>	<hr/>
Total costs and expenses			
	15,211	11,703	7,472
	<hr/>	<hr/>	<hr/>
Income from operations			
	12,427	6,225	4,994
Interest and other income/(expense), net			
	91	(31)	(84)
	<hr/>	<hr/>	<hr/>
Income before provision for income taxes			
	12,518	6,194	4,910
Provision for income taxes			
	2,301	2,506	1,970
	<hr/>	<hr/>	<hr/>
Net income			
	\$10,217	\$3,688	\$2,940
	<hr/>	<hr/>	<hr/>

Share-based compensation expense included in costs and expenses:

	Year Ended December 31,		
	<hr/>	<hr/>	<hr/>
	2016	2015	2014
	<hr/>	<hr/>	<hr/>
Cost of revenue			
	—%	—%	—%
Research and development			

517

	9	13	11
Marketing and sales			
	1	2	2
General and administrative			
	1	1	2
Total share-based compensation expense			
	12%	17%	15%

Revenue

<u>Year Ended December 31,</u>			<u>2016 vs</u>	<u>2015 vs</u>
<u>2016</u>	<u>2015</u>	<u>2014</u>	<u>2015 %</u>	<u>2014 %</u>
			<u>Change</u>	<u>Change</u>
(in millions)				
Advertising				
\$26,885	\$17,079	\$11,492	57 %	49 %
Payments and other fees				
753	849	974	(11)%	(13)%
Total revenue				
<u>\$27,638</u>	<u>\$17,928</u>	<u>\$12,466</u>	54 %	44 %

2016 Compared to 2015. Revenue in 2016 increased \$9.71 billion, or 54%, compared to 2015. The increase was mostly due to an increase in advertising revenue.

The most important factor driving advertising revenue growth was an increase in revenue from ads in News

Feed. For 2016, we estimate that mobile advertising revenue represented approximately 83% of total advertising revenue, as compared with approximately 77% in 2015. Factors that influenced our advertising revenue growth in 2016 included (i) an increase in demand for our ad inventory, in part driven by an increase in the number of marketers actively advertising on Facebook, (ii) an increase in user growth and engagement, and (iii) an increase in the number and frequency of ads displayed in News Feed, as well as the quality, relevance, and performance of those ads. However, we anticipate increases in the number and frequency of ads displayed in News Feed will be a less significant driver of our revenue growth in the future.

In 2016 compared to 2015, the average price per ad increased by 5% and the number of ads delivered increased by 50%. The increase in average price per ad was driven by a continued mix shift towards a greater percentage of our ads being shown in News Feed while the increase in the ads delivered was driven by the same factors that influenced our advertising growth.

Advertising spending is traditionally seasonally strong in the fourth quarter of each year. We believe that this seasonality in advertising spending affects our quarterly results, which generally reflect significant growth in advertising revenue between the third and fourth quarters and a decline in advertising spending between the fourth and subsequent first quarters. For instance, our advertising revenue increased 27%, 31%, and 22% between the third and fourth quarters of 2016, 2015, and 2014, respectively, while advertising revenue for both the first quarters of 2016 and 2015 declined 8% compared to the fourth quarters of 2015 and 2014.

Payments and other fees revenue in 2016 decreased \$96 million, or 11%, compared to 2015. The majority of

the decrease in Payments and other fees revenue was due to decreased Payments revenue from games played on personal computers. We anticipate Payments and other fees revenue will continue to decline in 2017.

2015 Compared to 2014. Revenue in 2015 increased \$5.46 billion, or 44%, compared to 2014. The increase was primarily due to an increase in advertising revenue.

The most important factor driving advertising revenue growth was an increase in revenue from ads in News Feed on mobile devices. In 2015, we estimate that mobile advertising revenue represented approximately 77% of total advertising revenue, as compared with approximately 65% in 2014. Factors that influenced our mobile advertising revenue growth in 2015 included (i) an increase in demand for our ad inventory, in part driven by an increase in the number of marketers actively advertising on Facebook, (ii) an increase in mobile user growth and engagement, and (iii) an increase in the number and frequency of ads displayed in News Feed, as well as the quality, relevance, and performance of those ads.

In 2015 compared to 2014, the average price per ad increased by 140% and the number of ads delivered decreased by 38%. The increase in average price per ad was driven by a product change related to certain non-News Feed ads during the third quarter of 2014, which decreased the number of ads displayed but increased the prominence of each ad. Average price per ad was also driven by a mix shift towards a greater percentage of our ads being shown in News Feed. The reduction in ads delivered was driven by factors including the product change described above as well as the shift in usage towards mobile devices where people are shown fewer ads as compared to personal computers.

Payments and other fees revenue in 2015 decreased \$125 million, or 13%, compared to 2014. The decrease in Payments and other fees revenue was a result of decreased Payments revenue from games played on personal computers, partially offset by an increase in other fees revenue related to acquisitions closed in the second half of 2014.

No customer represented 10% or more of total revenue during the years ended December 31, 2016, 2015, and 2014.

Foreign Exchange Impact on Revenue

The general strengthening of the U.S. dollar relative to certain foreign currencies from the full year 2015 compared to the same period in 2016 had an unfavorable impact on our revenue. If we had translated revenue for the full year 2016 using the prior year's monthly exchange rates for our settlement currencies other than the U.S. dollar, our total revenue and advertising revenue would have been \$27.91 billion, and \$27.15 billion, respectively. Using these constant rates, revenue and advertising revenue would have been \$270 million and \$269 million higher than actual revenue and advertising revenue, respectively, for the full year 2016.

The general strengthening of the U.S. dollar relative to certain foreign currencies (primarily the Euro) from the full year 2014 to the same period in 2015 had an unfavorable impact on our revenue. If we had translated revenue for the full year 2015 using 2014 monthly exchange rates for our settlement currencies other than the U.S. dollar, our total revenue and advertising revenue would have been \$19.11 billion and \$18.26 billion, respectively. Using these constant rates, both revenue and advertising

revenue would have been \$1.19 billion higher than actual revenue and advertising revenue for the full year 2015.

Cost of revenue

<u>Year Ended December 31,</u>			2016 vs	2015 vs
<u>2016</u>	<u>2015</u>	<u>2014</u>	2015 %	2014 %
			Change	Change
(dollars in millions)				
Cost of revenue				
\$3,789	\$2,867	\$2,153	32 %	33 %
Percentage of revenue				
14%	16%	17%		

2016 Compared to 2015. Cost of revenue in 2016 increased \$922 million, or 32%, compared to 2015. The majority of the increase was due to an increase in operational expenses related to our data centers and technical infrastructure and, to a lesser extent, higher costs associated with ads payment processing and various partnership agreements.

2015 Compared to 2014. Cost of revenue in 2015 increased \$714 million, or 33%, compared to 2014. The increase was primarily due to an increase in operational expenses related to our data centers and technical infrastructure, compared to 2014. Amortization of our intangible assets in 2015 also increased \$100 million compared to 2014, mostly due to the full year impact of acquisitions completed in the second half of 2014.

In 2017, we anticipate that the cost of revenue will increase as we continue to expand our data center capacity

and technical infrastructure to support user growth, increased user engagement, and the delivery of new products and services and, to a lesser extent, due to higher costs associated with ads payment processing and various partnership agreements.

Research and development

Year Ended December 31,			2016 vs	2015 vs
2016	2015	2014	2015 %	2014 %
			Change	Change
(dollars in millions)				
Re-search and development				
\$5,919	\$4,816	\$2,666	23%	81%
Percentage of revenue				
21%	27%	21%		

2016 Compared to 2015. Research and development expenses in 2016 increased \$1.10 billion, or 23%, compared to 2015. The majority of the increase was due to an increase in payroll and benefits as a result of a 34% growth in employee headcount from December 31, 2015 to December 31, 2016 in engineering and other technical functions. Additionally, our equipment and related expenses in 2016 to support our research and development efforts increased \$170 million compared to 2015.

2015 Compared to 2014. Research and development expenses in 2015 increased \$2.15 billion, or 81%, compared to 2014. The majority of the increase was due to an increase in share-based compensation expense of \$1.02 billion compared to 2014, which reflected the full year impact of share-based compensation related to the acquisitions

completed in the second half of 2014. In addition, other payroll and benefits expense increased as a result of a 43% growth in employee headcount from December 31, 2014 to December 31, 2015 in engineering and other technical functions.

In 2017, we plan to continue to accelerate the hiring of software engineers and other technical employees and increasing our investment to support our research and development initiatives.

Marketing and sales

<u>Year Ended December 31,</u>				
<u>2016</u>	<u>2015</u>	<u>2014</u>	<u>2016 vs 2015 % Change</u>	<u>2015 vs 2014 % Change</u>
(dollars in millions)				
Marketing and sales				
\$3,772	\$2,725	\$1,680	38%	62%
Percentage of revenue				
14%	15%	13%		

2016 Compared to 2015. Marketing and sales expenses in 2016 increased \$1.05 billion, or 38%, compared to 2015. The majority of the increase was due to payroll and benefits expenses as a result of a 28% increase in employee headcount from December 31, 2015 to December 31, 2016 in our marketing and sales functions, and increases in our consulting and other professional service fees. Additionally, our marketing expenses increased \$344 million in 2016, compared to 2015.

2015 Compared to 2014. Marketing and sales expenses in 2015 increased \$1.05 billion, or 62%, compared to 2014. The majority of the increase was due to increases in amortization of our intangible assets of \$305 million due to the full year impact of acquisitions completed in the second half of 2014, and in payroll and benefits expenses as a result of a 32% increase in employee headcount from December 31, 2014 to December 31, 2015 in our marketing and sales functions. Additionally, our marketing expenses increased \$258 million in 2015, compared to 2014.

In 2017, we plan to continue to increase our investment and the hiring of marketing and sales employees to support our marketing, sales, and partnership efforts.

General and administrative

<u>Year Ended December 31,</u>				
<u>2016</u>	<u>2015</u>	<u>2014</u>	2016 vs 2015 % Change	2015 vs 2014 % Change
(dollars in millions)				
General and administrative				
\$1,731	\$1,295	\$973	34%	33%
Percentage of revenue				
6%	7%	8%		

2016 Compared to 2015. General and administrative expenses in 2016 increased \$436 million, or 34%, compared to 2015. The majority of the increase was due to an increase in payroll and benefits expenses as a result of a 43% increase in employee headcount from December 31, 2015 to December 31, 2016 in general and administrative

functions, and to a lesser extent, higher professional services and legal fees.

2015 Compared to 2014. General and administrative expenses in 2015 increased \$322 million, or 33%, compared to 2014. The increase was primarily due to an increase in payroll and benefits expenses as a result of a 36% increase in employee headcount from December 31, 2014 to December 31, 2015 in general and administrative functions, including an increase of \$20 million in share-based compensation expense in 2015, and to a lesser extent, higher legal and other professional services fees.

In 2017, we plan to continue to increase general and administrative expenses to support overall company growth.

Interest and other income/(expense), net

<u>Year Ended December 31,</u>				
<u>2016</u>	<u>2015</u>	<u>2014</u>	2016 vs 2015 % Change	2015 vs 2014 % Change
(dollars in millions)				
Interest income/(expense), net				
\$166	\$29	\$4	NM	NM
Other income/(expense), net				
<u>(75)</u>	<u>(60)</u>	<u>(88)</u>	(25)%	32%
Interest and other income/(expense), net				
<u>\$91</u>	<u>\$(31)</u>	<u>\$(84)</u>	NM	63%

2016 Compared to 2015. Interest and other income/(expense), net in 2016 increased \$122 million compared to 2015. Interest income/(expense), net increased mostly due to increases in interest income driven by

higher invested cash balances and interest rates. In addition, the majority of the decrease in other income/(expense), net was due to foreign exchange impact resulting from the periodic re-measurement of our foreign currency balances.

2015 Compared to 2014. Interest and other income/(expense), net in 2015 increased \$53 million, or 63%, compared to 2014. Other income/(expense), net increased primarily due to a decrease in foreign exchange losses resulting from the periodic re-measurement of our foreign currency balances. In addition, interest income/(expense), net increased due to higher invested cash balances and interest rates.

Provision for income taxes

<u>Year Ended December 31,</u>				
<u>2016</u>	<u>2015</u>	<u>2014</u>	2016 vs 2015 % Change	2015 vs 2014 % Change
(dollars in millions)				
Provision for income taxes				
\$2,301	\$2,506	\$1,970	(8)%	27%
Effective tax rate				
18%	40%	40%		

2016 Compared to 2015. Our provision for income taxes in 2016 decreased \$205 million, or 8%, compared to 2015, primarily due to the impact of the adoption of ASU 2016-09, and was partially offset by an increase in income before provision for income taxes. Our effective tax rate decreased due to more of our income before provision for

income taxes being earned in jurisdictions with a tax rate lower than the U.S. statutory rate where we have asserted our intention to indefinitely reinvest certain of those earnings, as well as due to a lower increase in our unrecognized tax benefit in 2016 compared to 2015 and the adoption of ASU 2016-09 effective January 1, 2016.

The adoption of ASU 2016-09 significantly impacts both the timing and method of how the tax effects of share-based awards are recognized. ASU 2016-09 requires the income tax effects to be recognized in the provision for income taxes when the awards vest or are settled whereas previously such income tax benefits were recognized as part of additional paid-in capital and could not be recognized until they were realized through a reduction in income taxes payable. These combined effects had the impact of decreasing our provision for income taxes by \$934 million and our effective tax rate by 7% in 2016. Excluding the adoption of ASU 2016-09, our provision for income taxes and effective tax rate in 2016 would have been \$3.24 billion and 26%, respectively.

In July 2016, we received a Statutory Notice of Deficiency (Notice) from the IRS related to transfer pricing with our foreign subsidiaries in conjunction with the examination of the 2010 tax year. While the Notice applies only to the 2010 tax year, the IRS states that it will also apply its position for tax years subsequent to 2010, which, if the IRS prevails in its position, could result in an additional federal tax liability of approximately \$3.0 billion to \$5.0 billion in excess of the originally filed U.S. return, plus interest and any penalties asserted. We do not agree with the position of the IRS and have filed a petition in the United States Tax Court challenging the Notice. We have previously accrued an estimated unrecognized tax benefit consistent with the guidance in ASC 740 that is lower than

the potential additional federal tax liability of \$3.0 to \$5.0 billion in excess of the originally filed U.S. return, plus interest and penalties. If the IRS prevails in the assessment of additional tax due based on its position, the assessed tax, interest and penalties, if any, could have a material adverse impact on our financial position, results of operations, and cash flows.

2015 Compared to 2014. Our provision for income taxes in 2015 increased \$536 million, or 27%, compared to 2014, primarily due to an increase in income before provision for income taxes. Our effective tax rate in 2015 remained flat due to an increase in income subject to tax in jurisdictions with tax rates lower than the U.S. statutory rate offset by an increase in unrecognized tax benefits.

Effective Tax Rate Items. Our 2016 effective tax rate differs from the U.S. statutory rate primarily due to more of our income before provision for income taxes being earned in jurisdictions with tax rates lower than the U.S. statutory rate where we have asserted our intention to indefinitely reinvest those earnings and the recognition of certain tax benefits from share-based award activities after the adoption of ASU 2016-09. Our effective tax rate in the future will depend on the mix of our income before provision for income taxes earned in jurisdictions with a tax rate lower than the U.S. statutory rate where we have the ability and intent to indefinitely reinvest those earnings, as well as a number of other factors, including integrating intellectual property from acquisitions, research tax credits, share-based compensation, settlement of tax contingency items, and the impact of new legislation.

The portion of our income before provision for income taxes earned in jurisdictions with a tax rate lower than the U.S. statutory rate will depend upon the proportion of

revenue and costs associated with the respective jurisdictions. Our ability to assert our intention to indefinitely reinvest those future earnings will depend upon the amount, location, and cost of deploying those earnings to where they are needed by the business.

Integrating intellectual property from acquisitions into our business generally involves intercompany transactions that have the impact of increasing our provision for income taxes. Consequently, our provision for income taxes and our effective tax rate may initially increase following an acquisition and integration. The magnitude of this impact will depend upon the specific type, size, and taxing jurisdictions of the intellectual property as well as the relative contribution to income in subsequent periods.

The accounting for share-based compensation will increase or decrease our effective tax rate based upon the difference between our share-based compensation expense and the benefits taken on our tax return which depends upon the share price at the time of employee award vesting.

We anticipate our 2017 annual effective tax rate will be lower than 2016. We anticipate that more of our income before provision for income taxes will be earned in jurisdictions with a tax rate lower than the U.S. statutory rate where we intend to assert to indefinitely reinvest those earnings which we expect will result in a lower effective tax rate for 2017. In addition, we anticipate that ASU 2016-09 will further lower our effective tax rate, relative to the U.S. statutory rate, if our share price remains constant to the January 31, 2017 price of \$130.32. As ASU 2016-09 requires recognition of certain tax benefits on a discrete basis, we anticipate that our effective tax rate will vary from quarter to quarter depending on our share price in each period. If our share price remains constant

to the January 31, 2017 price, we anticipate that our effective tax rate will be lower in the first quarter of 2017 and increase in the remaining quarters throughout the year.

Unrecognized Tax Benefits. As of December 31, 2016, our net unrecognized tax benefits are \$2.43 billion accrued as other liabilities and are predominantly accrued for uncertainties related to transfer pricing with our foreign subsidiaries, which includes licensing of intellectual property, providing services and other transactions, as well as for uncertainties with our research tax credits. The ultimate settlement of the liabilities will depend upon resolution of tax audits, litigation, or events that would otherwise change the assessment of such items. Based upon the status of litigation described above and the current status of tax audits in various jurisdictions, we believe it is unlikely that a material change to our unrecognized tax benefits will occur within the next 12 months. We expect to continue to accrue unrecognized tax benefits for certain recurring tax positions and anticipate that the amount accrued will be similar to 2016. Absent any unanticipated event, we do not expect our unrecognized tax benefits will have a significant impact on our effective tax rate in 2017.

Quarterly Results of Operations Data

The following tables set forth our unaudited quarterly consolidated statements of income data in dollars and as a percentage of total revenue for each of the eight quarters in the period ended December 31, 2016. We have prepared the quarterly consolidated statements of income data on a basis consistent with the audited consolidated financial statements included in Part II, Item 8, “Financial Statements and Supplementary Data” in this Annual Report on Form 10-K. We elected to early adopt ASU 2016-09 in the fourth quarter of 2016. As such, certain consolidated statements of income data for the three

months ended December 31, 2016, September 30, 2016, June 30, 2016, and March 31, 2016 included the impacts of early adoption of ASU 2016-09. See Note 1 of the accompanying notes to our consolidated financial statements included in Part II, Item 8, “Financial Statements and Supplementary Data” of this Annual Report on Form 10-K for additional information related to this adoption. In the opinion of management, the financial information reflects all adjustments, consisting only of normal recurring adjustments, which we consider necessary for a fair presentation of this data. This information should be read in conjunction with the audited consolidated financial statements and related notes included in Part II, Item 8, “Financial Statements and Supplementary Data” in this Annual Report on Form 10-K. The results of historical periods are not necessarily indicative of the results of operations for any future period.

Three Months Ended			
Dec 31, 2016	Sep 30, 2016	Jun 30, 2016	Mar 31, 2016
Dec 31, 2015	Sep 30, 2015	Jun 30, 2015	Mar 31, 2015

(in millions)

Consolidated Statements of Income Data:

Revenue:

Advertising

\$8,629	\$6,816	\$6,239	\$5,201
\$5,637	\$4,299	\$3,827	\$3,317

Payments and other fees

180	195	197	181
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204	202	215	226
Total revenue			
8,809	7,011	6,436	5,382
5,841	4,501	4,042	3,543
Costs and expenses:			
Cost of revenue			
1,047	987	917	838
824	720	668	654
Research and development			
1,563	1,542	1,471	1,343
1,314	1,271	1,170	1,062
Marketing and sales			
1,118	926	901	826
772	706	626	620
General and administrative			
515	439	413	365
371	345	305	274
Total costs and expenses			
4,243	3,894	3,702	3,372
3,281	3,042	2,769	2,610
Income from operations			
4,566	3,117	2,734	2,010
2,560	1,459	1,273	933
Interest and other income/(expense), net			

(33)	47	20	56
(3)	(27)	—	(1)
Income before provision for income taxes			
4,533	3,164	2,754	2,066
2,557	1,432	1,273	932
Provision for income taxes			
965	537	471	328
995	536	554	420
Net income			
\$3,568	\$2,627	\$2,283	\$1,738
\$1,562	\$896	\$719	\$512
Less: Net income attributable to participating securities			
7	7	7	6
7	5	4	3
Net income attributable to Class A and Class B common stockholders			
\$3,561	\$2,620	\$2,276	\$1,372
\$1,555	\$891	\$715	\$509
Earnings per share attributable to Class A and Class B common stockholders:			
Basic			
\$1.24	\$0.91	\$0.80	\$0.61
\$0.55	\$0.32	\$0.26	\$0.18
Diluted			

\$1.21	\$0.90	\$0.78	\$0.60
\$0.54	\$0.31	\$0.25	\$0.18

Share-based compensation expense included in costs and expenses:

Three Months Ended			
Dec 31, 2016	Sep 30, 2016	Jun 30, 2016	Mar 31, 2016
Dec 31, 2015	Sep 30, 2015	Jun 30, 2015	Mar 31, 2015
(in millions)			
Cost of revenue			
\$32	\$30	\$29	\$22
\$22	\$21	\$21	\$17
Research and development			
641	636	631	586
583	598	603	566
Marketing and sales			
96	95	95	82
84	82	82	72
General and administrative			
62	63	62	56
57	56	57	48
Total share-based compensation expense			
\$831	\$824	\$817	\$746
\$746	\$757	\$763	\$703

Three Months Ended			
Dec 31, 2016	Sep 30, 2016	Jun 30, 2016	Mar 31, 2016
Dec 31, 2015	Sep 30, 2015	Jun 30, 2015	Mar 31, 2015
(as a percentage of total revenue)			

Consolidated Statements of Income**Data:**

Revenue:

Advertising

98%	97%	97%	97%
97%	96%	95%	94%

Payments and other fees

2	3	3	3
3	4	5	6

Total revenue

100%	100%	100%	100%
100%	100%	100%	100%

Costs and expenses:

Cost of revenue

12	14	14	16
14	16	17	18

Research and development

18	22	23	25
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	22	28	29	30
Marketing and sales				
	13	13	14	15
	13	16	15	17
General and administrative				
	6	6	6	7
	6	8	8	8
Total costs and expenses				
	48	56	58	63
	56	68	69	74
Income from operations				
	52	44	42	37
	44	32	31	26
Interest and other income/(expense), net				
	—	1	—	1
	—	(1)	—	—
Income before provision for income taxes				
	51	45	43	38
	44	32	31	26
Provision for income taxes				
	11	8	7	6
	17	12	14	12
Net income				
	41%	37%	35%	32%

27%	20%	18%	14%
Less: Net income attributable to participating securities			
—	—	—	—
—	—	—	—
Net income attributable to Class A and Class B common stockholders			
40%	37%	35%	32%
27%	20%	18%	14%

Share-based compensation expense included in costs and expenses:

Three Months Ended			
Dec 31, 2016	Sep 30, 2016	Jun 30, 2016	Mar 31, 2016
Dec 31, 2015	Sep 30, 2015	Jun 30, 2015	Mar 31, 2015

(as a percentage of total revenue)

Cost of revenue			
—%	—%	—%	—%
—%	—%	1%	—%
Research and development			
7	9	10	11
10	13	15	16
Marketing and sales			
1	1	1	2

1	2	2	2
General and administrative			
1	1	1	1
1	1	1	1
Total share-based compensation expense			
9%	12%	13%	14%
13%	17%	19%	20%

Liquidity and Capital Resources

Year Ended December 31,		
2016	2015	2014
(in millions)		

Consolidated Statements of Cash Flows Data:

Net cash provided by operating activities ⁽¹⁾	\$16,108	\$10,320	\$7,326
Net cash used in investing activities	(11,739)	(9,434)	(5,913)
Net cash used in financing activities ⁽¹⁾	(310)	(139)	(298)
Purchases of property and equipment	(4,491)	(2,523)	(1,831)
Depreciation and amortization			

539

2,342	1,945	1,243
Share-based compensation ⁽¹⁾		
3,218	2,960	1,786

⁽¹⁾ We elected to early adopt ASU 2016-09 in the fourth quarter of 2016. The impacts of adoption have been reflected retrospectively in certain of our consolidated statements of cash flows data for all periods presented. Share-based compensation for the year ended December 31, 2016 included the impact the adoption. See Note 1 of the accompanying notes to our consolidated financial statements for additional information related to this adoption.

Our principal sources of liquidity are our cash and cash equivalents, marketable securities, and cash generated from operations. Cash and cash equivalents, and marketable securities consist primarily of cash on deposit with banks, investments in money market funds, and investments in U.S. government securities, U.S. government agency securities, and corporate debt securities. Cash and cash equivalents, and marketable securities were \$29.45 billion as of December 31, 2016, an increase of \$11.02 billion from December 31, 2015, primarily due to \$16.11 billion of cash generated from operations, partially offset by \$4.49 billion for purchases of property and equipment and \$312 million for principal payments on capital lease and other financing obligations.

Cash paid for income taxes (net of refunds) was \$1.21 billion for the year ended December 31, 2016. As of December 31, 2016, our federal net operating loss carryforward was \$3.14 billion, although we anticipate only a relatively small portion of this will be available to offset our

federal taxable income in 2017. As of December 31, 2016, we had \$312 million of federal tax credits, of which a substantial portion will be available to offset our federal tax liabilities in 2017. We expect that the amount of cash paid for income taxes will significantly increase in 2017.

In May 2016, we terminated our undrawn five-year senior unsecured revolving credit facility that allowed us to borrow up to \$6.5 billion and entered into a \$2.0 billion senior unsecured revolving credit facility (2016 Facility). Any amounts outstanding under the 2016 Facility will be due and payable on May 20, 2021. As of December 31, 2016, no amounts had been drawn down and we were in compliance with the covenants under this credit facility.

In November 2016, our board of directors authorized a \$6.0 billion share repurchase program of our Class A common stock commencing in 2017 and does not have an expiration date. The timing and actual number of shares repurchased depend on a variety of factors, including price, general business and market conditions, and other investment opportunities, through open market purchases or privately negotiated transactions including through the use of trading plans intended to qualify under Rule 10b5-1 under the Securities Exchange Act of 1934, as amended (Exchange Act).

As of December 31, 2016, \$5.10 billion of the \$29.45 billion in cash and cash equivalents, and marketable securities was held by our foreign subsidiaries. We have provided residual taxes in jurisdictions where we do not intend to indefinitely reinvest the earnings of the local subsidiary.

In January 2017, we began funding withholding taxes due on employee equity awards by net share settlement, rather than our previous approach of requiring employees

to sell shares of our common stock to cover taxes upon vesting of such awards. We expect this net share settlement approach will increase our cash outflows and reduce the number of shares that will be issued in connection with the vesting of our employee equity awards. If we had used the net share settlement approach in 2016, our cash outflows would have increased by approximately \$2.3 billion for the year ended December 31, 2016, and the number of shares of Class A common stock issued in connection with the vesting of employee equity awards during this period would have decreased by approximately 20 million shares.

We currently anticipate that our available funds, credit facility, and cash flow from operations will be sufficient to meet our operational cash needs for the foreseeable future.

Cash Provided by Operating Activities

Cash flow from operating activities during 2016, mostly consisted of net income, adjusted for certain non-cash items, such as share-based compensation expense of \$3.22 billion and total depreciation and amortization of \$2.34 billion. The increase in cash flow from operating activities during 2016 compared to 2015, was mostly due to an increase in net income, including the impact of ASU 2016-09 adoption, as adjusted for depreciation and amortization, deferred income taxes, and share-based compensation expense.

Cash flow from operating activities during 2015, mostly consisted of net income, adjusted for certain non-cash items, such as share-based compensation expense of \$2.96 billion, total depreciation and amortization of \$1.95 billion, and tax benefit from share-based award activity of \$1.72 billion, which had been reclassified from financing activity as a result of ASU 2016-09 adoption. The increase

in cash flow from operating activities during 2015 compared to 2014, was primarily due to an increase in net income, as adjusted for share-based compensation expense, and higher income tax payable as of December 31, 2015 compared to 2014.

Cash flow from operating activities during 2014, primarily consisted of net income, adjusted for certain non-cash items, such as tax benefit from share-based award activity of \$1.85 billion, which had been reclassified from financing activity as a result of ASU 2016-09 adoption, share-based compensation expense of \$1.79 billion and total depreciation and amortization of \$1.24 billion. The cash flow from operating activities during 2014 compared to 2013 increased mainly due to an increase in net income of \$1.44 billion, as adjusted for certain non-cash items described above, partially offset by a decrease in income tax refunds of \$415 million.

Cash Used in Investing Activities

Cash used in investing activities was \$11.74 billion during 2016, mostly due to \$7.19 billion for net purchases of marketable securities and \$4.49 billion for capital expenditures as we continued to invest in data centers, servers, office buildings, and network infrastructure. The increase in cash used in investing activities during 2016 compared to 2015 was mostly due to increases in capital expenditures and net purchases of marketable securities.

Cash used in investing activities during 2015, primarily resulted from \$6.70 billion for net purchases of marketable securities and \$2.52 billion for capital expenditures as we continued to invest in servers, data centers, network infrastructure, and office buildings. The increase in cash used in investing activities during 2015 compared to 2014

was mainly due to increases in net purchases of marketable securities, partially offset by a decrease in acquisitions of businesses and purchases of intangible assets.

Cash used in investing activities during 2014 primarily resulted from \$4.98 billion for the acquisition of businesses and \$1.83 billion for capital expenditures related to network infrastructure and the construction of data centers and office buildings, partially offset by \$1.24 billion for the net sales and maturities of marketable securities. The increase in cash used in investing activities during 2014 compared to 2013 was mainly due to increases in acquisitions of businesses and purchases of intangible assets, and capital expenditures, partially offset by net sales of marketable securities.

We anticipate making capital expenditures in 2017 of approximately \$7.0 billion to \$7.5 billion.

Cash Used in Financing Activities

Cash used in financing activities during 2016, mostly consisted of principal payments on capital lease and other financing obligations. The increase in cash used in financing activities was due to full repayment of our capital lease and other financing obligations in 2016.

Cash used in financing activities during 2015, primarily consisted of principal payments on capital lease obligations. The decrease in cash used in financing activities was primarily due to lower principal payments related to our capital lease transactions.

Cash used in financing activities during 2014 was \$298 million, which primarily resulted from \$243 million of payments related to our capital lease transactions, and \$55 million of other financing activities.

Off-Balance Sheet Arrangements

We did not have any off-balance sheet arrangements as of December 31, 2016.

Contractual Obligations

Our principal commitments consist of obligations under operating leases for offices, land, facilities, and data centers. The following table summarizes our commitments to settle contractual obligations in cash as of December 31, 2016 (in millions):

Total	Payment Due by Period			
	Less than 1 Year	1-3 Years	3-5 Years	More than 5 Years
Operating lease obligations				
\$ 1,964	\$ 277	\$ 549	\$ 405	\$ 733
Financing obligation—building in progress—leased facility ⁽¹⁾				
476	—	7	71	398
Other contractual commitments ⁽²⁾				
1,244	741	153	52	298
Total contractual obligations				
<u>\$ 3,684</u>	<u>\$ 1,018</u>	<u>\$ 709</u>	<u>\$ 528</u>	<u>\$ 1,429</u>

⁽¹⁾ Financing obligation—building in progress—leased facility represents our commitments to lease certain office buildings that are currently under construction. As of December 31, 2016, \$112 million of the total obligation was recorded as a liability and is included in other liabilities on

our consolidated balance sheets. See Note 9 of the accompanying notes to our consolidated financial statements for additional information related to this financing obligation.

⁽²⁾ Other contractual commitments primarily relate to network infrastructure and our data center operations.

In addition, our other liabilities include \$2.43 billion related to uncertain tax positions as of December 31, 2016. Due to uncertainties in the timing of the completion of tax audits, the timing of the resolution of these positions is uncertain and we are unable to make a reasonably reliable estimate of the timing of payments in individual years beyond 12 months. As a result, this amount is not included in the above contractual obligations table.

Contingencies

We are involved in claims, lawsuits, government investigations, and other legal proceedings. We record a provision for a liability when we believe that it is both probable that a liability has been incurred, and that the amount can be reasonably estimated. Significant judgment is required to determine both probability and the estimated amount. Such legal proceedings are inherently unpredictable and subject to significant uncertainties, some of which are beyond our control. Should any of these estimates and assumptions change or prove to be incorrect, it could have a material impact on our results of operations, financial position, and cash flows.

See Note 9—Commitments and Contingencies and Note 12—Income Taxes of the accompanying notes to our consolidated financial statements included in Part II, Item 8, “Financial Statements and Supplementary Data” and Part I, Item 3, “Legal Proceedings” of this Annual Report on Form 10-K for additional information regarding these contingencies.

Recently Issued Accounting Pronouncements

In May 2014, the FASB issued Accounting Standards Update No. 2014-09, *Revenue from Contracts with Customers (Topic 606)* (ASU 2014-09), which amends the existing accounting standards for revenue recognition. In August 2015, the FASB issued ASU No. 2015-14, *Revenue from Contracts with Customers (Topic 606): Deferral of the Effective Date*, which delays the effective date of ASU 2014-09 by one year. The FASB also agreed to allow entities to choose to adopt the standard as of the original effective date. In March 2016, the FASB issued Accounting Standards Update No. 2016-08, *Revenue from Contracts with Customers (Topic 606): Principal versus Agent Considerations (Reporting Revenue Gross versus Net)* (ASU 2016-08) which clarifies the implementation guidance on principal versus agent considerations. The guidance includes indicators to assist an entity in determining whether it controls a specified good or service before it is transferred to the customers. The new revenue recognition standard will be effective for us in the first quarter of 2018, with the option to adopt it in the first quarter of 2017. We currently anticipate adopting the new standard effective January 1, 2018. The new standard also permits two methods of adoption: retrospectively to each prior reporting period presented (full retrospective method), or retrospectively with the cumulative effect of initially applying the guidance recognized at the date of initial application (the modified retrospective method). We currently anticipate adopting the standard using the modified retrospective method. While we are still in the process of completing our analysis on the impact this guidance will have on our consolidated financial statements and related disclosures, we do not expect the impact to be material.

In February 2016, the FASB issued Accounting Standards Update No. 2016-02, *Leases (Topic 842)* (ASU 2016-02), which generally requires companies to recognize operating and financing lease liabilities and corresponding right-of-use assets on the balance sheet. This guidance will be effective for us in the first quarter of 2019 on a modified retrospective basis and early adoption is permitted. We are still evaluating the effect that this guidance will have on our consolidated financial statements and related disclosures.

In October 2016, the FASB issued Accounting Standards Update No. 2016-16, *Income Taxes (Topic 740): Intra-Entity Transfers Other than Inventory* (ASU 2016-16), which requires companies to recognize the income-tax consequences of an intra-entity transfer of an asset other than inventory. This guidance will be effective for us in the first quarter of 2018, with the option to adopt it in the first quarter of 2017. We currently anticipate adopting the new standard effective January 1, 2018, and do not expect the standard to have a material impact on our consolidated financial statements.

In November 2016, the FASB issued Accounting Standards Update No. 2016-18, *Statement of Cash Flows (Topic 230): Restricted Cash* (ASU 2016-18), which requires companies to include amounts generally described as restricted cash and restricted cash equivalents in cash and cash equivalents when reconciling beginning-of-period and end-of-period total amounts shown on the statement of cash flows. This guidance will be effective for us in the first quarter of 2018 and early adoption is permitted. We are still evaluating the effect that this guidance will have on our consolidated financial statements and related disclosures.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

We are exposed to market risks, including changes to foreign currency exchange rates, interest rates, and inflation.

Foreign Currency Exchange Risk

We have foreign currency risks related to our revenue and operating expenses denominated in currencies other than the U.S. dollar, primarily the Euro. In general, we are a net receiver of currencies other than the U.S. dollar. Accordingly, changes in exchange rates, and in particular a strengthening of the U.S. dollar, have negatively affected our revenue and other operating results as expressed in U.S. dollars.

We have experienced and will continue to experience fluctuations in our net income as a result of transaction gains or losses related to revaluing certain current asset and current liability balances that are denominated in currencies other than the functional currency of the entities in which they are recorded. At this time we have not entered into, but in the future we may enter into, derivatives or other financial instruments in an attempt to hedge our foreign currency exchange risk. It is difficult to predict the effect hedging activities would have on our results of operations. We recognized foreign currency losses of \$76 million, \$66 million, and \$87 million in 2016, 2015, and 2014, respectively.

Interest Rate Sensitivity

Our exposure to changes in interest rates relates primarily to interest earned and market value on our cash and cash equivalents, and marketable securities.

Our cash and cash equivalents, and marketable securities consist of cash, certificates of deposit, time deposits, money market funds, U.S. government securities, U.S. government agency securities, and corporate debt securities. Our investment policy and strategy are focused on preservation of capital and supporting our liquidity requirements. Changes in U.S. interest rates affect the interest earned on our cash and cash equivalents and marketable securities, and the market value of those securities. A hypothetical 100 basis point increase in interest rates would have resulted in a decrease of \$403 million and \$173 million in the market value of our available-for-sale debt securities as of December 31, 2016 and December 31, 2015, respectively. Any realized gains or losses resulting from such interest rate changes would only occur if we sold the investments prior to maturity.

* * *

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA
SAN JOSE DIVISION

IN RE
FACEBOOK, INC.
SECURITIES
LITIGATION

Case No.
5:18-cv-01725-EJD

**ORDER GRANTING
DEFENDANTS'
MOTION TO
DISMISS
CONSOLIDATED
CLASS ACTION
COMPLAINT**

Re: Dkt. No. 93

This lawsuit stems from the revelation that Cambridge Analytica acquired the private Facebook data of millions of users and that, upon learning of this leak, Facebook allegedly attempted to suppress evidence of the breach contrary to its stated privacy policy.

Plaintiffs are persons who purchased shares of Facebook common stock between February 3, 2017 and July 25, 2018 (the “Class Period”), who believe that Mark Zuckerberg, Sheryl K. Sandberg, and David M. Wehner, collectively Defendants, made materially false and misleading statements and omissions in connection with the purchase and sale of Facebook stock. *See* Consolidated Complaint (“Compl.”) ¶ 1, Dkt. 86. They allege that Defendants violated Section 10(b), 20(a), and 20A of the Securities Exchange Act of 1934 (the “Exchange Act”) and Rule 10b-5 promulgated thereunder because Defendants made guarantees that the Cambridge Analytica, and related data-privacy scandals, would not impact Facebook

stock while knowing this to be false. Specifically, Plaintiffs focus on Defendants' statements and omissions "concerning Facebook's privacy and data protection practices" and their impact on Facebook's stock price during two time periods: March and July 2018.

Defendants have filed a motion to dismiss the lawsuit arguing that Plaintiffs have not, and cannot, meet Rule 9(b)'s heightened pleading requirements for securities fraud and instead allege "an overarching hindsight theory." Motion to Dismiss ("Mot.") at 2, Dkt. 93. Defendants make four main arguments all centered around Plaintiffs' inability to meet the elements of securities fraud. First, Defendants argue Plaintiffs have not pled an actionable misstatement or omission because they have not identified any false statements. Defendants argue the 36 "actionable" statements or omissions Plaintiffs raise are, in fact, neither actionable nor fraudulent because Plaintiffs make no attempt to plead that Defendants lied or mislead investors. As explained *infra* Section III.C.1.a., as to all the allegations, only Statement 22 is actionable.

Second, Defendants argue Plaintiffs have not pled a strong inference of scienter because Plaintiffs do not (1) relate the alleged misstatements to any conduct establishing scienter or (2) show facts that the Defendants knew the challenged statements were false. Further, Defendants contend that Plaintiffs offer only conclusions without alleging any specific facts to support these conclusions. As explained *infra* Section III.C.2. the one actionable Statement, Statement 22 lacks scienter because Plaintiffs do not allege with sufficient particularity that Defendant Sandberg made the statement knowing it was false.

Third, Defendants contend that Plaintiffs fail to plead loss causation since Defendants had already warned investors of a potential stock decline and cannot trace any corrective disclosure to the stock price's drop. Finally, Defendants argue that Plaintiffs cannot show reliance based on a "fraud-on-the market" theory because the Cambridge Analytica scandal was already known a year before the start of the putative class action and so the market already reacted to the data breach. The Court does not reach these arguments because it **GRANTS** the Motion to Dismiss on alternative grounds.

Accordingly, the Plaintiffs do not adequately plead a securities fraud violation. Here, it is Plaintiffs' burden to point to plausible and particular facts tending to show fraudulent behavior by Defendants. Without such a showing, Plaintiffs cannot survive the higher evidentiary pleading standard enumerated in Rule 9 of the Federal Rules of Civil Procedure. *See* Fed. R. Civ. Pro. 9(b). Thus, for the reasons below, Defendants' Motion to Dismiss is **GRANTED**.

I. BACKGROUND

A. Factual Background¹

Facebook was founded by Mark Zuckerberg who is now the Chief Executive Officer ("CEO") of the company.

¹ At points, Plaintiffs' consolidated class action complaint can be difficult to understand—it is hard to grasp exactly *what* Plaintiffs allege Defendants' misstatements and omissions were and *how* they constitute a securities violation. *See Irving Firemen's Relief & Ret. Fund v. Uber Techs.*, 2018 WL 4181954, at *6 (N.D. Cal. Aug. 31, 2018) (noting that courts in this district have rejected the "laborious deconstruction and reconstruction of a great web of scattered, vague, redundant, and often irrelevant allegations" in securities fraud cases). Often, the Complaint simply reposts entire news articles, multiple times, without explaining to this Court why Defendants' statements

Compl. ¶ 28. Sheryl Sandberg is the Chief Organization Officer (“COO”) and David Wehner is the Chief Financial Officer (“CFO”) of Facebook. *Id.* ¶¶ 30-31. Facebook is a social-media networking website that allows users to create profiles and share information about themselves to their “community.” *Id.* ¶ 37. The platform also enables third-party developers’ applications or websites (“apps”) to access users’ information. *Id.* ¶¶ 45-46. Importantly before 2015, a user could consent to an app developer gaining access to their personal data *and* the personal data of his or her friends (referred to herein as “third-party consent”). *Id.* ¶ 46.

1. Relevant Agreements

Facebook-User Agreements. The use and sharing of data on Facebook are governed by an agreement between Facebook and users, including Facebook’s Data Policy (also referred to as the “Data Use Policy” and the “Privacy Policy”), Ex. 24 & 35, and the Terms of Service (formerly “Statement of Rights and Responsibilities”), Compl. ¶ 4, 60, 200, 232. These agreements explain how users can control the use of their data. *Id.* ¶ 301(b).

Before 2015, Facebook’s policies allowed users to share information about their friends with third-party app developers, *i.e.* “third-party consent.” *Id.* ¶¶ 46, 82. Defendants subsequently announced that they would overhaul Facebook’s privacy practices to better protect user data and would tell people if their data was shared with Cambridge Analytica. *Id.* ¶ 18. Specifically, in 2014, Facebook stated that changes would “dramatically limit the

therein constitute actionable fraud. *See* Compl. ¶¶ 230, 237, 242, 251, 261(b), 276. If Plaintiffs amend their complaint, this Court requests they make it clear what the alleged misstatement or omission is and why it meets the standards of securities fraud.

Facebook information apps could access,” and “turn[ed] off users’ ability to provide access to their friend’s personal data.” *Id.* ¶¶ 79, 251, 266(b), 280. However, in April 2018, it was revealed that Defendants still permitted third parties to access user data, known as “whitelisting.” *Id.* ¶¶ 19, 140.

Facebook-App Developer Agreements. Third-party app developers must agree to Facebook’s Platform Policies before offering apps on Facebook. ¶¶ 176, 301. This limits the use and collection of user data and requires developers to explain what type of information they will collect and how it will be used. *Id.* The policy prohibits developers from selling, licensing, or purchasing user data and from transferring data to advertisers or data brokers. *Id.* ¶ 301(c).

2. Relevant Events Allegedly Showing Material Misstatements or Omissions

Aleksandr Kogan and Cambridge Analytica. In 2013, Kogan, a professor and data researcher at Cambridge University, developed an app called “thisisyourdigitalife.” *Id.* ¶ 80–81. This app was a personality quiz; users were told that the results would be used only for academic purposes. *Id.* ¶ 81. Around 270,000 people installed the app and consented to the sharing of their data. *Id.* ¶¶ 81-82. Due to Facebook’s privacy policies, app developers were able to access data about “thisisyourdigitalife” user’s Facebook friends. *Id.*

The December 2015 The Guardian Article and Defendants’ Response. In December 2015, The Guardian reported that Kogan, through his company Global Science Research (“GSR”), sold information collected through the “thisisyourdigitalife” app to Cambridge Analytica, violat-

ing Facebook's policies. *Id.* ¶¶ 7, 150, 232, 280. This article indicated that Cambridge Analytica developed voter profiles using the data of tens of millions of Facebook users, which were then used for political purposes. *Id.* ¶¶ 80-81. Once news of the data leak broke, Defendants sent Cambridge Analytica a letter asking it to delete the data and provide confirmation of deletion. *Id.* ¶¶ 9, 90, 92, 96, 98, 150-51, 176. Defendants made no efforts to verify Cambridge Analytica's assurances that the data was deleted, investigate the extent of the use or distribution of data, or verify that the data had been deleted. *Id.* ¶ 9.

Reemergence of the Cambridge Analytica Story in 2018. On March 17, 2018, three years after the original Cambridge Analytica story broke, *The New York Times* and *The Guardian* reported that Defendants delayed acting to address the Cambridge Analytica data breach and that data had not been deleted but was used in connection with President Donald Trump's campaign. *Id.* ¶¶ 150, 153-54. These reports allegedly contradicted Defendants' representations of data protection, specifically the fact that user data could still be accessed by developers without user's knowledge or consent, *i.e.*, whitelisting. *Id.* ¶ 14, 19. Facebook did, however, immediately suspend Cambridge Analytica, its parent company, and Cambridge Analytica employees from the Facebook platform. *Id.* ¶150.

In response to the stories, Facebook's common stock dropped nearly 7% on Monday, March 19, 2018, the first trading day after the news broke. *Id.* By March 27, 2018, the stock was trading as low as \$152/share, a drop of nearly 18% in value from its price before the stories broke. *Id.* ¶ 15. The Securities and Exchange Commission ("SEC") began investigating "whether Facebook adequately warned investors that developers and other third

parties may have obtained users' data without their permission or in violation of Facebook policies." *Id.* ¶ 16.

Facebook's First Quarter 2018 Earnings Report ("1Q18") and the GDPR. On April 25, 2018, Defendants released a favorable first quarter earnings report, 1Q18, which showed that user growth was unaffected by the continued Cambridge Analytica scandal. *Id.* ¶ 21. The report had quarterly revenue, earnings, and daily and monthly active user growth exceeding analyst expectations. *Id.* ¶¶ 21, 186, 188, 190, 270-71. Although a "handful" of advertisers had "paused spend" with Facebook after the Cambridge Analytica news, Defendants reported that this did not appear to reflect a "meaningful trend." *Id.* ¶ 274. Defendants also told investors that it anticipated expenses to increase year-over-year by "50% [to] 60%," because of the "significant investments [Facebook was] making in areas like safety and security" and due to increased hiring. *Id.* ¶ 275. The stock price climbed more than 9% following the release of this report. *Id.* ¶ 21. By July, Facebook's stock price was trading well above \$200 per share. *Id.*

The new European privacy legislation, the General Data Protection Regulation² (the "GDPR"), became effective the month after 1Q18 was released. Defendants addressed the possible impact of this legislation during the investor call. *Id.* ¶ 276. Defendants claimed that compli-

² The GDPR applies to all companies processing personal data of European Union citizens, regardless of the company's location. See *GDPR Key Changes*, EU GDPR.ORG, <https://eugdpr.org/the-regulation/> (last visited Sept. 16, 2019). Violations can result in severe penalties. *Id.* The main component of the GDPR that affects Defendants is the requirement that users provide intelligent consent for use of their data, *i.e.*, an "opt-in" regime. *Id.*

ance with the GDPR would not be an issue because Facebook was almost compliant. *Id.* ¶ 20. On this call, however, Defendants noted that it was “early and difficult to know . . . in advance” the business implications of the GDPR and anticipated that Facebook’s European daily and monthly user base could “be flat to slightly down.” Lutz Ex. 11, at 8, 23, Dkt. 95. Defendants noted that there was potential for impact and that they would monitor it closely. *Id.*

Facebook’s Second Quarter 2018 Earnings Report (“2Q18”). The stock price increase ended on July 25, 2018 when Defendants released 2Q18, which showed a decline in total revenues. *Id.* ¶ 21. There, Defendants reported a significant decline in user-metrics in Europe, zero user growth in the United States, decelerating worldwide growth of active users, lower than expected revenue and earnings, and ballooning expenses affecting profitability. *Id.* As a result, the common stock price dropped nearly 19% on July 26, 2018, resulting in a single-day loss of approximately \$100 billion in market capitalization. *Id.* ¶ 23. By July 30, 2018, the price of stock had fallen by 21%, shedding around \$112 billion in market capitalization. *Id.*

Defendants attributed the user growth slowdown to the effects of the “GDPR rollout, consistent with the outlook we gave on the Q1 call,” but noted that the “vast majority of people [had continued] opting in to . . . third-party data use.” Lutz Ex. 12 at 7, 18. Defendants maintain that this is consistent with their premonition during the Q1 call that there would be a “decline” in European users. Motion to Dismiss at 9, Dkt. 93.

Defendants’ Sale of Facebook Stock. During the Class Period, Defendant Zuckerberg sold approximately 30,000 Facebook shares for proceeds of more than \$5.3 billion, while Sandberg sold \$389 million worth and

Wehner \$21 million worth during the same period. Compl. ¶ 13. These included large sales during the first quarter of 2018—more than triple what Defendants sold in the last quarter of 2017—before the 2Q18 report was released. *Id.*

3. Alleged Misstatements/Omissions

Plaintiffs allege Defendants made a total of 36 materially misleading statements or omissions in press releases, SEC filings, earnings calls, and public remarks at conferences. The Court has arranged these statements chronologically and by source and bolded/italicized the relevant part of the statement.

December 2015³ Statements to The Guardian

Statement 1

“[M]isleading people or misusing their information is a direct violation of our policies and ***we will take swift action against companies that do . . .***”

Statement 2

“[I]ncluding banning those companies from Facebook and ***requiring them to destroy all improperly collected data.***”

September 29, 2016 Facebook Privacy Policy

Statement 3

“We use the information we have to help verify accounts and activity, and to promote safety and security on and off of our Services, ***such as by investigating***

³ These are within the Class Period as Plaintiffs allege that Defendants repeated these statements in 2017. *See* Pl. Opp. at 7; Compl. ¶¶ 228 (noting that a Facebook representative made this statement on or around June 8, 2017, *i.e.*, within the Class Period).

suspicious activity or violations of our terms or policies.”

Statement 4

“We work hard to protect your account using teams of engineers, automated systems, and advanced technology such as encryption and machine learning.”

Statement 5

*“These partners **must adhere to strict confidentiality obligations** in a way that is consistent with this Data Policy and the agreements we enter into with them.”*

Statement 6

*“Don’t sell, license or purchase any data obtained from us or our services. . . . Don’t transfer any data that you receive from us (including anonymous, aggregate or derived data) to any ad network, data broker or other advertising or monetization-related service. . . . **Enforcement is both automated and manual, and can include disabling your app, restricting you and your app’s access to platform functionality, requiring that you delete data, terminating our agreements with you or any other action that we deem appropriate.**”*

Statement 7

*“We notify our users with context around the status of their account and **actionable recommendations** if we assess they are at increased risk of future account compromise by sophisticated actors **or when we have confirmed their accounts have been compromised.**”*

Statement 8

“You own all of the content and information you post on Facebook, and ***you can control how it is shared through your privacy and application settings***. In addition . . . [w]hen you use an application, the application may ask for your permission to access your content and information as well as content and information that others have shared with you. ***We require applications to respect your privacy, and your agreement with that application will control how the application can use, store, and transfer that content and information. (To learn more about Platform, including how you can control what information other people may share with applications, read our Data Policy and Platform Page.)***”

February 3, 2017 Facebook’s 10-K Report: Data Breaches**Statement 9**

“Security breaches and improper access to or disclosure of our data or user data, or other hacking and phishing attacks on our systems, could harm our reputation and adversely affect our business.”

Statement 10

“. . . Any failure to prevent or mitigate security breaches and improper access to or disclosure of our data or user data could result in the loss or misuse of such data, which could harm our business and reputation and diminish our competitive position. In addition, computer malware, viruses, social engineering (predominantly spear phishing attacks), and general hacking have become more prevalent in our industry, have occurred on our systems in the past,

and will occur on our systems in the future. As a result of our prominence, we believe that we are a particularly attractive target for such breaches and attacks. Such attacks may cause interruptions to the services we provide, degrade the user experience, cause users to lose confidence and trust in our products, or result in financial harm to us. Our efforts to protect our company data or the information we receive may also be unsuccessful due to software bugs or other technical malfunctions; employee, contractor, or vendor error or malfeasance; government surveillance; or other threats that evolve. In addition, third parties may attempt to fraudulently induce employees or users to disclose information in order to gain access to our data or our users' data."

Statement 11

"Although *we have developed systems and processes that are designed to protect our data and user data*, to prevent data loss, and to prevent or detect security breaches, we cannot assure you that such measures will provide absolute security."

Statement 12

"In addition, some of our developers or other partners, such as those that help us measure the effectiveness of ads, may receive or store information provided by us or by our users through mobile or web applications integrated with Facebook. *We provide limited information to such third parties based on the scope of services provided to us. However, if these third parties or developers 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 accessed, used, or disclosed.*

Statement 13

“Affected users or government authorities could initiate legal or regulatory actions against us in connection with any security breaches or improper disclosure of data, which could cause us to incur significant expense and liability or result in orders or consent decrees forcing us to modify our business practices. Any of these events could have a material and adverse effect on our business, reputation, or financial results.”

February 3, 2017 Facebook’s 10-K Report: Risks Related to Business and Industry

Statement 14

“If we fail to retain existing users or add new users, or if our users decrease their level of engagement with our products, our revenue, financial results, and business may be significantly harmed.

The size of our user base and our users’ level of engagement are critical to our success. . . . ***If people do not perceive our products to be useful, reliable, and trustworthy, we may not be able to attract or retain users or otherwise maintain or increase the frequency and duration of their engagement. . . .***”

Statement 15

“Any number of factors could potentially negatively affect user retention, growth, and engagement, including if:

....

- there are decreases in user sentiment about the quality or usefulness of our products or ***concerns related to privacy and sharing, safety, security***, or other factors;”

Statement 16

- “[T]echnical or other problems prevent us from delivering our products in a rapid and reliable manner or otherwise affect the user experience, such as security breaches or failure to prevent or limit spam or similar content;”

Statement 17

- “[W]e, developers whose products are integrated with our products, or other partners and companies in our industry are the subject of adverse media reports or other negative publicity.”

February 3, 2017 Facebook’s 10-K Report: Unfavorable Media and Regulatory Investigations**Statement 18**

“Unfavorable media coverage could negatively affect our business.”

Statement 19

“We have been subject to regulatory investigations and settlements, and we expect to continue to be subject to such proceedings and other inquiries in the future, which could cause us to incur substantial costs or require us to change our business practices in a manner materially adverse to our business.”

April 27, 2017 White Paper**Statement 20**

“Targeted data collection and theft can affect all types of victims [t]ypical methods include phishing with

malware to infect a person’s computer and credential theft to gain access to their online accounts. . . .

....

....

....

Here are some of the steps we are taking:

....

- ***Notifications to specific people*** if they have been targeted by sophisticated attackers, with custom recommendations depending on the threat model;”

Statement 21

- ***“Proactive notifications to people*** who have yet to be targeted, but whom we believe may be at risk based on the behavior of particular malicious actors;”

October 12, 2017 Sandberg’s Axios Interview

Statement 22

“[W]hen you share on Facebook, you need to know that no one’s going to steal our data. No one is ***going to get your data that shouldn’t have it . . . you are controlling who you share with.***”

Statement 23

“Europe[] has passed a single privacy law and ***we are adhering to that.*** . . . privacy is something we take really seriously.”

November 1, 2017 3Q17 Earnings Call

Statement 24

“On GDPR, the Facebook family of apps already applies the core principles of the framework because we built our services around transparency and control, and we’re building on this to ensure that we comply in May of next year.”

March 16, 2018 “Suspending Cambridge Analytica & SCL Group From Facebook” Post

Statement 25

“We are committed to vigorously enforcing our policies to protect people’s information. We will take whatever steps are required to see that this happens. We will take legal action if necessary to hold them responsible and accountable for any unlawful behavior.”

Statement 26

“In 2014, after hearing feedback from the Facebook community, we made an update **to ensure that each person decides what information they want to share about themselves, including their friend list.**”

Statement 27

“This is just one of the many ways we give people the tools to **control their experience.** Before you decide to use an app, you can review the permissions the developer is requesting and choose which information to share. You can manage or revoke those permissions at any time. On an ongoing basis, **we also do a variety of manual and automated checks to ensure compliance with our policies and a positive experience for users.**”

Statement 28

“These include steps such as random audits of existing apps along with the regular and proactive monitoring of the fastest growing apps. *We enforce our policies in a variety of ways—from working with developers to fix the problem, to suspending developers from our platform, to pursuing litigation.*”

March 17, 2018 Addendum to Earlier Statements About Cambridge Analytica Event

Statement 29

“*The claim that this is a data breach is completely false.* Aleksandr Kogan requested and gained access to information from users who chose to sign up to his app,”

Statement 30

“*[E]veryone involved gave their consent. People knowingly provided their information,* no systems were infiltrated, and no passwords or sensitive pieces of information were stolen or hacked.”

April 4, 2018 Defendant Zuckerberg’s Telephonic Phone Conference

Statement 31

“*You asked about the FTC consent order. We’ve worked hard to make sure that we comply with it. I think the reality here is that we need to take a broader view of our responsibility, rather than just the legal responsibility. We’re focused on doing the right thing and making sure people’s information is protected, and we’re doing investigations.*”

Statement 32

“For Facebook specifically, one of the things we need to do and that I hope that more people look at are just the privacy controls that you have. I think, especially *leading up to the GDPR event, a lot of people are asking us, “Okay, are you going to implement all those things?” And my answer is that we’ve had almost all of what’s in there implemented for years, around the world, not just in Europe. So, to me, the fact that a lot of people might not be aware of that is an issue, and I think we could do a better job of putting these tools in front of people and not just offering them*, and I would encourage people to use them and make sure that they’re Comfortable with how their information is used on our services and others.”

April 25, 2018 Defendant Zuckerberg’s Personal Facebook Update

Statement 33

“Despite facing important challenges, *our community continues to grow*. More than 2.2 billion people now use Facebook every month and more than 1.4 billion people use it daily.”

April 25, 2018 1Q18 Earnings Call

Statement 34

“We made a number of changes and are still making changes to prioritize meaningful interactions between people over passive consumption of content. . . .

We’ve been rolling out new changes. . . . *that [have] increased*—or we’ve observed increases in some types of sharing and interaction between people based on

that. We've also observed some continued declines as we've done this

Overall, I'd say these changes are doing what we expected that they would do and helping people to connect more and have more meaningful interactions. . . . We think that this is going in the direction of building a strong community and a stronger business over the long term and *we're optimistic about what we're seeing here.*"

Statement 35

"[W]e do not anticipate [that new European privacy regulations] *will significantly impact advertising revenues.*"

Statement 36

"So on GDPR. . . .

I don't know that we really see a doomsday scenario here. *I think what we think is that depending on how people react to the controls and the ad settings, there could be some limitations on data usage. We believe that those will be relatively minor.*"

B. Procedural History

Following the collapse of Facebook's stock price, multiple lawsuits were filed against Defendants. One of these—*Fan Yuan v. Facebook*—was randomly assigned to this Court. *See* Dkt. 1. This Court consolidated that case with other related ones. *See* Order Granting Administrative Motion Relating Cases, Dkt. 23. On October 15, 2018, Plaintiffs submitted their consolidated class action amended complaint, which is the subject of the current motion to dismiss. Defendants also request judicial notice regarding facts pertaining to the motion to dismiss. *See*

Request for Judicial Notice re Motion to Dismiss (“Req. Jud. Notice”), Dkt. 94.

II. JUDICIAL NOTICE

Defendants ask this Court to take judicial notice of Exhibits 1 through 34 attached to the declaration of Brian M. Lutz (the “Lutz declaration”) and of Exhibits 35 through 37.

A. Legal Standard

Generally, district courts may not consider material outside the pleadings when assessing the sufficiency of a complaint under Rule 12(b)(6) of the Federal Rules of Civil Procedure. *Lee v. City of L.A.*, 250 F.3d 668, 688 (9th Cir. 2001). When matters outside the pleadings are considered, the 12(b)(6) motion converts into a motion for summary judgment. *Khoja v. Orexigen Therapeutics, Inc.*, 899 F.3d 988, 998 (9th Cir. 2018); *see also* Fed. R. Civ. P. 12(d). This rule does not apply to the incorporation by reference doctrine and judicial notice under Federal Rule of Evidence 201. *Khoja*, 899 F.3d at 998. These exceptions, however, should not be used to “undermin[e] . . . the usual pleading burden[.]” *Id.* (noting the “concerning pattern” in securities cases where exploiting the exceptions improperly defeats what would otherwise constitute adequately stated claims at the pleading stage).

Rule 201 permits a court to take judicial notice of an adjudicative fact “not subject to reasonable dispute,” that is “generally known” or “can be accurately and readily determined from sources whose accuracy cannot reasonably be questioned.” Fed. R. Evid. 201(b). Specifically, a court may take judicial notice: (1) of matters of public record, *Khoja*, 899 F.3d at 999, (2) that the market was aware of information contained in news articles, *Heliotrope Gen., Inc. v. Ford Motor Co.*, 189 F.3d 971, 981 n.18 (9th Cir.

1999), and (3) publicly accessible websites whose accuracy and authenticity is not subject to dispute, *Daniels-Hall v. Nat'l Educ. Ass'n*, 629 F.3d 992, 998-99 (9th Cir. 2010). A court may further consider facts contained in the noticed materials. *Barron v. Reich*, 13 F.3d 1370, 1377 (9th Cir. 1994).

Incorporation by reference treats certain documents as though they are part of the complaint itself. *Daniels-Hall*, 629 F.3d at 998. These are situations where the complaint “necessarily relies” upon a document or where the complaint alleges the contents of the document and the documents authenticity and relevance is not disputed. *Coto Settlement v. Eisenberg*, 593 F.3d 1031, 1038 (9th Cir. 2010). A defendant may seek to incorporate a document into the complaint “if the plaintiff refers extensively to the document or the document forms the basis of the plaintiff’s claim.” *Khoja*, 899 F.3d at 1002.

B. Discussion

1. Unopposed Items: Exhibits 2-5, 11-23, 25-29

Plaintiffs do not object to the judicial notice of these documents for any reason. Pl. Opp. to Jud. Notice at 4.

Exhibits 2-6 are Facebook SEC Filings. Judicial notice is **GRANTED** for these Exhibits because they are public filings made by Facebook with the SEC and thus are matters of public record not subject to reasonable dispute. Fed. R. Evid. 201(b); *Khoja*, 899 F.3d at 999; *see also Waller v. Scout Analytics, Inc.*, 230 F. Supp. 3d 1085, 1094 n.5 (N.D. Cal. 2017) (taking judicial notice of SEC filings).

Exhibits 11 & 12 are Transcripts of the Conference Calls following the release of the 2018 quarter earnings reports. Judicial notice is **GRANTED** because these are

relied on extensively by Plaintiffs and are used as evidence to establish a material misstatement or omission. Further, they are also matters of public record. *See In re Energy Recovery Inc. Sec. Litig.*, 2016 WL 324150, at *3 (N.D. Cal. Jan. 27, 2016) (“[T]ranscripts of conference calling calls are judicially noticeable because they are matters of public record.”).

Exhibits 13-23 are news articles used to show that the market was aware of the information contained in the articles. Judicial notice is **GRANTED** because they are publicly available news articles. *See In re Kalobios Pharm., Inc. Sec. Litig.*, 258 F. Supp. 3d 999, 1003–04 (N.D. Cal. 2017) (granting judicial notice of four news articles). Further these articles were reprinted in full or in part in the Complaint and so are also incorporated by reference.

Exhibit 25 is Facebook’s Data Policy and is used throughout Plaintiffs’ Complaint to show changes that Facebook made to the policy. It is referenced throughout; specifically, ¶¶ 4, 60, 139, 200, 301(b), 302(a), 302(b), 302(e). Accordingly, judicial notice is **GRANTED**.

Exhibit 26 is the Facebook White Paper referenced and relied on in paragraphs 5, 120, 122, 230, 301, and 302 of the Complaint. **Exhibit 27** is a 2018 Facebook press release referenced in paragraph 250. **Exhibit 28** is a June 29, 2018 Facebook letter providing answers to written questions from the Energy and Commerce Committee of the U.S. House of Representatives, referenced in paragraph 206 of the Complaint. All these exhibits are referenced in the Complaint and are publicly available documents. Therefore, judicial notice is **GRANTED**.

Exhibit 29 is a Bloomberg stock table showing the historical stock prices of Facebook from January 2, 2018 to

December 11, 2018. “Information about the stock price of publicly traded companies [is] the proper subject of judicial notice.” *In re Copper Mountain Sec. Litig.*, 311 F. Supp. 2d 857, 864 (N.D. Cal. 2004). Judicial notice is **GRANTED**.

2. Semi-Opposed Items: Exhibits 1, 6-10

Plaintiffs object to judicial notice of Exhibits 1, 6-10. Pl. Opp. to Jud. Notice at 4. They do not object to this Court taking judicial notice of the existence of these documents, only of the facts contained therein. *Id.* at 1. Plaintiffs contend that Defendants seek to improperly use these exhibits to establish a defense to scienter by showing trades were made pursuant to a Rule 10b5-1⁴ plan. *Id.* at 4 (citing Mot. at 24).

Exhibit 1 shows Defendant Zuckerberg’s plan to gift substantially all his Facebook stock or the proceeds to philanthropy pursuant to a Rule 10b5-1 plan. **Exhibit 6** is a Facebook Proxy Statement, which notifies shareholders that directors and officers have adopted Rule 10b5-1 plans. **Exhibit 7** is Facebook’s September 4, 2012 Current Report on Form 8-K, which contains the Company’s insider trading policy and notes that Zuckerberg had not yet entered a Rule 10b5-1 plan. **Exhibits 8-10** are SEC Form 4s which disclose Defendants’ sales of Facebook stock and note that these were made pursuant to a Rule 10b5-1 plan.

⁴ Rule 10b5-1 permits company insiders to adopt written, pre-arranged trading plans under which specific amounts of stock are sold according to pre-established criteria, thus theoretically eliminating an individual’s discretion over trading. *See* 17 C.F.R. § 240.10b5-1(c). Plaintiffs and Defendants dispute the amount of discretion retained by Defendants.

Defendants clarify in their Reply that they are only asking for judicial notice as to the “*existence* of the Individual Defendants’ 10b5-1 plans.” Reply in Support of Request for Judicial Notice (“Reply Jud. Notice”) at 2, Dkt. 104. Courts “may take judicial notice of SEC Forms 4, even when not referenced in the pleading, to prove that stock sales were made pursuant to a Rule 10b5-1 trading plan.” *City of Royal Oak Ret. Sys. v. Juniper Networks, Inc.*, 880 F. Supp. 2d 1045, 1059 (N.D. Cal. 2012). Exhibits 1 and 6–10 are publicly available documents and it is proper for this Court to take judicial notice of the documents. The Court, however, agrees with Plaintiffs’ contention that judicial notice is confined to recognizing *only* that a 10b5-1 trading plan existed. *See also Patel v. Parnes*, 253 F.R.D. 531, 546 (C.D. Cal. 2008) (“It is appropriate for the court to take judicial notice of the content of the SEC Forms 4 and the fact that they were filed with the agency. The truth of the content, and the inferences properly drawn from them, however, is not a proper subject of judicial notice under Rule 201.”). Accordingly, Defendants’ request is **GRANTED** but is limited to showing only that a Rule 10b5-1 plan existed and that stock sales were made pursuant to that plan, not that this plan confined Defendants’ trading discretion. *See Khoja*, 899 F.3d at 999 (court cannot take judicial notice of disputed facts in records).

3. Opposed Items: Exhibits 24, 30-34

Plaintiffs object to any judicial notice of Exhibits 24, 30-34. Pl. Opp. to Jud. Notice at 7.

Exhibit 24 is Facebook’s 2013 Data Policy. The exhibit was obtained using the Internet Archive’s Wayback Machine. *See U.S. ex. Rel. v. Newport Sensors, Inc.*, 2016 WL 8929246, at *3 (N.D. Cal. May 19, 2016) (“A court ‘may take judicial notice on its own,’ and district courts in this

circuit have routinely taken judicial notice of content from the Internet Archive's Wayback Machine pursuant to this rule, as we do here." (citations omitted)).

Plaintiffs argue that this Court should not take judicial notice because the facts of the policy are disputed and it is not relied on or referenced throughout. This policy is, however, implicitly referenced throughout; a central theme of the Complaint is that Facebook changed its 2013 Data Policy in 2015 to eliminate the provision that allowed third-party consent. *See* Compl. ¶¶ 79, 131, 176, 183, 203, 238, 251, 258(a), 264, 266(b), 268, 280, 288, & 302; *see also Khoja*, 899 F.3d at 1002 (noting incorporation by reference appropriate where Plaintiff references the document throughout). It would be unfair for Plaintiffs to reference this document to show the change in Facebook's Data Policy and suppress the actual policy. Plaintiffs repeatedly reference this change, and so their use of the document is more than "the mere mention of [its] existence." *Cf. United States v. Ritchie*, 342 F.3d 903, 908–09 (9th Cir. 2003). This Court agrees that Plaintiffs true contention is with the legal effect of the policy, which is outside the inquiry of judicial notice. *See* Reply Jud. Notice at 5. Because the policy is referenced throughout, the Court **GRANTS** Defendants' request.

Exhibits 30-33 are stock indices running from January 2, 2018 to December 11, 2018, showing the historical stock prices of different companies; specifically, Ex. 30 is Amazon, Ex. 31 is Apple, Ex. 32 is Alphabet, and Ex. 33 is Netflix. **Exhibit 34** is the CBOE Volatility Index, a popular measure of the stock market's expectation of volatility, for the same period. These exhibits were not referenced or relied on through the complaint and so Defendants ask for judicial notice only. Plaintiffs argue that Defendants use these exhibits to support their argument

that Plaintiffs' Complaint should be dismissed because of the "incredible volatility" in the stock market during the Class Period. Pl. Opp. to Jud. Notice at 9.

In *Khoja*, the Ninth Circuit cautioned against the use of judicial notice to allow defendants to "use the doctrine to insert their own version of events into the complaint to defeat otherwise cognizable claims." 899 F.3d at 1002. While the focus of the discussion was on incorporation-by-reference, this Court finds the logic of *Khoja* applicable to judicial notice as well. If this Court allows Defendants to submit Exhibits 30–34, it would permit Defendants to "short-circuit the resolution of a well-pleaded claim." *Id.* The question at this stage is not are there other explanations for Facebook's stock price falling but whether Plaintiffs adequately stated a claim for securities fraud. The stock prices of Apple, Google, and Netflix, and the overall volatility of the stock market during the Class Period do not help answer that question and so Defendants' request for judicial notice of Exhibits 30–34 is **DENIED**.

4. Items that Plaintiffs Did Not Receive a Chance to Respond to: Exhibits 35-37

Defendants also ask this Court to take judicial notice of three exhibits used to support its Reply in Support of its Motion to Dismiss. Request for Judicial Notice in Support of Facebook's Reply in Support of Motion to Dismiss, Dkt. 102, 103. Plaintiffs did not receive an opportunity to respond to this request because procedurally they had no leave to respond to Defendant's reply. Plaintiffs raised no objection to Defendants request for judicial notice of these three exhibits.

Exhibit 35 is a transcript of a March 21, 2018 witness examination of Sandy Parkilas before the Digital, Cul-

ture, Media, and Sports Committee of the House of Commons of the United Kingdom. This exhibit is referenced and repeatedly quoted in the Complaint. *See* ¶¶ 76-78; *Coto*, 593 F.3d at 1038 (noting that incorporation by reference is appropriate when “the contents of the document are alleged in a complaint”). Further, this a matter of public record not subject to reasonable dispute. Fed. R. Evid. 201(b); *Khoja*, 899 F.3d at 999. Accordingly, Defendants’ request for judicial notice of Exhibit 35 is **GRANTED**.

Exhibit 36 is an excerpt of a Transcript of Proceedings from a February 1, 2019 hearing before Judge Chhabria regarding another data privacy action arising out of the Cambridge Analytica events. Defendants use this to support their theory that users consented to Cambridge Analytica obtaining their data. *See* Reply in Support of Motion to Dismiss (“Reply”) at 8, Dkt. 101. Publicly available transcripts of court hearings are “not subject to reasonable dispute” and courts routinely take judicial notice of them. *See In re: San Jose Airport Hotel, LLC*, 2016 WL 3357175, at *4 n.1 (N.D. Cal. June 17, 2016) (taking judicial notice of transcripts of hearings before the bankruptcy court); *Biggs v. Terhune*, 334 F.3d 910, 915 n.3 (9th Cir. 2003) (“Materials from a proceeding in another tribunal are appropriate for judicial notice”), *overruled on other grounds by Hayward v. Marshall*, 603 F.3d 546 (9th Cir. 2008).

Defendants, however, misunderstand these cases; in each, the trial court materials being judicially noticed were used to show the trial court did or did not do something. In *San Jose Airport Hotel*, this Court judicially noticed the bankruptcy court’s docket to show that it never ruled on a motion at issue. 2016 WL 3357175, at *4. Likewise, in *Biggs*, the Ninth Circuit judicially noticed that the

trial court's transcript undertook the appropriate review of the Parole Board's hearing. 334 F.3d at 915. In contrast, here, Defendants are neither asking this Court to judicially notice another Court's ruling (or absence thereof) nor the reasoning used to support a ruling, they are asking this Court to judicially notice another judge's opining, at a hearing, on the issue of consent. The case law does not support this. Moreover, judicial notice on the issue of user consent is not appropriate because it cannot be "accurately and readily determined" given the fluidity and complexity of this area of the law. *See In re Facebook Inc., Consumer Privacy User Profile Litig.*, 2019 WL 4261048, at *8 (N.D. Cal. Sept. 9, 2019) (collecting cases); Fed. R. Evid. 201(b)(2). Accordingly, this request is **DE-NIED**.

Exhibit 37 is a Facebook blog post entitled "Notifications for targeted attacks" by Alex Stamos. This is a publicly available document and is cited and referenced in Exhibit 26, which Plaintiffs cite in their Complaint. *See Diaz v. Intuit, Inc.*, 2018 WL 2215790, at *3 (N.D. Cal. May 15, 2018) ("Publically accessible websites and news articles are proper subjects of judicial notice." (citation omitted)). The Court **GRANTS** this request for judicial notice.

III. MOTION TO DISMISS

A. Legal Standard

To survive a Rule 12(b)(6) motion to dismiss, a complaint must contain sufficient factual matter to "state a claim to relief that is plausible on its face." *Ashcroft v. Iqbal*, 556 U.S. 662, 678 (2009); Fed. R. Civ. Pro. 8(a). Threadbare recitals of the elements of a cause of action supported by mere conclusory statements "do not suffice." *Ashcroft*, 556 U.S. at 678.

Securities fraud cases, however, must meet Rule 8's plausibility standard, the Private Securities Litigation Reform Act ("PSLRA"), and Rule 9(b)'s higher pleading standard. See *Tellabs, Inc. v. Makor Issues & Rights, Ltd.*, 551 U.S. 308, 319-22 (2007); *Zucco Partners, LLC v. Digimarc, Corp.*, 552 F.3d 981, 991 (9th Cir. 2009).

The PSLRA mandates that securities fraud complaints "specify" each misleading statement, set forth the facts "on which [a] belief" that a statement is misleading was "formed," and "state with particularity facts giving rise to a strong inference that the defendant acted with the required state of mind [scienter]." *Dura Pharm., Inc. v. Broudo*, 544 U.S. 336, 345 (2005) (quoting 15 U.S.C. §§ 78u-4(b)(1)-(2)); see also *Metzler Inv. GmbH v. Corinthian Colleges, Inc.*, 540 F.3d 1049, 1070 (9th Cir. 2008) ("The PSLRA has exacting requirements for pleading 'falsity.'"). Plaintiffs bear the burden of proving that the defendant's misrepresentations "caused the loss for which the plaintiff seeks to recover." *Dura Pharm.*, 544 U.S. at 345-46 (quoting § 78u-4(b)(4)). In determining whether a "strong inference" of scienter has been sufficiently alleged, this Court must not only draw "inferences urged by the plaintiff," but also engage in a "comparative evaluation," thus examining and considering "competing inferences [in defendants' favor] drawn from the facts alleged." *Tellabs*, 551 U.S. at 314. Hence, scienter must not only be "plausible or reasonable," it must also be "cogent and at least as compelling as any opposing inference of nonfraudulent intent." *Id.* at 324.

Rule 9 further requires a plaintiff pleading securities fraud to state, with particularity, the circumstances constituting fraud or mistake. Fed. R. Civ. Pro 9(b).

B. Defendants' Motion To Dismiss

To show securities fraud under Section 10(b) and Rule 10b-5, plaintiffs must allege facts sufficient to establish (1) a material misrepresentation or omission; (2) made with scienter, *i.e.*, a wrongful state of mind; (3) a connection between the misrepresentation and the purchase or sale of a security; (4) reliance upon the misrepresentation; (5) economic loss; and (6) loss causation. *Loos v. Immersion Corp.*, 762 F.3d 880 (9th. Cir. 2014), *amended* (Sept. 11, 2014). “To determine whether a private securities fraud complaint can survive a motion to dismiss for failure to state a claim, the court must determine whether particular facts in the complaint, taken as a whole, raise a strong inference that defendants intentionally or with deliberate recklessness made false or misleading statements to investors.” *In re LeapFrog Enter., Inc. Sec. Litig.*, 527 F. Supp. 2d 1033, 1039-40 (N.D. Cal. 2007).

In their Motion to Dismiss, Defendants challenge the sufficiency of Plaintiffs' Section 10b and Rule 10b-5 claim as to (1) misrepresentation, (2) scienter, (3) reliance, and (4) causation. Regarding misrepresentation, Defendants argue that Plaintiffs' “scattershot pleading” fails on multiple levels.

First, Defendants argue that Plaintiffs fail to allege particularized, contemporaneous facts inconsistent with Defendants' allegedly false statements, and thus do not meet the PSLRA. Mot. at 10. Defendants also contend that many of the challenged statements are forward-looking statements accompanied by appropriate cautionary language and are thus protected by the PSLRA's “Safe Harbor” Provision. See Mot. at 11, 14, 19. Finally, Defendants assert that many of the challenged statements (including some of the ones claimed to be forward-looking)

are non-actionable expressions of corporate optimism. *See id.* at 11.

Defendants next argue that Plaintiffs fail to plead sufficient facts establishing the requisite inference of scienter because “Plaintiff offer[s] almost nothing but conclusions.” *Id.* at 20. Defendants then argue that Plaintiffs fail to plead loss causation because there is no pleading of a specific misstatement, as opposed to some other fact, that foreseeably caused Plaintiffs’ loss. *Id.* at 27. Rather, Defendants contend that the stock fluctuation was due to other forces. *Id.* Defendants next contend that Plaintiffs fail to plead reliance based on the fraud-on-the-market theory because Plaintiffs already knew of the core information allegedly concealed. *Id.* at 33. Finally, Defendants argue that because Plaintiffs cannot show a primary Securities Act violation, their Section 20(a) and 20A claims must be dismissed. *Id.* at 34.

As discussed in detail below, the Court finds that Statement 22 is the only actionable statement, but that Plaintiffs failed to adequately plead scienter and thus **GRANTS** Defendants Motion to Dismiss.

C. Discussion

1. Misstatement or Omission

For a misstatement to be actionable, the statement must be both false and material. *See Basic Inc. v. Levinson*, 485 U.S. 224, 238 (1988) (“It is not enough that a statement is false or incomplete, if the misrepresented fact is otherwise insignificant.”). To survive a motion to dismiss, a complaint must “specify each statement alleged to have been misleading, [and] the reason or reasons why the statement is misleading.” *Metzler Inv. GmbH*, 540 F.3d at 1070 (quoting 15 U.S.C. § 78u-4(b)(1)).

Statements are misleading only if they “affirmatively create an impression of a state of affairs that differs in a material way from the one that actually exists.” *Brody v. Transitional Hosp. Corp.*, 280 F.3d 997, 1006 (9th Cir. 2002). Rule 10b-5 prohibits “only misleading and untrue statements, not statements that are incomplete.” *Id.* Silence, absent a duty to disclose, “is not misleading under Rule 10b-5.” *Basic*, 485 U.S. at 239 n.17. “Often a statement will not mislead even if it is incomplete or does not include all relevant facts.” *Brody*, 280 F.3d at 1006.

Not all material adverse events must be disclosed to investors. See *In re Rigel Pharm., Inc. sec. Litig.*, 697 F.3d 869, 880 n.8 (9th Cir. 2012) (discussing *Matrixx Initiatives, Inc. v. Siracusano*, 563 U.S. 27, 38-45 (2011)). Information that a reasonable investor might consider material need not always be disclosed; companies can control “what they have to disclose [per § 10(b)] by controlling what they say to the market.” *Matrixx*, 563 U.S. at 45. Consequently, omissions are only actionable if a defendant has a duty to disclose information and fails to do so. *Basic*, 485 U.S. at 239 n.17. Hence, if the omission does not “make the actual statement[] misleading,” a company need not supplement the statement “even if investors would consider the omitted information significant.” *Rigel*, 697 F.3d at 880 n.8.

Finally, an actionable statement must also “be capable of objective verification.” *Retail Wholesale & Dep’t Store Union Local 338 Ret. Fund v. Hewlett-Packard Co.*, 845 F.3d 1268, 1275 (9th Cir. 2017). For example, business puffery or opinion (vague, optimistic statements) is not actionable because it does not “induce the reliance of a reasonable investor.” *Or. Pub. Emps. Ret. Fund v. Apollo Grp. Inc.*, 774 F.3d 598, 606 (9th Cir. 2014).

a. Application

The alleged material misstatements and omissions can be separated into four categories: first, material misstatements or omissions regarding Facebook's response to data misuse and privacy violations. For these, Plaintiffs allege actionable misstatements by Defendants because they mislead investors about how Facebook handled privacy violations by falsely stating that victims received notice when their data was compromised, that they would ensure the deletion of any purloined data, and that users could control their data, including where it went and with whom it was shared. Pl. Opp. at 5. Second, Plaintiffs allege that the risk disclosures (Defendants' 10-K forms) filed with the SEC were materially false and misleading because they failed to disclose the existence and magnitude of the risks created by Facebook's existing and uncorrected failures to protect user privacy, including the risk presented by the exposed data possessed by Cambridge Analytica and other privacy violations. *Id.* at 11. Third, Plaintiffs address material misstatements or omissions regarding Defendants' response to the Cambridge Analytica scandal. Plaintiffs allege that Defendants concealed the full extent that Cambridge Analytica damaged Facebook's image and thus mislead investors. *Id.* at 13; Compl. ¶¶ 149-52, 176. Finally, Plaintiffs allege that Defendants materially mislead investors by repeatedly assuring investors that Facebook was GDPR-compliant, when, in fact, it was not. Pl. Opp. at 17; Compl. ¶¶ 234-37.

In order to effectively address these categories of statements, the Court sorts the statements into headings based on Defendants arguments for dismissal, *i.e.*, (1) Forward-Looking Statements, (2) General Statements of

Corporate Optimism, and (3) Falsity (including the alleged omissions). To begin, this Court resolves whether Facebook’s Privacy Policy statements are actionable.

i. Use of the Privacy Policy Statements

Defendants argue that the Privacy Policy Statements (Statements 3-7) are not actionable because these statements were not “made in connection with the purchase or sale of Facebook securities.” Mot. at 20.

To give rise to a 10b-5 claim, a statement must be made “in a manner reasonably calculated to influence the investing public.” *McGann v. Ernst & Young*, 102 F.3d 390, 397 (9th Cir. 1996). Plaintiffs first point the Court to *Batwin v. Occam Networks, Inc.*, to show that a “materiality” argument is premature at this stage. 2008 WL 2676364, at *22 (C.D. Cal. July 1, 2008). Plaintiffs are correct that materiality arguments often are “inappropriate for resolution on a motion to dismiss.” *Id.* But the question here is *not* whether an investor would find the information in the privacy statements material, *but* if they are the types of documents that a reasonable investor would look at while making purchasing decisions. These questions, while remarkably similar, are distinct. *Batwin*, thus, is not applicable.⁵

⁵ For this reason, Plaintiffs use of *In re Volkswagen “Clean Diesel” Mktg., Sales Practices, and Prods. Liab.*, 2017 WL 66281 (N.D. Cal. Jan. 4, 2017) is also misplaced. That case assessed whether stickers were addressed at consumers, rather than the investing public, in a *reliance* argument. *Id.* at *22 (“[Defendants’ cases] do not indicate that *only* market-related documents, such as regulatory filings, public presentations, or press releases, can contain actionable misstatements under Section 10(b); instead, the cases simply identify documents that have previously been found to support a ‘*fraud-on-the-market*’ theory.” (second emphasis added)). For this same reason, Plaintiffs use of *Basic*, 485 U.S. at 247 n.24, is also misplaced as the

Defendants cite *In re Lifelock, Inc. Securities Litigation*, to argue that while Facebook’s privacy policies may have some probative value in consumer protection litigation, they have none in a case alleging investor fraud. 690 F. App’x 947, 953-54 (9th Cir. 2017). The *Lifelock* court, however, specifically distinguished the simple ads at hand, from the “detailed drug advertisements in sophisticated medical journals” considered in *In re Carter-Wallace, Inc. Securities Litigation*, 150 F.3d 153, 154 (2d Cir. 1998). Here, Facebook’s privacy policies are more like the detailed drug advertisements of *Carter-Wallace* and less like the “simple” advertisements discussed in *Lifelock*. See Pl. Opp. at 20 n.16. As Exhibit 24 and 25 show, Facebook’s data policy is thorough and thus markedly different from the “simple descriptive chart” and “passive ads” at issue in *Lifelock*. Further, the Second Circuit, who has examined this issue more extensively, has “broadly construed” the phrase “in connection with” to account for Congressional intent. *Carter-Wallace*, 150 F.3d at 156. Accordingly, because this Court cannot say as a matter of law that a reasonable investor would not use the privacy policy when making investment decisions, the privacy policies may be used to show a material misstatement or omission.

ii. Forward-Looking Statements

Under the PSLRA “Safe Harbor” Provision, “forward-looking statements are not actionable as a matter of law if they are identified as such and accompanied by “meaningful cautionary statements identifying important facts that could cause actual results to differ materially

Court was specifically discussing when a presumption of reliance applies.

from those in the forward looking statement.” 15 U.S.C. § 78u-5(c)(1)(A)(i).

A forward-looking statement is “any statement regarding (1) financial projections, (2) plans and objectives of management for future operations, (3) future economic performance, or (4) the assumptions ‘underlying or related to’ any of these issues.” *No. 84 Emp’r Teamster Joint Council Pension Trust Fund v. Am. W. Holding Corp.*, 320 F.3d 920, 936 (9th Cir. 2003) (citing 15 U.S.C. § 78u5 (i)). “[I]f a forward-looking statement is identified as such and accompanied by meaningful cautionary statements, then the state of mind of the individual making the statement is irrelevant, and the statement is not actionable regardless of the plaintiff’s showing of scienter.” *In re Cutera Sec. Litig.*, 610 F.3d 1103, 1112 (9th Cir.2010).

Here, Defendants argue that some of the challenged statements were forward-looking statements protected by the PSLRA’s Safe Harbor. This Court holds that Statements 35 and 36 are inactionable forward-looking statements.

Statement 35 is a statement of anticipation regarding the impact of the GDPR made during an earnings call (“[W]e do not *anticipate* [GDPR] will *significantly impact advertising revenues*.”). Compl. ¶ 273. Forward-looking statements made during earnings calls are protected under the PSLRA safe harbor. *In re Mellanox Techs. Ltd. Secs. Litig.*, 2014 WL 12650991, at *14 (N.D. Cal. Mar. 31, 2014). Forward-looking statements are projections of revenues, income, earnings per share, management’s plans or objectives for future operations and *predictions of future economic performance*. 15 U.S.C. § 78u-5(i)(1)(A)-(C). At the start of the call, Defendants stated “[O]ur remarks today will include forward-looking statements. Actual results may differ materially from

those contemplated by these forward-looking statements.” Ex. 11 at 1. Because Statement 35 is a statement of anticipation regarding a future economic performance accompanied by meaningful cautionary language, this is an inactionable forward-looking statement.

Statement 36 is a statement regarding predictions of the impact of the GDPR on ads, *i.e.* revenue (“We believe [GDPR impacts on ads] *will be relatively minor.*”). Compl. ¶ 277. It was made on the same call as Statement 35 and is also a projection of future economic performance with meaningful, cautionary language. Accordingly, Statement 36 is an inactionable forward-looking statement.

For these reasons, the Court holds that Plaintiffs failed to plead falsity as required by the PSLRA for Statements 35 and 36. Accordingly, this Court **GRANTS** Defendants’ motion to dismiss as to those statements.

iii. General Statements of Corporate Optimism/Puffery

In the Ninth Circuit, “vague, generalized assertions of corporate optimism or statements of ‘mere puffing’ are not actionable material misrepresentations under federal securities laws” because no reasonable investor would rely on such statements. *In re Fusion-io*, 2015 WL 661869, at *14 (collecting cases). When valuing corporations, investors do not “rely on vague statements of optimism like ‘good,’ ‘well-regarded,’ or other feel good monikers.” *In re Cutera*, 610 F.3d at 1111.

Statements like “[w]e are very pleased with the learning from our pilot launch,” “so far we’re getting really great feedback,” and “we are very pleased with our progress to date,” are inactionable puffery. *Wozniak v. Align Tech., Inc.*, 2012 WL 368366, at *4-5 (N.D. Cal. Feb. 3,

2012). Likewise, “statements projecting ‘excellent results,’ a ‘blowout winner’ product, ‘significant sales gains,’ and ‘10% to 30% growth rate over the next several years’” have been held not actionable as mere puffery. *In re Fusion-io*, 2015 WL 661869, at *14 (citing *In re Cornerstone Propane Partners, L.P. Sec. Litig.*, 355 F. Supp. 2d 1069, 1087 (N.D. Cal. 2005)).

Statement 31 pertains to Defendant Zuckerberg’s conference call statements about the FTC consent order. Compl. ¶ 261(b) (“*We’ve worked hard* to make sure that we comply with [the FTC order].”). Plaintiffs allege that this was a misstatement because it misleadingly assured investors that the Cambridge Analytica scandal, and any potential resulting regulatory action, was a “non-issue.” Pl. Opp. at 13, 15. Defendants argue, and this Court agrees, that this statement is too vague to be actionable. *See, e.g., Lominkit v. Apollo Educ. Grp. Inc.*, 2017 WL 633148, at *23 (D. Ariz. Feb. 16, 2017) (“Courts often hold that statements regarding general legal compliance are too vague to be actionable misrepresentations or omissions.”); *see also Karam v. Corinthian Colls., Inc.*, 2012 WL 8499135, at *10 (C.D. Cal. Aug. 20, 2012) (holding statement “[c]ompliance for the organization has really been job one for us” inactionable puffery); *In re Gentiva Sec. Litig.*, 932 F. Supp. 2d 352, 370 (2013) (“The Court finds . . . [statements] that the compliance program was “robust” or “best-of-class” . . . too general to cause reliance by a reasonable investor.”). Because this a statement of general compliance, it is inactionable corporate puffery.

Moreover, companies are not required to engage in “self-flagellation” by disclosing unproven allegations. *Haberland v. Bulkeley*, 896 F. Supp. 2d 410, 426 (E.D.N.C. 2012); *In re Paypal Holdings, Inc.*, 2018 WL

466527, at *3 (N.D. Cal. Jan. 18, 2018) (“Federal securities laws do not impose upon companies a ‘duty to disclose uncharged, unadjudicated wrongdoing.’” (citing *City of Pontiac Policemen & Firemen Ret. Sys. v. UBS AG*, 752 F.3d 173, 184 (2d Cir. 2014)). At the time this statement was made, the FTC only stated an intent to investigate Facebook, but had not made any formal finding that Facebook violated the decree order. *See* Compl. ¶ 16 (“On March 26, 2018, the FTC formally announced *an investigation* into Facebook’s breach of the consent decree” (emphasis added)). Thus, Defendants had no requirement to elaborate on any potential privacy breaches. Accordingly, Statement 31 is not an actionable misstatement.

Statement 33 relates to statements made by Defendant Zuckerberg in an April 2018 Facebook post. He wrote that the Facebook community “continues to grow.” Compl. ¶ 271. Plaintiffs argue that because there was a “basis” for doubt about growth, this statement is misleading and conceals user disengagement. The statement, however, is almost identical to statements this district has found to be inactionable puffery. *See Cornerstone Propane*, 355 F. Supp. 2d at 1087 (statement “10% to 30% growth over the next several years” inactionable puffery); *LeapFrog*, 527 F. Supp. 2d at 1050 (vague statements like “[w]e are pleased with our progress” inactionable); *City of Royal Oak Ret. Sys. v. Juniper Networks Inc.*, 880 F. Supp. 2d 1045, 1064 (N.D. Cal. 2012) (statements like “our demand indicators are strong, our product portfolio is robust” inactionable corporate optimism). In response, Plaintiffs argue that this statement was deceptive because it misleadingly told investors that the Cambridge Analytica scandal was not affecting Facebook. This rebuttal, however, fails to allege that Facebook was *not* growing (thus rendering the statement false). *Cf. In re Syntex*

Corp. Sec. Litig., 95 F.3d 922, 931 (9th Cir. 1996) (“Everything [was] going fine” actionable only because plaintiff “pled facts showing that the statements were false when made”). Accordingly, because Plaintiffs have not sufficiently pled falsity, this is an inactionable statement of corporate optimism.

Statement 34 is a statement of optimism (“[W]e’re *optimistic* about what we’re seeing here.”). Compl. ¶ 273. The Court agrees with Defendants that this is a general statement of corporate optimism because it is a vague, “run-of-the-mill” statement expressing, quite literally, corporate optimism. *Copper Mountain*, 311 F. Supp. 2d at 868-69 (“run-of-the-mill” statements like “business remained strong” inactionable corporate optimism). Thus, this statement is not actionable.

For these reasons, the Court holds that Plaintiffs failed to plead falsity as required by the PSLRA for Statements 31, 33, and 34. Accordingly, this Court **GRANTS** Defendants’ motion to dismiss as to those statements.

iv. Failure to Sufficiently Allege Falsity

To assert a claim under the PSLRA, the plaintiff must particularly plead the element of falsity. *Zucco Partners*, 552 F.3d at 990-91. “The PSLRA has exacting requirements for pleading ‘falsity.’” *Metzler*, 540 F.3d at 1070. To satisfy these “exacting requirements” a plaintiff must plead “specific facts indicating why” the statements at issue were false. *Id.*; *Ronconi v. Larkin*, 253 F.3d 423, 434 (9th Cir. 2001) (“Plaintiffs’ complaint was required to allege specific facts that show” how statements were false). A plaintiff may rely on contemporaneous statements or conditions to demonstrate why statements were false when made, but such circumstantial evidence must be plead with particularity. *In re Stratosphere Corp. Sec.*

Litig., 1997 WL 581032, at *13 (D. Nev. May 20, 1997) (noting that to plead falsity, plaintiff must provide “evidentiary facts contemporary to the alleged false or misleading statements from which this court can make inferences permissible under Rule 9(b).”). Thus, to be actionable, a statement must be false “at [the] time by the people who made them.” *Larkin*, 253 F.3d at 430. The fact that a “prediction proves to be wrong in hindsight does not render the statement untrue when made.” *In re VeriFone Sec. Litig.*, 11 F.3d 865, 871 (9th Cir. 1993).

Statements 1 and 2 pertain to how Facebook said it generally responds to situations involving data violations; Defendants stated they would take “swift action” against companies that mislead people or misuse their information because this is a “direct violation of [Facebook] policies” and would require such companies to destroy improperly collected data. Compl. ¶¶ 227-28. First, Plaintiffs do not allege that misleading people or misusing their information is allowed under Facebook’s policies, *i.e.*, that it is not a “direct violation” of the policy. Rather, Plaintiffs allege that these statements were misleading because Facebook’s actions in response to the Cambridge Analytica data breach, and other similar privacy violations, were “directly contrary” to these assertions. *Id.* ¶ 229.

Defendants stated they “will” take swift action;⁶ Plaintiffs must prove contemporaneous falsity, *Stratosphere Corp.*, 1997 WL 581032, at *13, and allege specific facts demonstrating that, when the statements were made, Facebook did not intend to (1) take swift action and/or (2)

⁶ This Court need not decide whether this statement is forward-looking, without the presence of meaningful cautionary language, as it holds Plaintiffs did not allege falsity with sufficient particularity. See Pl. Opp. 8-9 (citing *Fadia v. FireEye, Inc.*, 2016 WL 6679806, at *11-12 (N.D. Cal. Nov. 14, 2016)).

promptly ban from Facebook companies that violated Facebook's policies and require those companies to destroy misappropriated data. *See In re Fusion-io, Inc. Sec. Litig.*, 2015 WL 661869 (N.D. Cal. Feb. 12, 2015) (requiring plaintiff provide evidentiary facts contemporary to the alleged false statement from which court can make inferences permitted under Rule 9(b)). To show contemporaneous falsity, Plaintiffs argue that when these statements were first made in 2015, Facebook "had not taken any action to enforce its privacy policies until six months after the Cambridge Analytica data breach was publicly reported and more than a year after the Company had learned of it." Pl. Opp. at 7 (citing Compl. ¶¶ 86, 94-97). But what happened in 2015 is irrelevant, the Class Period starts in February 2017. When these statements were made in 2017, Facebook "*did* investigate the alleged data misuse, *did* remove Kogan's app from Facebook, and *did* obtain certifications and confirmations that all user data had been destroyed." Mot. at 11 (citing Compl. ¶¶ 9, 90, 92, 96, 98, 150-51, 176). Thus, this Court can infer they *did* take "swift action."

Plaintiffs next urge this Court to find the statements false because Defendants had not taken any "meaningful steps to 'require' Cambridge Analytica to 'destroy' the affected data, to investigate the extent of the breach, or even to identify the amount of data affected." Pl. Opp. at 7 (citing Compl. ¶¶ 90-93, 98-99, 104-08). Plaintiffs, however, never allege that Defendants promised to take "meaningful steps." Further, and more damning, Plaintiffs cannot escape the fact that Defendants *did* require Kogan to destroy the data, Compl. ¶ 9, and received confirmation from Kogan that this was done, *id.* ¶ 92.

Finally, these statements, by their terms, are outside the scope of the Cambridge Analytica matter and are thus

outside the purview of Plaintiffs' claim. *Compare* Compl. ¶¶ 227, 228 ("Facebook, which told *The Guardian* in 2015 that it was investigating allegations that the company had improperly obtained data from its users, *would not comment on the current status of that investigation.*" (emphasis added)), *with id.* ¶ 225 ("Facebook's false assurances that it had "take[n] swift action" in response to the Cambridge Analytica data breach . . . remained alive and uncorrected in the market at the outset of the Class Period.").

For these reasons, the Court holds that Plaintiffs failed to plead falsity as required by the PSLRA for Statements 1 and 2. Accordingly, this Court **GRANTS** Defendants' motion to dismiss as to those statements.

Statements 3-8 refer to Facebook's 2016 Privacy Policy (now recorded at Exhibit 25). *See* Compl. ¶¶ 301-04. Defendants argue that these statements are not actionable because they are not adequately alleged to have been false or misleading. Mot. at 20; *see also supra* III.C.1.a.i. (holding privacy policy statements actionable).

Plaintiffs take issue with the "investigating suspicious activity or violations of our terms or policies" part of Statement 3. Compl. ¶¶ 301(a), 302(a). Plaintiffs argue this statement is false because Defendants "deliberately ignored information brought to its attention about such risks and violations," like the failure to "fully or promptly" investigate the Cambridge Analytic breach or "thousands of [other] reports of [privacy] violations." *Id.* ¶ 302(a). Plaintiffs, however do not: (1) provide this Court with specific occurrences of Defendants ignoring these "thousands of reports" or (2) specifically allege, with evidentiary facts, that Defendants did not investigate suspicious activity. To the contrary, Plaintiffs identify actions Defend-

ants took to respond to data breaches, like Cambridge Analytica, thus showing they *did* investigate these violations. *See, e.g., id.* ¶ 99. Plaintiffs instead make conclusions that “Facebook [did not] make any attempt to investigate *what* data had been compromised or from *which* users, or how widely it had been distributed beyond Cambridge Analytica.” *Id.* ¶ 91; *cf. id.* ¶ 104 (identifying Defendant Zuckerberg’s expression of regret about not doing *more* to investigate the data breach). Defendants never represented (and Plaintiffs do not allege they did) that “investigate” means a “full or prompt” investigation. Because Plaintiffs have not identified specific occurrences of lack of investigation, they have not adequately alleged that this statement is false.

Regarding Statement 4, Plaintiffs allege that contrary to Defendants’ assertion that they “work hard to protect . . . account[s] using teams of engineer, automated systems, and advanced technology,” the company had “no ability to track user data provided to developers or others, much less the ability to determine whether information had been used or shared beyond the extent authorized by the user, or what user data had been compromised, who had it, or how it was being used.” *Id.* ¶ 302(b). Specifically, Plaintiffs allege that during the class period, Defendants were still concealing that it was unaware of how much data had been compromised or how many users were affected by the Cambridge Analytica breach. *Id.* Plaintiffs’ allegation that the statement “working hard to protect accounts” is rendered false by the Cambridge Analytica breach and issues arising from the breach is a stretch. In this statement, Defendants do not profess an ability to track user data or that they can determine third-party data-use. Further, Plaintiffs do not allege contemporaneous facts that Defendants meant Statement 4 as an assurance that they could track data. Accordingly, this

Court cannot infer a connection between the data breach and this statement.

Regarding Statements 5 and 8, Plaintiffs allege that contrary to Defendants assertion that: (1) Facebook’s vendors, service providers, and other partners must “adhere to strict confidentiality obligations that is consistent with [Facebook’s policies];” (2) Facebook “require[s] applications to respect [user] privacy, and [the user’s] agreement with that application will control who the application can use, store, and transfer that content and information;” and (3) that Facebook “expected app developers and others to protect user’s rights by making it clear what information is being collected and how it is used,” Facebook “repeatedly ignored information brought to its attention about violations of those policies, and repeatedly authorized developers and others to use information in ways that were directly contrary to those policies.” *Id.* ¶ 302(e). First, Plaintiffs do not allege that Facebook partners *do not* have to adhere to strict confidentiality obligations. Further, Statement 5, by its terms, only requires *developers* to adhere to strict confidentiality obligations, it makes no assertion about what Defendants will do with developers who do not adhere to this policy, and thus even if Defendants ignored violations, they never asserted here that they would affirmatively do something. Finally, Plaintiffs provide no specific evidentiary facts from which the Court can infer falsity, *i.e.*, that at the time the statement was made, developers did *not* have to adhere to strict confidentiality obligations. Accordingly, Statement 5 is not actionable.

Regarding Statement 8, at the time of the Cambridge Analytica scandal, Facebook had a different privacy policy. *See* Ex. 24. This privacy policy did not have any guarantee about requiring apps to respect user privacy. The

Cambridge Analytica scandal, thus, is irrelevant to *this* 2015/2016 privacy policy (and this is likely why Plaintiffs did not plead any Cambridge Analytica related issues regarding Statement 8). Moreover, Plaintiffs point this Court toward no specific instances of Facebook “repeatedly ignor[ing] information brought to its attention about violations [of Statement 8]” or “repeatedly authoriz[ing] developers and others to use information in ways that were directly contrary [to Statement 8].” Thus, the Court cannot conclude that Statement 8 is false as Plaintiffs have not met their burden of showing particular, evidentiary facts from which this Court can infer falsity. Moreover, Plaintiffs point this Court toward no specific instances of Facebook “repeatedly ignor[ing] information brought to its attention about violations [of Statement 8]” or “repeatedly authoriz[ing] developers and others to use information in ways that were directly contrary [to Statement 8].” Thus, the Court cannot conclude that Statement 8 is false as Plaintiffs have not met their burden of showing particular, evidentiary facts from which this Court can infer falsity.

Further regarding Statement 8, Plaintiffs argue that Defendants falsely stated that “[users] can control” how their information is shared through “privacy and application settings.” *Id.* ¶ 302(f); Pl. Opp. at 9. Plaintiffs argue this is a false statement because Defendants “knew that Facebook’s privacy policies and settings were deliberately confusing to users,” especially regarding third-party consent. Compl. ¶ 302(f). But Plaintiffs offer no contemporaneous pieces of evidence from which this Court can infer Defendants knew users did not understand the policy. Further, Plaintiffs do not allege that users could not control information-sharing. Therefore, again, the Court cannot conclude that Statement 8 is an actionable false statement.

Regarding Statement 6, Plaintiffs allege that contrary to Defendants warning to app developers that Facebook would enforce its privacy policy to prevent app developers from selling or transferring user data, “or from using their customers’ friend data outside of their customer’s use of the app,” Facebook failed to verify that user data compromised in the Cambridge Analytica data breach had been deleted and its enforcement of this policy was “limited, haphazard, and inconsistent.” *Id.* ¶ 302(c).

The connection between Cambridge Analytica and Statement 6 is tenuous. Statement 6 makes no guarantees about verifying data deletion. Rather, by its terms, it specifies enforcement options like “disabling [an] app, restricting . . . access, requiring that you delete data, [or] terminating our agreements with you.” *Cf. id.* ¶ 313 (Defendants required Cambridge Analytica to delete the data per the policy); *Id.* ¶ 137 (“On May 14, 2018, CNN reported that ‘Facebook has suspended 200 apps for possible misuse of user data in the wake of the Cambridge Analytica scandal.’”). Further, Plaintiffs offer no specific facts from which this Court can infer that Defendants’ enforcement was “limited, haphazard, and inconsistent.” Accordingly, the Court cannot conclude that Statement 6 is false as Plaintiffs have not met their burden of showing particular, evidentiary facts from which this Court can infer falsity.

Plaintiffs contend that Statement 7 is false because Defendants did not “notify [their] users with context around the status of their account and actionable recommendations” when they “confirmed . . . accounts [were] compromised.” Specifically, Plaintiffs point to the fact that Defendants “failed to notify tens of millions of users whose data had been compromised by the Cambridge Analytica data breach.” *Id.* ¶ 301(d). Defendants wrote this

policy in 2017, an entire year after they thought that Cambridge Analytica had already deleted the data. *Id.* ¶ 153. Moreover, Plaintiffs have not shown that Defendants did *not* notify users once they confirmed accounts were compromised. *Id.* ¶ 93; *Id.* ¶ 18 (“Facebook, also, for the first time, started to notify data misuse victims and ‘tell people if their information may have been improperly shared with Cambridge Analytica.’”). The notification to users came *after* Facebook learned that Cambridge Analytica had not actually deleted user data. To discount this, Plaintiffs highlight Defendants admissions of regret to show an inadequate response to the breach, but never show that Defendants *knew* the accounts were compromised before this policy was enacted or before the 2018 articles. *See id.* ¶ 93. The Court, therefore, cannot conclude that this statement is actionable.

For these reasons, the Court holds that Plaintiffs failed to plead falsity as required by the PSLRA for Statements 3-8. Accordingly, this Court **GRANTS** Defendants’ motion to dismiss as to those statements.

Statements 9-19 refer to Defendants’ 10-K SEC risk disclosure statements. Plaintiffs main contention is that these statements are materially false and misleading because the risks they warned of already had materialized. Pl. Opp. at 11 (citing Compl. ¶¶ 6-13, 290–300). Essentially, they argue that Defendants intentionally omitted information about the “existence and magnitude of the risks” facing Facebook and thus mischaracterized threats facing Facebook as “future risks.” *Id.* For example, Facebook warned investors, using contingent terms, that “[a]ny failure to prevent or mitigate security breaches and improper access to or disclosure of . . . user data could result in the loss or misuse of such data, which could harm

our business and reputation.” Compl. ¶ 291. This, Plaintiffs contend, is a material misstatement because “Defendants knew . . . they had not properly ‘mitigate[d]’ the Cambridge Analytica data violation” by not investigating the full extent of the breach, notifying victims of the breach, and not receiving reliable assurances that the data had been deleted. Pl. Opp. at 11 (citing Compl. ¶¶ 8, 9, 90-93, 94-97, 100, 104-10). And, they allege, because Defendants knew of these risks, it was materially misleading to “warn” investors of “potential risks” to the Company by unaddressed privacy violations without revealing that those exact risk already existed. *Id.* at 12.

For a risk disclosure to be false, Plaintiffs must “allege facts indicating that [the] risk factor was *already affecting* [Facebook] to the extent that [D]efendants’ statements were false” when made. *Lloyd v. CVB Fin. Corp.*, 2012 WL 12883522, at *19 (C.D. Cal. Jan. 12, 2012) (emphasis added); *Baker v. Seaworld Entm’t, Inc.*, 2016 WL 2993481, at *12 (S.D. Cal. Mar. 31, 2016) (holding that risk disclosure statements not materially false or misleading because “[p]laintiffs . . . fail to plausibly allege Defendants knew that [warned-of risks] were having any impact on attendance”); *Williams v. Globus Med. Inc.*, 869 F.3d 235, 241-43 (3d Cir. 2017) (holding risk disclosures not materially misleading because risks plead by the plaintiffs “had not actually materialized at the time of either the 2013 10-K or the 2014 1Q 10-Q”). Plaintiffs do not allege that the Cambridge Analytica data breach was “already affecting Facebook” at the time these risk disclosures were made. Nor could they; these risk disclosure statements were made on February 3, 2017, Compl. ¶ 291, two years after the first 2015 *The Guardian* story about Cambridge Analytica, *id.* ¶ 7, and a year *before* the 2018 Cambridge Analytica *The Guardian* story, *id.* ¶ 14-15. This chronology

undercuts Plaintiffs theory of events, namely that the second story reignited scrutiny and distrust, which caused the stock collapse. *Id.* ¶ 18-23. Accordingly, Plaintiffs have offered no proof that future risks stated in the risk disclosures had “actually affected” Facebook’s reputation or stock because the risks of negative media attention or regulatory action had not yet materialized.

In the alternative, Plaintiffs argue that the statements were false because Defendants knew the statements were incomplete. *See Berson v. Applied Signal Tech.*, 527 F.3d 982, 986 (9th Cir. 2008) (holding that the defendant’s may have made a material misstatement when they omitted information of a known-risk). Plaintiffs rely on *Sgarlata v. PayPal Holdings, Inc.* as support that the risks facing Facebook had materialized. 2018 WL 6592771 (N.D. Cal. Dec. 13, 2018). There, the plaintiffs claimed that the defendants made material misstatements in press releases. *Id.* at *2. Specifically, the defendants released a statement that they were suspending operations due to the discovery of “securities vulnerabilities.” *Id.* About a month later, the defendants revealed that over 1.6 million people’s data had been potentially compromised. *Id.* The plaintiffs had plead, with particularity, that the defendants knew about the data breach when they made the original statement. *Id.* at *3. This allowed the court to conclude that the plaintiffs’ claims satisfied falsity because the disclosure “could plausibly have created an impression that only a potential vulnerability and not an actual breach had been discovered.”⁷ *Id.* at *7; *see also Brody*,

⁷ This further supports Defendants position that the risk, when stated, must have already materialized. In *Sgarlata*, the defendants knew that the stated “securities vulnerabilities” was actually a massive data breach. Thus, the risk stated already had materialized and so failure to disclose the gravity of this risk was an omission.

280 F.3d at 1006 (“[An omission] must affirmatively create an impression of a state of affairs that differs in a material way from the one that actually exists.”).

In contrast, here, Plaintiffs fail to plead specific facts from which this Court can infer that Facebook knew of the risk still posed by the Cambridge Analytica breach and that a materially different “state of affairs” existed. Rather, Plaintiffs indicate that no risk had materialized because Defendants *had* asked and *had* received certifications from Kogan, Cambridge Analytica, and its affiliates that all Facebook user data had been destroyed and *had* banned Kogan and his app from Facebook. Compl. ¶¶ 9, 90, 92, 96, 98, 150-51, 176. Plaintiffs do not allege other particular facts from which this Court can infer Defendants knew these risk disclosures were false. *See* ¶ 78 (noting that Facebook did not know of any continued risk because it *never* audited its developers). Further, Facebook changed its privacy policy and restricted app developers access to data, leading the Court farther from the inference that Defendants knew a Cambridge Analytica-like event was likely to happen again. *Id.* ¶¶ 98, 251, 258, 266, 280. For this reason, Statements 9, 10, 13-19 are inactionable.

Plaintiffs’ opposition points this Court towards Statement 11 to argue its language about “developing systems and processes designed to protect user data” is false because Defendants allowed third-party consent for years. Opp. at 12. These risk disclosures, however, were made after Facebook updated its privacy policy to no longer allow such consent. Plaintiffs next argue that because Facebook continues to provide device makers access to us-

ers' friends' data without their explicit consent (“whitelisting”), this disclosure is false.⁸ Pl. Opp. at 12. Plaintiffs, however, do not allege this whitelisting resulted in “data loss” or a “security breach” thus making the risk disclosure false. Compl. ¶ 291. Further, per Statement 12, Facebook discloses that such data sharing may occur.

Finally, Plaintiffs argue Statement 12 is false because it affirmatively reassures users that Facebook only gives third parties “limited” data. *Id.* ¶ 291. Plaintiffs contend that this is false because Facebook “didn’t really care how the data was used” and exposed data to copying “a million times” by hundreds of third parties. *Id.* ¶ 131-48. Plaintiffs, however, seem to disregard the final part of this statement—“*if these third parties . . . fail to adopt or adhere to adequate security practices . . . our data or users’ data may be improperly accessed, used, or disclosed.*” *Id.* ¶ 291. Defendants, thus, make no guarantee that data given to app developers would be protected or that they would control app developers use of that data. Plaintiffs essentially only allege that Facebook did not audit developers after learning of a potential data storage problem. *Id.* ¶ 78. However, Facebook makes no contention that it would control the actions of these third-parties.

For these reasons, the Court holds that Plaintiffs failed to plead falsity as required by the PSLRA for Statements 9-19. Accordingly, this Court **GRANTS** Defendants’ motion to dismiss as to those statements.

Statements 20 & 21 refer to the white paper issued by Facebook in April 2017 in which Defendants stated they would “notify specific people” targeted by sophisticated

⁸ The Court does not rule on whether this white-listing violated Facebook’s privacy policies or whether Defendants knew about it. Compl. ¶¶ 140, 183.

at-tackers and “proactively notify people” they believed would be targeted. *Id.* ¶ 230.

Plaintiffs argue that these are false statements because (1) Defendant Zuckerberg admitted to the U.S. Senate that Facebook made a conscious decision not to inform users whose data had been appropriated by Cambridge Analytica about the data breach, *id.* ¶¶ 93, 98, 100, (2) failed to either investigate other data-sharing instances with other app developers or notify potential victims of such data-sharing, *id.* ¶¶ 79, 131-48, and (3) continued to share user data in ways that violated its stated privacy policies by providing “whitelisted” mobile device makers access to users’ friends data without notifying users, *id.* ¶¶ 138, 140, 183, 209-10.

Plaintiffs, however, seem to ignore that these statements refer to “*targeted* data collection and theft.” Ex. 26 at 7 (emphasis added). Specifically, this page advised users about protecting their accounts from data collection by methods *like* “phishing⁹ with malware to infect a person’s computer and credential theft to gain access to . . . online accounts.” *Id.* This Court rejects Plaintiffs’ argument that “phishing with malware” was “merely an example of misconduct that could compromise user data.” Pl. Opp. at 6. The portion of the paper with the “false statements” expressly confines itself to situations involving “malicious actors,” who use “[t]ypical methods” like phishing. Ex. 26 at 7. Plaintiffs do not allege that Cambridge Analytica and other app developers used methods

⁹ Phishing is “a cybercrime in which a target or targets are contacted by email, telephone, or text message by someone posing as a legitimate institution to lure individuals into providing sensitive data such as personally identifiable information, banking and credit card details, and password.” *What Is Phishing?*, PHISHING.org, <https://www.phishing.org/what-is-phishing> (last visited Sept. 17, 2019).

like “phishing with malware.” Instead, Plaintiffs’ complaint focuses on situations where user data was not obtained by phishing, but rather by app developers who accessed the platform with Facebook’s permission and user consent. Compl. ¶¶ 46, 79, 150, 280. Contrary to Plaintiffs’ contention, *Hong* is thus directly applicable¹⁰ because this portion of the white paper plainly does not bear on the Cambridge Analytica-type privacy issues. See *Hong v. Extreme Networks, Inc.*, 2017 WL 1508991, at *15 (N.D. Cal. Apr. 27, 2017) (holding the plaintiffs’ allegations of falsity insufficient because “the reasons Plaintiffs offer as to why the statements are false or misleading bear no connection to the substance of the statements themselves”).

Further, by its very terms, notification was limited to people targeted by “sophisticated attackers.” Ex. 26 at 7. This is defined as an “attacker suspected of working on behalf of a nation-state.” Ex. 37 (cited in Ex. 26 at 7 n.5). The additional warning is shown if Facebook “has a strong suspicion that an attack could be government-sponsored.” *Id.* Plaintiffs do not allege that Cambridge Analytica, or any other app developer, was “suspected of working on behalf of a nation state” or “government sponsored.” Instead, Plaintiffs allege that Cambridge Analytica misappropriated Facebook user data for use in U.S. political campaigns, but not that they were sophisticated attackers who targeted users’ accounts. *Cf.* Compl. ¶¶ 80-83. Defendants’ commitment in the white paper to warn users ei-

¹⁰ Plaintiffs’ argument that its interpretation prevails because this is the pleading stage is rejected. Pl. Opp. at 6. While it is true that factual disputes are not resolved at the pleading stage, *In re Finisar Corp. Sec. Litig.*, 2017 WL 1549485, at *5 (N.D. Cal. May 1, 2017), this is not a factual issue as Plaintiff *never* pleads that the Cambridge Analytica scandal was a “phishing-like” incident.

ther proactively or post-attack by a sophisticated attacker, thus, has no relation to the allegations of misappropriation by Cambridge Analytica.

Finally, Plaintiffs attempt to show falsity by contrasting the white paper statements and Defendants' 2018 statements. In 2018, Defendants are quoted as saying "[they] should have [informed users]" and that they "got [it] wrong" by withholding notice from the Cambridge Analytica victims, Compl. ¶¶ 174-83. The connection, however, fails for two reasons: first, as demonstrated, the white paper has no relation (stated or implied) to the Cambridge Analytica scandal, and so statements made about the Cambridge Analytica or related data scandals are *per se* unrelated to the white paper's statements, which focuses on Facebook's phishing policy. Second, and relatedly, while these statements may demonstrate Defendants' regret, they do not contradict any alleged earlier statement by Defendants that affected users would be notified about the Cambridge Analytica breach.

For these reasons, the Court holds that Plaintiffs failed to plead falsity as required by the PSLRA for Statements 20 and 21. Accordingly, this Court **GRANTS** Defendants' motion to dismiss as to those statements.

Statement 22¹¹ is Defendant Sandberg's 2017 statement that "no one is going to get your data that shouldn't

¹¹ This Court holds that this is not an inactionable forward-looking statement because "you need to know" refers to current practices, as does "you are controlling." *Mulligan v. Impax Labs, Inc.*, 36 F. Supp. 3d 942, 963-64 (N.D. Cal. 2014) (holding statements outside the PSLRA's definition of a "forward-looking" statement because contained representations of present or historical fact). This Court also holds that this statement is not corporate puffery because it is not so vague or exaggerated that it is "not capable of objective verification."

have it” because “you’re controlling who you share with.” Compl. ¶ 234(a).

Plaintiffs allege two main theories of misconduct regarding consent: (i) third-party consent and (ii) whitelisting. This statement addresses theory (ii), specifically that Defendants were still involved in the harvesting of data by allowing certain whitelisted apps to access data contrary to the Privacy Policy. *See* Ex. 25.

Plaintiffs argue, and this Court agrees, that Plaintiffs have adequately pleaded that users could not control their data. *See id.* ¶¶ 138-40, 207, 209 (discussing how Facebook was overriding user privacy settings to provide data to mobile device makers, depriving users of control); *Id.* ¶¶ 102-03 (stating that Defendants knew that bad actors were able to access data). These allegations are particular enough to allow the Court to infer contemporaneous falsity—that is, that user’s privacy choices were being “overridden” at the time this statement was made. *Id.* ¶¶ 140, 183 (stating that the whitelisting deals started in 2015); *see also In re Facebook Inc., Consumer Privacy User Profile Litig.*, 2019 WL 4261048, at *16 (holding whitelisted theory adequately pleaded because “complaint plausibly alleges that none of the users consented” to this type of sharing).

For these reasons, the Court holds that Plaintiffs adequately pleaded falsity as required by the PSLRA for Statement 22.

Statements 25-28 pertain to the update posted by Defendant Zuckerberg after the 2018 *The Guardian* article. Plaintiffs allege these statements are materially mislead-

In re Cornerstone Propane Partners, 355 F. Supp. 2d 1069, 1087-88 (N.D. Cal. 2005).

ing because they were meant to cast doubt on news reports about Facebook’s failure to address data breaches. Plaintiffs allege “Facebook had authorized Kogan . . . to sell user data,” “had taken no action against Kogan,” “waited six months before asking Cambridge Analytica and other entities to certify all data had been destroyed,” and “made no effort . . . to identify what data had been compromised.” Plaintiffs, however, allege no facts from which this Court can infer falsity—they offer no evidence Facebook authorized Kogan to sell data, they indicate that Facebook *did* take action against Kogan and Cambridge Analytica, and they never plead Facebook made promises to take action within a certain time frame.

For these reasons, the Court holds that Plaintiffs failed to plead falsity as required by the PSLRA for Statements 25–28. Accordingly, this Court **GRANTS** Defendants’ motion to dismiss as to those statements.

Statements 29 & 30 pertain to the issue of consent, specifically whether users gave third-party consent.

In a Facebook post, Defendants wrote “[t]he claim that this is a *data breach* is completely false.” (Statement 29), Compl. ¶ 255. Plaintiffs argue that this statement is materially misleading because (1) this *was* a huge data breach and (2) it undermined media reports concerning Facebook’s lax privacy policies thus misleadingly reassuring investors that the Cambridge Analytica scandal was behind the Company. *Id.* ¶ 256-57. First, Plaintiffs state “[i]t was patently false to claim that the Cambridge Analytica scandal was “not a data breach.” *Id.* ¶ 256. This, however, overlooks the fact that the post confined its meaning of “data breach” to “systems [being] infiltrated, . . . passwords or sensitive pieces of information [being] stolen or hack[ing].” *Id.* Plaintiffs do not allege that this definition of a data breach was materially misleading or

false or that the Cambridge Analytica scandal fit within this definition of data breach.

In this same post, Defendants wrote “everyone involved *gave their consent. People knowingly provided their information.*” (Statement 30), *Id.* ¶ 255. Plaintiffs argue that this is a false statement because not all 87 million affected users consented to the data-sharing and none consented to the sale of their data for use in political campaigns. Pl. Opp. at 14. First, this statement never contends that people consented to the use of their data in political campaigns. Plaintiffs allege that saying people consented is false because people did not knowingly give consent to the data sharing by noting the number of affected people, that they did not get timely notice, and that the FTC consent order required them to report data violations.

Again, Plaintiffs allege three main theories of misconduct regarding consent: (i) third-party consent, (ii) white-listing, and (iii) sharing of data with third-parties contrary to stated policy. At issue here, is category (i); Statement 30 directly addresses this type of consent. Exhibit 24 shows the privacy policy in place during the creation and implantation of the app “thisisyourdigitallife.” This policy stated “Just like when you share information by email or elsewhere on the web, information you share on Facebook can be re-shared. This means that if you share something on Facebook, *anyone who can see it can share it with others, including the games, applications, and websites they use.*” Ex. 24 at 4 (emphasis added). The policy also told users they could decline to allow this third-party consent but would have to actively opt-out, otherwise their data could be shared. *Id.*; see also *In re Facebook Inc., Consumer Privacy User Profile Litig.*, 2019 WL 4261048, at

*14 (“Thus, contrary to the plaintiffs’ argument, the language of these disclosures cannot be interpreted as misleading users into believing that they merely needed to adjust their privacy settings to ‘friends only’ to protect their sensitive information from being disseminated to app developers. Users were told that they needed to adjust their application settings too.”).

While Facebook’s updated Privacy Policy restricts friends’ ability to share data with third-party app developers, Ex. 25, Plaintiffs have provided no factual basis that the statement “everyone involved gave their consent” was false when made because they have not shown that users did not consent. *In re Fusion-io*, 2015 WL 661869, at *16 (“To satisfy these ‘exacting requirements,’ a plaintiff must plead ‘specific facts indicating why’ the statements at issue were false.”).

For these reasons, the Court holds that Plaintiffs failed to plead falsity as required by the PSLRA for Statements 29 & 30. Accordingly, this Court **GRANTS** Defendants’ motion to dismiss as to those statements.

Statements 23, 24, and 32¹² are used by Plaintiffs to show that Defendants “misleadingly downplayed” the impact of the effect of the looming GDPR on business.

¹² Plaintiffs did not respond to Defendants’ argument that the Daily Active User (“DAU”) and Monthly Active User (“MAU”) statements are not misleading. The Court agrees with Defendants’ arguments, Mot. at 17, that simply using a new methodology to count accounts is not misleading. See *Ironworkers Local 580—Joint Funds v. Linn Energy, LLC*, 29 F. Supp. 3d 400, 426 (S.D.N.Y. 2014) (rejecting as misguided the claim that changing a formula for calculating financial metrics amounted to “some sort of admission that statements made in prior reporting periods were false or materially misleading”). Accordingly, the DAU and MAU figures used were not misleading.

Statements 23, 24, and 32 are about the GDPR; Plaintiffs argue that Defendants falsely assured investors that Facebook was already “already adhering to or prepared to meet” the regulations, when they were not meeting the requirements. Compl. ¶¶ 233-37, 261, 276-77, 283. Defendants, however, never asserted that Facebook was fully compliant with the GDPR, only that “Europe . . . passed a single privacy law and [Facebook is] adhering to that.” *Id.* ¶ 201 (Statement 23). In other words, this expresses an intention to adhere to this privacy law, the statement is not a profession of being fully compliant. Facebook maintained only that it “applies the core principles [of the GDPR] . . . and *we’re building* on this to ensure that we comply in May of next year.” *Id.* (emphasis added) (Statement 24); *see also id.* ¶ 202 (“[W]e’ve had *almost all* of what’s in [the GDPR] implemented for years”) (emphasis added) (Statement 32). The statements show that Facebook knew it was not fully GDPR compliant, but that it intended to keep working to become GDPR compliant. To rebut this, Plaintiffs argue that the costs associated with GDPR implementation, specifically user growth and revenue costs, show that Facebook was not actually anywhere near being GDPR compliant. Pl. Opp. at 18. Defendants, however, specifically warned investors in April 2018 that implementation of the GDPR would impact advertising revenues and user growth by stating they expected “full-year 2018 total expenses [to] grow 50-60%” due to “significant investments we’re making in areas like safety and security.” Compl. ¶ 277, Ex. 11 at 8; *see also Turocy v. El Pollo Loco Holdings, Inc.*, 2016 WL 4056209, at *8-10 (C.D. Cal. July 25, 2016) (holding not misleading statement where “allegedly omitted facts rendering the statement false were actually disclosed”).

Further, Plaintiffs never identify a single provision of the GDPR that Facebook had not implemented at the time the challenged statements were made. Reply at 11. Instead, Plaintiffs rely on a fraud by hindsight pleading—they allege that GDPR compliance statements must have been false because user growth declined slightly once GDPR had been fully implemented. This is not permitted under PSRLA’s strict pleading standards. *See City of Rosville Emps. Ret. Sys. v. Sterling Fin. Corp.*, 963 F. Supp. 2d 1092, 1109 (E.D. Wash. 2013) (“Without evidence of contemporaneous falsity, an allegation of a misleading representation, which entirely rests on later contradictory statements, constitutes an impermissible attempt to plead fraud by hindsight.”). Accordingly, these statements are not actionable.

For these reasons, the Court holds that Plaintiffs failed to plead falsity as required by the PSLRA for Statements 25-28. Accordingly, this Court **GRANTS** Defendants’ motion to dismiss as to those statements.

2. Scierter

Having determined that Statement 22¹³ is actionable, the next issue is whether Plaintiffs adequately pleaded a strong inference of scierter.

Scierter is required under the PSLRA and plaintiffs must plead “with particularity facts giving rise to a strong inference that the defendant acted with the requisite state of mind” regarding “each act or omission alleged.” 15 U.S.C. 78u-4(b)(2)(A). It can be established by intent, knowledge, or certain levels of recklessness. *Verifone*,

¹³ This section does not address Defendants or Plaintiffs argument regarding inference of scierter based on “data being important to Facebook’s user model” because Statement 22 is actionable due to white-listing, not the Cambridge Analytica breach.

704 F.3d at 702. Recklessness must be deliberate. *Schueneman v. Arena Pharma., Inc.*, 840 F.3d 698, 705 (9th Cir. 2016) (“[S]cienter—a mental state that not only covers ‘intent to deceive, manipulate, or defraud,’ but also ‘deliberate recklessness.’” (citations omitted)). Deliberate recklessness is an “*extreme departure* from the standards of ordinary care . . . which presents a danger of misleading buyers or sellers that is either known to the defendant or is so *obvious* that the actor must have been aware of it.” *Id.* Thus, recklessness only satisfies scienter under § 10(b) to the extent it reflects some degree of intentional or conscious misconduct. *In re NVIDIA Corp. Sec. Litig.*, 768 F.3d 1046, 1053 (9th Cir. 2014).

A “strong inference” of scienter exists “only if a reasonable person would deem the inference of scienter cogent and at least as compelling as any opposing inference one could draw from the facts alleged.” *Tellabs*, 551 U.S. at 324. In reviewing a complaint under this standard, the court must consider “*all* reasonable inferences to be drawn from the allegations, including inferences unfavorable to the plaintiffs.” *Metzler*, 540 F.3d at 1061. To plead a strong inference of scienter, plaintiffs must plead particularized facts demonstrating that the individual defendants knew the supposedly false statements challenged by the plaintiffs were false or misleading when made or had access to information demonstrating that the individual defendants were deliberately reckless in allowing the false statements to be made. *See id.* at 1068.

Plaintiffs allege Defendant Sandberg falsely claimed, “[N]o one is going to steal your data.” Compl. ¶ 234(a). This Court held above that Plaintiffs adequately alleged that this is a materially misleading statement considering “whitelisting.” To establish scienter, Plaintiffs rely on Sandberg’s statements of regret, “witness accounts,”

“widespread privacy misconduct,” and “the FTC Consent Decree.”¹⁴

The witness accounts do not establish scienter because none of the witnesses establish that Sandberg intentionally or recklessly lied when she claimed users controlled their data. First, Plaintiffs argue that in 2016, Roger McNamee raised “red flags” about Facebook’s “systemic problem of data misuse.” Pl. Opp. at 23. McNamee discussed with Defendants a “systemic problem with algorithms and the business model of Facebook that allow bad actors to cause harm to innocent users of Facebook.” Ex. 15 at 3. This could establish knowledge that Sandberg knew, in 2017 when she made Statement 22, that people’s data could be vulnerable. Plaintiffs, however, do not allege, nor can this Court infer, that when Sandberg made this statement, a year after McNamee “raised red flags,” that these processes were still allowing bad actors to cause harm to innocent users. The stronger inference is that Facebook *had* addressed these problems since Sandberg addressed security improvements following the Russian interference in the Axios Interview (the interview in which Statement 22 was made).

Similarly, Plaintiffs use the fact that Sandy Parakilas warned the “top five executives” at Facebook about “privacy vulnerabilities” at Facebook. But, this was *five years* before the Class Period began, Reply at 14, and thus suffers the same problem as McNamee’s statement. Likewise, Christopher Wylie’s testimony that “Facebook was first notified of [Cambridge Analytica’s] harvesting

¹⁴ The Court does not address the arguments regarding the stock sales as those relate to scienter regarding the 1Q18 and 2Q18 disclosures. The chart in the Complaint does not even include the range during which Sandberg made the Axios statement.

scheme in 2015,” Compl. ¶ 86(f), has little import considering she said “*going to get*” your data, therefore rendering the Cambridge Analytica breach irrelevant.

Next, Plaintiffs argue that widespread privacy misconduct at Facebook confirms scienter. Plaintiffs point to the *New York Times* article discussing “whitelisting” and that “the Company had struck agreements allowing phone and other device makers access to vast amounts of its users’ personal information.” Compl. ¶ 138. They argue that this alone is enough to establish scienter. But, none of the cases Plaintiffs cite support this conclusion. See *In re Countrywide Fin. Corp. Sec. Litig.*, 588 F. Supp. 2d 1132, 1190 (C.D. Cal. 2008) (holding complaint persuasively alleges that “systematic changes in Countrywide came from the top down and pervaded virtually every office” because directors and officers allegedly were regularly provided “detailed exception statistics”). Here, in contrast to *Countrywide*, Plaintiffs do not allege that Sandberg knew about whitelisting or was provided detailed information about it. It is not enough that Facebook’s business model depends on users freely sharing their information and thus incentivizes misuse of data. See, e.g., Compl. ¶ 302(f); *Metzler*, 540 F.3d at 1068 (“As this court has noted on more than one occasion, corporate management’s general awareness of the day-to-day workings of the company’s business does not establish scienter—at least absent some additional allegation of specific information conveyed to management and related to the fraud.”).

Third, Plaintiffs point to the FTC Decree to establish scienter because it put “Facebook on notice” that “its representations concerning its privacy practice needed to be completely accurate.” Pl. Opp. at 26. Plaintiffs use *In re Enron Corp. Sec., Deriv. & ERISA Litig.*, 235 F. Supp. 2d

549 (S.D. Tex. 2002) to support this. However, there, the court mentioned the SEC Consent Decree in conjunction with many other factors; this combination gave rise to a strong inference of scienter. *Id.* at 706. The SEC Consent Decree alone was not enough to infer scienter and, likewise here, the FTC Consent Decree alone is insufficient to infer scienter as Plaintiffs have provided no particularized facts from which this Court can infer Sandberg consciously lied.

For these reasons, the Court finds that Plaintiffs fail to plead scienter as to Statement 22 as required by the PSLRA and so this Court **GRANTS** Defendants' motion to dismiss as to **Statement 22**.¹⁵

Plaintiffs also bring claims for violations of Sections 20(a) and (A) of the Exchange Act. Both these claims, however, depend on a primary violation of Section 10(b) or Rule 10b-5. *Lipton v. Pathogenesis Corp.*, 284 F.3d 1027, 1035 n.15 (9th Cir. 2002) (“[T]o prevail on their claims for violations of § 20(a) and § 20A, plaintiffs must first allege a violation of § 10(b) or Rule 10b 5.”). Because the Court determines Plaintiffs' claim under Section 10(b) and Rule 10b-5 fail, Defendants motion to dismiss these claims is also **GRANTED**.

IV. LEAVE TO AMEND

When dismissing a complaint for failure to state a claim, a court should grant leave to amend “unless it determines that the pleading could not possibly be cured by the allegation of other facts.” *Lopez v. Smith*, 203 F.3d 1122, 1127 (9th Cir. 2000). Although the Court has determined that Plaintiffs fail to state a claim, it is possible Plaintiffs can cure their allegations by alleging, among

¹⁵ Because it is unnecessary, this Court does not address causation or reliance.

other things, more particular facts as to why statements by the Individual Defendants were false when made. Accordingly, because Plaintiffs may salvage their Complaint, the Court finds amendment would not be futile. Plaintiffs' claims are therefore dismissed with leave to amend.

V. CONCLUSION

Defendants' motion to dismiss Plaintiffs' Complaint in its entirety is **GRANTED** with leave to amend. Should Plaintiffs choose to file an amended complaint, they must do so by October 26, 2019. Failure to do so, or failure to cure the deficiencies addressed in this Order, will result in dismissal of Plaintiffs' claims with prejudice. Plaintiffs may not add new claims or parties without leave of the Court or stipulation by the parties pursuant to Federal Rule of Civil Procedure 15.

IT IS SO ORDERED.

Dated: September 25, 2019

/s/ Edward J. Davila
EDWARD J. DAVILA
United States District Judge

The Guardian**Ted Cruz using firm that harvested data on millions of unwitting Facebook users**

Exclusive: Documents reveal donor-funded US startup embedded in Republican's campaign paid UK university academics to collect psychological profiles on potential voters

Harry Davies

Fri 11 Dec 2015 17.22 EST

Ted Cruz's presidential campaign is using psychological data based on research spanning tens of millions of Facebook users, harvested largely without their permission, to boost his surging White House run and gain an edge over Donald Trump and other Republican rivals, the Guardian can reveal.

A little-known data company, now embedded within Cruz's campaign and indirectly financed by his primary billionaire benefactor, paid researchers at Cambridge University to gather detailed psychological profiles about the US electorate using a massive pool of mainly unwitting US Facebook users built with an online survey.

As part of an aggressive new voter-targeting operation, Cambridge Analytica—financially supported by reclusive hedge fund magnate and leading Republican donor Robert Mercer—is now using so-called “psychographic profiles” of US citizens in order to help win Cruz votes, despite earlier concerns and red flags from potential survey-takers.

Documents seen by the Guardian have uncovered longstanding ethical and privacy issues about the way academics hoovered up personal data by accessing a vast set

of US Facebook profiles, in order to build sophisticated models of users' personalities without their knowledge.

In the race to advance data-driven electioneering strategies pioneered by successive Obama campaigns, Cruz has turned to Cambridge Analytica for its unparalleled offering of psychological data based on a treasure trove of Facebook "likes", allowing it to match individuals' traits with existing voter datasets, such as who owned a gun.

Analysis of Federal Election Commission (FEC) filings shows Cruz's campaign has paid Cambridge Analytica at least \$750,000 this year. The "behavioural microtargeting" company has also received around \$2.5m over the past two years from conservative Super PACs to which Mercer or members of his family have donated.

In an interview with the Guardian last month, Cruz said his funding and outreach apparatus "is very much the Obama model—a data-driven, grassroots-driven campaign—and it is a reason why our campaign is steadily gathering strength".

Cruz is increasingly seen as a leading Republican contender, uniting factions within the party beyond his evangelical and Tea Party base. In Iowa—the first state to vote in the presidential primary, in less than two months—the outspoken Texas senator dethroned Trump in a poll for the first time this week as the mogul became ensnared in yet more controversy.

Cambridge Analytica has also worked with the Republican candidate Ben Carson, receiving \$220,000 from his campaign earlier this year. But the company is more closely involved in Cruz's presidential bid, with a team of its data scientists currently working at Cruz campaign headquarters in Houston.

Having donated \$11m to the main pro-Cruz Super Pac, Keep the Promise I, Mercer is Cruz's top financier—and the largest individual donor to Super Pacs or outside groups during the presidential election cycle thus far, according to data compiled by the political transparency website Open Secrets.

Mercer's connections to both the Cruz campaign and the data firm that is apparently helping to power the senator's advantages were previously reported by Politico and Bloomberg. But political strategists and privacy advocates agreed that Mercer's parallel funding channels, combined with concerns over the surreptitious, commodified Facebook data—reported here for the first time—represented an intensified collision of billionaire financing and digital targeting on the campaign trail.

“If people begin to be turned off by Trump, the Cruz campaign will probably have a better strategic understanding of the implications and how to capitalize upon them,” said Bud Jackson, a Democratic specialist in digital grassroots campaigning, when asked to review the relationships. “Where a candidate's campaign may be afraid to go outside the boundaries of ethical behaviour because of a potential public backlash, an outside group may be less afraid.”

In an interview, Cruz spokesman Rick Tyler said the campaign had contracted Cambridge Analytica “because they're a market leader and best in the field” but that officials had “done our due diligence”.

“My understanding is all the information is acquired legally and ethically with the permission of the users when they sign up to Facebook,” he said, referring questions about previous research to Cambridge Analytica.

The Guardian contacted Cambridge Analytica prior to publication via email with its findings and a list of detailed questions. Repeated calls were also made to its offices in Washington and New York, as well as its parent company in London. A representative in New York refused to speak with the Guardian and hung up the phone.

After this article was published, Facebook said the company was “carefully investigating this situation” regarding the Cruz campaign.

“[M]isleading people or misusing their information is a direct violation of our policies and we will take swift action against companies that do, including banning those companies from Facebook and requiring them to destroy all improperly collected data,” a Facebook spokesman said in a statement to the Guardian.

Christopher Soghoian, principal technologist and senior policy analyst at the American Civil Liberties Union, described the Guardian’s findings as “troubling” and highlighted shortcomings by the FEC to adequately regulate campaigns’ use of data.

“What it essentially means is there is no one regulating campaigns’ privacy data and security practices,” he said. “So it means you have a wild west, where the campaigns can do whatever they want and get away with it.”

Research that seeded data on millions

Documents seen by the Guardian show Cambridge Analytica’s parent, a London-based company called Strategic Communications Laboratories (SCL), was first introduced to the concept of using social media data to model human personality traits in early 2014 by Dr Aleksandr Kogan, a lecturer at Cambridge University’s renowned psychology department.

Kogan established his own company in spring that year and began working with SCL to deliver a “large research project” in the US. His stated aim was to get as close to every US Facebook user into the dataset as possible.

The academic used Amazon’s crowdsourcing marketplace Mechanical Turk (MTurk) to access a large pool of Facebook profiles, hoovering up tens of thousands of individuals’ demographic data—names, locations, birthdays, genders—as well as their Facebook “likes”, which offer a range of personal insights.

This was achieved by recruiting MTurk users by paying them about one dollar to take a personality questionnaire that gave access to their Facebook profiles. This raised the alarm among some participants, who flagged Kogan for violating MTurk’s terms of service. “They want you to log into Facebook and then download a bunch of your information,” complained one user at the time.

Crucially, Kogan also captured the same data for each person’s unwitting friends. For every individual recruited on MTurk, he harvested information about their friends, meaning the dataset ballooned significantly in size. Research shows that in 2014, Facebook users had an average of around 340 friends.

Kogan assured the MTurk users their Facebook data would “only be used for research purposes” and remain “anonymous and safe”.

However, the Facebook data was then used to generate sophisticated models of each of their personalities using the so-called “big five” personality traits and characteristics—openness, conscientiousness, extraversion, agreeableness, neuroticism (known as the OCEAN scale).

By summer 2014, Kogan’s company had created an expansive and powerful dataset. His business partner boasted

on LinkedIn that their private outfit, Global Science Research (GSR), “owns a massive data pool of 40+ million individuals across the United States—for each of whom we have generated detailed characteristic and trait profiles”.

Documents show SCL agreed to a contract with GSR, whereby it would pay its data collection costs in order to improve “match rates” against SCL’s existing datasets or to enhance GSR’s algorithm’s “national capacity to profile capacity of American citizens”.

In an email, Kogan said he was unable to explain in detail where all the data came from, as he was restricted by various confidentiality agreements. He said SCL is no longer a client.

He said that while GSR often used MTurk for data collection, it “never collected more than a couple thousand responses on MTurk for any one project, or even across all projects for a single client—the vast majority of our MTurk data collection as a company is in the form of surveys only”. He said GSR stores Facebook data anonymously.

Kogan explained that separate from his university role, his private company undertook various commercial ventures relating to data analysis. He said that when GSR collect Facebook data, the terms detail the use that information collected will be put to and make clear to participants that they are giving GSR full permission to use the data and user contribution for any purpose.

He said Cambridge University had “no knowledge of the clients or projects GSR had worked on” and that GSR has never used any data collected as part of his university activities.

‘Packaging voters like they’re consumers’

Today, Cambridge Analytica’s central offering to US politicians is to enable them to use the OCEAN scale in shaping highly targeted campaign messages. This allows candidates like Cruz to campaign on specific issues, but communicate them in multiple ways to different audiences depending on the personal information the company holds about them.

As the company’s CEO, Alexander Nix, explains in a promotional video: “The more you know about someone, the more you can align a campaign with their requirements or their wants and needs.” He did not respond to a request for comment.

Michael Zimmer, an associate professor at the University of Wisconsin, Milwaukee, where he specialises in privacy and internet ethics, described this as a “particularly problematic” kind of voter targeting that raised broader concerns in the US about “packaging voters like they’re consumers”.

“It’s one thing for a marketer to try to predict if people like Coke or Pepsi,” he said, “but it’s another thing for them to predict things that are much more central to our identity and what’s more personal in how I interact with the world in terms of social and cultural issues.”

Prior to its relationship with Cruz, Cambridge Analytica worked with a handful of 2014 midterm candidates, according to FEC filings. The firm also secured hundreds of thousands of dollars of business with John Bolton’s Super Pac, formed by the hawkish former UN ambassador to support conservative candidates campaigning on national security issues.

Ahead of the midterms, Cambridge Analytica reportedly developed a series of TV ads for candidates supported by Bolton, each aimed at different personality types and aired at times when viewers with personalities it aimed to reach were most likely to be watching.

Last week, the Cruz campaign launched a combative TV ad timed to air during a major college football game in Iowa. In the 30-second ad, Cruz vows: “We’ll rebuild our military, we’ll kill the terrorists and every Islamic militant will know—if you wage jihad against us, you’re signing your death warrant.”

Tyler, the Cruz spokesman, said Cambridge Analytica did not work on television advertising for the campaign. “They’re helping with online targeting and messaging, and that’s how we find people online,” he said.

It remains unclear when Mercer’s involvement with Cambridge Analytica began, but FEC filings show the company started working with Super Pacs that the secretive conservative donor has backed during the second half of 2014.

On Wednesday in Washington, Cruz was the only member of the Senate armed services committee to skip a hearing on US strategy to combat the Islamic State. Instead, he travelled to attend a fundraising luncheon in New York hosted by the president of Keep the Promise I, the Super Pac funded by Mercer that, one day earlier, had announced a \$600,000 digital advertising strategy to be rolled out via social media in early voting states.

A spokesman for Mercer declined to comment for this article.

- Michal Kosinski, a co-author of research exploring the risks and opportunities of psychological profiling, was

one of the sources who provided some of the information for this article. This note was added on 2 September 2019 with Kosinski's knowledge and consent.

Additional reporting by Ben Jacobs in Amana, Iowa

The New York Times**Is It Ted Cruz's Party—Or Marco Rubio's?****By Emma Roller**

Dec 15, 2015

The most interesting fight brewing in the Republican primary isn't between Donald J. Trump and the rest of the world, but between Ted Cruz and Marco Rubio, wunderkind vs. wunderkind. One is ruthless in his appeals to the Republican base, poised to ride its anger to victory, as Tea Party candidates did before him; the other is attractive to the establishment wing of the party, with the potential to draw in moderate voters, but who is sputtering in early primary states.

The dynamic we're seeing, between Senator Cruz of Texas and Rubio of Florida, may ultimately decide which path the Republican Party chooses to go down in 2016. And, as hard as it may be to envision where Trumpmania is going to leave us, Mr Cruz has jumped to the lead in a new Iowa poll, and has climbed to second place in a national poll ahead of Tuesday's debate.

The two senators have a few basic things in common: They were born within six months of each other. They are both sons of Cuban immigrants. They both experienced a meteoric rise to national politics thanks, in part, to the Tea Party wave that crashed down on Washington in 2010, when Mr. Rubio was elected, and continued to support Mr. Cruz's rise in 2012.

But over the past two months, they have tried to put as much space between their positions as possible—and engaged in some innovative name-calling, comparing each other to Barack Obama, Hillary Clinton and even Senator Chuck Schumer. (It's not clear whether that particular

insult, invoking the New York Democrat, resonates with the voters Mr. Cruz and Mr. Rubio are courting, but it has been thrown around by both campaigns. When asked about his Republican primary cameo, Mr. Schumer simply said: “I’m honored.”)

Recently, the two senators have started to distance themselves from each other on several key issues, especially national security and immigration. Kellyanne Conway, who leads Keep the Promise I, one of the super PACs supporting Mr. Cruz’s candidacy, happily took aim at Mr. Rubio’s record on inauguration in an interview on the tensions between the two candidates. “Can you trust the person who essentially dropped his bags off in his new Senate office, crossed the hallway, and started doing deals with Chuck Schumer and Dick Durbin, or can you trust the guy who hasn’t betrayed you?” she said. Mr. Rubio has leveled a similar attack against Mr. Cruz on national security, saying that the Texas senator was “part of that coalition that worked with the Democrats like Chuck Schumer and the A.C.L.U. to harm our intelligence programs.”

In a speech to the Heritage Foundation last week, Mr. Cruz outlined a foreign policy plan that both recognizes the Islamic State of Iraq and Syria as an existential threat, but ignores the “occasional dime-store dictator” who does not pose a threat to national security.

With typical doomsday aplomb, Mr. Cruz said the United States was facing a moment “like Munich in 1938” and that the Arab Spring brought a “tsunami of chaos and unrest.”

He also criticized fellow Republicans who supported bulk data collection via the National Security Administration, thereby implicating fellow candidates Mr. Rubio and Gov.

Chris Christie of New Jersey. “More data from millions of law-abiding citizens is not always better data,” he said.

Joe Pounder, an adviser to Mr. Rubio’s campaign, quickly responded to the implied diss on Twitter. “Odd that in defense of his NSA position, @tedcruz bear hugs Obama’s top intelligence official,” he tweeted. “Obama-Cruz agree on NSA.”

You can expect this kind of sniping to extend into Tuesday night’s debate, with Mr. Cruz trying to paint Mr. Rubio as a pushover on immigration, while Mr. Rubio tries to paint Mr. Cruz as soft on national security.

On a recent installment of “Morning Joe,” the host, Joe Scarborough, asked Mr. Cruz if he thought Mr. Rubio was a “big-government Republican?”

“He wants as much power in Washington as possible, and he has agreed with John McCain and Lindsey Graham—and for that matter, Hillary Clinton and Barack Obama—that we should keep sticking our nose in foreign entanglements where the result of their policies has made America less safe,” Mr. Cruz replied.

While Mr. Rubio has not gone as far as his fellow senator Lindsey Graham in calling for 20,000 American troops on the ground in Iraq and Syria, he has outlined a hawkish strategy in the region. In a recent Politico column, Mr. Rubio detailed a plan to bar Syrian refugees from entering the country, end budget cuts to the Department of Defense, build a “multinational coalition of countries” to defeat the Islamic State, and restore the “intelligence-gathering authorities” of the National Security Agency that the U.S.A. Freedom Act limited. He also went a step past Mr. Cruz by arguing that intervening in the Syrian civil war was necessary to the war on terror in the region.

“Cutting off oxygen to ISIL also requires defeating Assad in Syria,” he wrote, referring to an acronym for the Islamic State and the president of Syria, Bashar al-Assad. “Some of my Republican colleagues are also vying for the presidency, yet they have spent the last several years helping to gut our defense and eliminate key intelligence programs.”

Mr. Cruz has derided Mr. Rubio’s platform as “military adventurism,” and his allies have linked Mr. Rubio, negatively, to the Bush doctrine of foreign policy. The Texas senator also spent the last Republican debate leveling attacks against Mr. Rubio for the Florida senator’s support for the 2013 Gang of Eight immigration reform bill.

Mr. Rubio and his allies have sought to counter those blows by arguing that Mr. Cruz supported a pathway to legal status for undocumented immigrants with an amendment he introduced in 2013. But, with all due respect to the Rubio campaign, this is a bit of a stretch: Mr. Cruz deliberately introduced the amendment to foil the Gang of Eight bill, and Republican voters are unlikely to view Mr. Cruz as pro-amnesty anytime soon.

“That was a poison pill to both Rubio and the Democrats, and it exposed the bill for what it was, which was amnesty and a pathway to citizenship,” Rick Tyler, a spokesman for the Cruz campaign, said in an interview. “It’s an incredibly weak argument, but they seem to be persisting with it.”

Mr. Rubio is unlikely to win the immigration debate among conservatives, though: Mr. Cruz’s campaign has spent the past four months diligently suctioning itself to the xenophobic Mr. Trump and his legion of supporters. Mr. Cruz has refused to repudiate Mr. Trump in public for calling for a ban on Muslims entering this country—

something that Mr. Rubio, Mitt Romney, former Vice President Dick Cheney, Speaker of the House Paul Ryan, Jeb Bush, Mr. Graham, Gov. John Kasich of Ohio, Governor Christie and the G.O.P. state party chairmen in Iowa, New Hampshire and South Carolina have all done.

Of Mr. Trump, Mr. Cruz has said, “I do not believe the world needs my voice added to that chorus of critics.”

Rick Wilson, a prominent Republican strategist, has written that Mr. Cruz “appears to be playing the role of political pilot fish to Trump’s Great White.” It’s a strategy that has paid off for him so far: In Iowa, for now, the pilot fish has overtaken Jaws.

In the third fund-raising quarter, the Cruz campaign raised more than twice as much cash as the Rubio campaign and enjoys the support of at least four separate super PACs.

There are plenty of Rubio surrogates, in addition to the candidate himself, who are willing to call out Mr. Cruz on what they see as his failure on national security policy. In June, Mr. Cruz was one of 23 Republican senators to vote for the U.S.A. Freedom Act, which placed restrictions on the National Security Agency’s bulk collection of metadata from phones.

In November, a nonprofit group called American Encore spent \$200,000 on an ad buy in Iowa saying the bill Mr. Cruz supported was “crafted to hobble the gathering of intelligence.”

When asked about the ad, Mr. Cruz shot back, “Senator Rubio’s campaign has been desperate to change the topic from his longtime partnership with and collaboration with President Obama and Chuck Schumer in pushing a massive amnesty bill.”

Sean Noble, the president of American Encore, supports Mr. Rubio for president, though he says his group has not endorsed a presidential candidate yet. He faulted Mr. Cruz for promoting what he sees as a false notion of privacy over national security.

“The Cruz campaign and their allies are trying to change the subject because he sided with liberal Democrats,” Mr. Noble said. “There is no privacy. Anyone on Facebook understands that everything is an open book, so why would we try to bobble intelligence against those who try to do us harm?”

Funny he should mention Facebook. The Guardian recently reported that Mr. Cruz’s campaign hired a firm that scours American Facebook users’ data to create “psychographic profiles” and help campaigns target potential supporters online. The company, Cambridge Analytica, has come under scrutiny for accessing Facebook data without users’ permission in some cases. It seems a surprising lack of concern on privacy for a candidate like Mr. Cruz.

The powers that be in the Republican Party will ultimately guide their party to a nominee, and many hope they will do everything in their power to make sure that person is not named Trump. The choice the party makes—between the ideologically pure conservative who does what he needs to do to win and the candidate who seems to empathize with the new voters the party needs to attract to avoid becoming obsolete—could clinch its fate for years to come.

Facebook Newsroom

Suspending Cambridge Analytica and SCL Group From Facebook

March 16, 2018

“Protecting people’s information is at the heart of everything we do, and we require the same from people who operate apps on Facebook”

By Paul Grewal, VP & Deputy General Counsel

Update on March 17, 2018, 9.50 AM PT. The claim that this is a data breach is completely false. Aleksandr Kogan requested and gained access to information from users who chose to sign up to his app, and everyone involved gave their consent. People knowingly provided their information, no systems were infiltrated, and no passwords or sensitive pieces of information were stolen or hacked.

Originally published on March 16, 2018:

We are suspending Strategic Communication Laboratories (SCL), including their political data analytics firm, Cambridge Analytica, from Facebook. Given the public prominence of this organization, we want to take a moment to explain how we came to this decision and why.

We Maintain Strict Standards and Policies

Protecting people’s information is at the heart of everything we do, and we require the same from people who operate apps on Facebook. In 2015, we learned that a psychology professor at the University of Cambridge named Dr. Aleksandr Kogan lied to us and violated our Platform Policies by passing data from an app that was using Facebook Login to SCL/Cambridge Analytica, a firm that does political, government and military work around the globe.

He also passed that data to Christopher Wylie of Eunoia Technologies, Inc.

Like all app developers, Kogan requested and gained access to information from people after they chose to download his app. His app, “thisisyourdigitallife,” offered a personality prediction, and billed itself on Facebook as “a research app used by psychologists.” Approximately 270,000 people downloaded the app. In so doing, they gave their consent for Kogan to access information such as the city they set on their profile, or content they had liked, as well as more limited information about friends who had their privacy settings set to allow it.

Although Kogan gained access to this information in a legitimate way and through the proper channels that governed all developers on Facebook at that time, he did not subsequently abide by our rules. By passing information on to a third party, including SCL/Cambridge Analytica and Christopher Wylie of Eunoia Technologies, he violated our platform policies. When we learned of this violation in 2015, we removed his app from Facebook and demanded certifications from Kogan and all parties he had given data to that the information had been destroyed. Cambridge Analytica, Kogan and Wylie all certified to us that they destroyed the data.

Breaking the Rules Leads to Suspension

Several days ago, we received reports that, contrary to the certifications we were given, not all data was deleted. We are moving aggressively to determine the accuracy of these claims. If true, this is another unacceptable violation of trust and the commitments they made. We are suspending SCL/Cambridge Analytica, Wylie and Kogan from Facebook, pending further information.

We are committed to vigorously enforcing our policies to protect people's information. We will take whatever steps are required to see that this happens. We will take legal action if necessary to hold them responsible and accountable for any unlawful behavior.

How Things Have Changed

We are constantly working to improve the safety and experience of everyone on Facebook. In the past five years, we have made significant improvements in our ability to detect and prevent violations by app developers. Now all apps requesting detailed user information go through our App Review process, which requires developers to justify the data they're looking to collect and how they're going to use it—before they're allowed to even ask people for it.

In 2014, after hearing feedback from the Facebook community, we made an update to ensure that each person decides what information they want to share about themselves, including their friend list. This is just one of the many ways we give people the tools to control their experience. Before you decide to use an app, you can review the permissions the developer is requesting and choose which information to share. You can manage or revoke those permissions at any time.

On an ongoing basis, we also do a variety of manual and automated checks to ensure compliance with our policies and a positive experience for users. These include steps such as random audits of existing apps along with the regular and proactive monitoring of the fastest growing apps. We enforce our policies in a variety of ways—from working with developers to fix the problem, to suspending developers from our platform, to pursuing litigation.

The Guardian

Revealed: 50 million Facebook profiles harvested for Cambridge Analytica in major data breach

Whistleblower describes how firm linked to former Trump adviser Steve Bannon compiled user data to target American voters

'I made Steve Bannon's psychological warfare tool': meet the data war whistleblower Mark Zuckerberg breaks silence on Cambridge Analytica

Carole Cadwalladr and Emma Graham-Harison

Sat 17 Mar 2018 18.03 EDT

The data analytics firm that worked with Donald Trump's election team and the winning Brexit campaign harvested millions of Facebook profiles of US voters, in one of the tech giant's biggest ever data breaches, and used them to build a powerful software program to predict and influence choices at the ballot box.

A whistleblower has revealed to the *Observer* how Cambridge Analytica—a company owned by the hedge fund billionaire Robert Mercer, and headed at the time by Trump's key adviser Steve Bannon—used personal information taken without authorisation in early 2014 to build a system that could profile individual US voters, in order to target them with personalised political advertisements.

Christopher Wylie, who worked with a Cambridge University academic to obtain the data, told the *Observer*: “We exploited Facebook to harvest millions of people's profiles. And built models to exploit what we knew about them and target their inner demons. That was the basis the entire company was built on.”

Documents seen by the *Observer*, and confirmed by a Facebook statement, show that by late 2015 the company

had found out that information had been harvested on an unprecedented scale. However, at the time it failed to alert users and took only limited steps to recover and secure the private information of more than 50 million individuals.

The *New York Times* is reporting that copies of the data harvested for Cambridge Analytica could still be found online; its reporting team had viewed some of the raw data.

The data was collected through an app called *thisisyour-digitallife*, built by academic Aleksandr Kogan, separately from his work at Cambridge University. Through his company Global Science Research (GSR), in collaboration with Cambridge Analytica, hundreds of thousands of users were paid to take a personality test and agreed to have their data collected for academic use.

However, the app also collected the information of the test-takers' Facebook friends, leading to the accumulation of a data pool tens of millions-strong. Facebook's "platform policy" allowed only collection of friends' data to improve user experience in the app and barred it being sold on or used for advertising. The discovery of the unprecedented data harvesting, and the use to which it was put, raises urgent new questions about Facebook's role in targeting voters in the US presidential election. It comes only weeks after indictments of 13 Russians by the special counsel Robert Mueller which stated they had used the platform to perpetrate "information warfare" against the US.

Cambridge Analytica and Facebook are one focus of an inquiry into data and politics by the British Information

Commissioner's Office. Separately, the Electoral Commission is also investigating what role Cambridge Analytica played in the EU referendum.

"We are investigating the circumstances in which Facebook data may have been illegally acquired and used," said the information commissioner Elizabeth Denham. "It's part of our ongoing investigation into the use of data analytics for political purposes which was launched to consider how political parties and campaigns, data analytics companies and social media platforms in the UK are using and analysing people's personal information to micro-target voters."

On Friday, four days after the *Observer* sought comment for this story, but more than two years after the data breach was first reported, Facebook announced that it was suspending Cambridge Analytica and Kogan from the platform, pending further information over misuse of data. Separately, Facebook's external lawyers warned the *Observer* it was making "false and defamatory" allegations, and reserved Facebook's legal position.

The revelations provoked widespread outrage. The Massachusetts Attorney General Maura Healey announced that the state would be launching an investigation. "Residents deserve answers immediately from Facebook and Cambridge Analytica," she said on Twitter.

The Democratic senator Mark Warner said the harvesting of data on such a vast scale for political targeting underlined the need for Congress to improve controls. He has proposed an Honest Ads Act to regulate online political advertising the same way as television, radio and print. "This story is more evidence that the online political advertising market is essentially the Wild West. Whether

it's allowing Russians to purchase political ads, or extensive micro-targeting based on ill-gotten user data, it's clear that, left unregulated, this market will continue to be prone to deception and lacking in transparency," he said.

Last month both Facebook and the CEO of Cambridge Analytica, Alexander Nix, told a parliamentary inquiry on fake news: that the company did not have or use private Facebook data.

Simon Milner, Facebook's UK policy director, when asked if Cambridge Analytica had Facebook data, told MPs: "They may have lots of data but it will not be Facebook user data. It may be data about people who are on Facebook that they have gathered themselves, but it is not data that we have provided."

Cambridge Analytica's chief executive, Alexander Nix, told the inquiry: "We do not work with Facebook data and we do not have Facebook data."

Wylie, a Canadian data analytics expert who worked with Cambridge Analytica and Kogan to devise and implement the scheme, showed a dossier of evidence about the data misuse to the *Observer* which appears to raise questions about their testimony. He has passed it to the National Crime Agency's cybercrime unit and the Information Commissioner's Office. It includes emails, invoices, contracts and bank transfers that reveal more than so million profiles—mostly belonging to registered US voters—were harvested from the site in one of the largest-ever breaches of Facebook data. Facebook on Friday said that it was also suspending Wylie from accessing the platform while it carried out its investigation, despite his role as a whistleblower.

At the time of the data breach, Wylie was a Cambridge Analytica employee, but Facebook described him as working for Eunoia Technologies, a firm he set up on his own after leaving his former employer in late 2014.

The evidence Wylie supplied to UK and US authorities includes a letter from Facebook's own lawyers sent to him in August 2016, asking him to destroy any data he held that had been collected by GSR, the company set up by Kogan to harvest the profiles.

That legal letter was sent several months after the *Guardian* first reported the breach and days before it was officially announced that Bannon was taking over as campaign manager for Trump and bringing Cambridge Analytica with him.

"Because this data was obtained and used without permission, and because GSR was not authorised to share or sell it to you, it cannot be used legitimately in the future and must be deleted immediately," the letter said.

Facebook did not pursue a response when the letter initially went unanswered for weeks because Wylie was travelling, nor did it follow up with forensic checks on his computers or storage, he said.

"That to me was the most astonishing thing. They waited two years and did absolutely nothing to check that the data was deleted. All they asked me to do was tick a box on a form and post it back."

Paul-Olivier Dehaye, a data protection specialist, who spearheaded the investigative efforts into the tech giant, said: "Facebook has denied and denied and denied this. It has misled MPs and congressional investigators and it's failed in its duties to respect the law.

“It has a legal obligation to inform regulators and individuals about this data breach, and it hasn’t. It’s failed time and time again to be open and transparent.”

A majority of American states have laws requiring notification in some cases of data breach, including California, where Facebook is based.

Facebook denies that the harvesting of tens of millions of profiles by GSR and Cambridge Analytica was a data breach. It said in a statement that Kogan “gained access to this information in a legitimate way and through the proper channels” but “did not subsequently abide by our rules” because he passed the information on to third parties.

Facebook said it removed the app in 2015 and required certification from everyone with copies that the data had been destroyed, although the letter to Wylie did not arrive until the second half of 2016. “We are committed to vigorously enforcing our policies to protect people’s information. We will take whatever steps are required to see that this happens,” Paul Grewal, Facebook’s vice-president, said in a statement. The company is now investigating reports that not all data had been deleted.

Kogan, who has previously unreported links to a Russian university and took Russian grants for research, had a licence from Facebook to collect profile data, but it was for research purposes only. So when he hoovered up information for the commercial venture, he was violating the company’s terms. Kogan maintains everything he did was legal, and says he had a “close working relationship” with Facebook, which had granted him permission for his apps.

The *Observer* has seen a contract dated 4 June 2014, which confirms SCL, an affiliate of Cambridge Analytica, entered into a commercial arrangement with GSR, entirely

premised on harvesting and processing Facebook data. Cambridge Analytica spent nearly \$1m on data collection, which yielded more than 50 million individual profiles that could be matched to electoral rolls. It then used the test results and Facebook data to build an algorithm that could analyse individual Facebook profiles and determine personality traits linked to voting behaviour.

The algorithm and database together made a powerful political tool. It allowed a campaign to identify possible swing voters and craft messages more likely to resonate.

“The ultimate product of the training set is creating a ‘gold standard’ of understanding personality from Facebook profile information,” the contract specifies. It promises to create a database of 2 million “matched” profiles, identifiable and tied to electoral registers, across 11 states, but with room to expand much further.

At the time, more than 50 million profiles represented around a third of active North American Facebook users, and nearly a quarter of potential US voters. Yet when asked by MPs if any of his firm’s data had come from GSR, Nix said: “We had a relationship with GSR. They did some research for us back in 2014. That research proved to be fruitless and so the answer is no.” Cambridge Analytica said that its contract with GSR stipulated that Kogan should seek informed consent for data collection and it had no reason to believe he would not.

GSR was “led by a seemingly reputable academic at an internationally renowned institution who made explicit contractual commitments to us regarding its legal authority to license data to SCL Elections”, a company spokesman said.

SCL Elections, an affiliate, worked with Facebook over the period to ensure it was satisfied no terms had been

“knowingly breached” and provided a signed statement that all data and derivatives had been deleted, he said. Cambridge Analytica also said none of the data was used in the 2016 presidential election.

Steve Bannon’s lawyer said he had no comment because his client “knows nothing about the claims being asserted”. He added: “The first Mr Bannon heard of these reports was from media inquiries in the past few days.” He directed inquiries to Nix.

**UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA**

SECURITIES AND EXCHANGE
COMMISSION,

Plaintiff,

vs.

FACEBOOK, INC.

Defendant.

Case No.

COMPLAINT

Plaintiff Securities and Exchange Commission (the “Commission”) alleges:

SUMMARY OF THE ACTION

1. For more than two years, Facebook made misleading statements in its required public filings about the misuse of its users’ data. From 2016 until mid-March 2018, Facebook presented the risk of misuse of its users’ data as merely hypothetical. In fact, Facebook had already become aware by December 2015 that a researcher had improperly sold information related to tens of millions of Facebook users to data analytics firm Cambridge Analytica.

2. Since its initial public offering in 2012, Facebook has warned investors that one of the material risks to its business was the fact that independent developers who create applications for its platform might misuse personal data obtained from Facebook users.

3. In June 2014, an academic researcher and Cambridge Analytica entered into an agreement, through affiliated companies, whereby Cambridge Analytica would pay for the researcher to collect data on Facebook users.

At Cambridge Analytica's expense, the researcher developed a personality survey that obtained data from U.S. Facebook users, including their names, birthdates, gender, location, and their affinities, or "page likes." From the summer of 2014 through the spring of 2015, the researcher transferred data relating to approximately 30 million Facebook users in the United States to Cambridge Analytica.

4. Facebook learned about the collaboration between the researcher and Cambridge Analytica when it investigated a report published in the British press in December 2015. Within days of the press report, both the researcher and Cambridge Analytica privately confirmed to Facebook that the researcher had transferred personality profiles based on Facebook user data to Cambridge Analytica. Facebook determined that the transfer violated its policy that prohibits developers, like the researcher, from selling or transferring its users' data, and told the researcher and Cambridge Analytica to delete the data.

5. In June 2016, the researcher told Facebook that, in addition to transferring Cambridge Analytica personality profiles for approximately 30 million of its users, he had also, for those same users, sold Cambridge a substantial quantity of the underlying Facebook data from which he had derived those profiles.

6. In its quarterly and annual reports filed between January 28, 2016 and March 16, 2018 (the "relevant period"), Facebook did not disclose that a researcher had, in violation of the company's policies, transferred data relating to approximately 30 million Facebook users to Cambridge Analytica. Instead, Facebook misleadingly presented the potential for misuse of user data as merely a hypothetical investment risk. Moreover, when asked by

reporters in 2017 about its investigation into the Cambridge Analytica matter, Facebook falsely claimed the company found no evidence of wrongdoing, thereby reinforcing the misleading statements in its periodic filings.

7. Facebook did not disclose that a researcher had improperly transferred data for millions of Facebook users to Cambridge Analytica until March 16, 2018, when the company—for the first time—publicly acknowledged on its website that it had learned of the violation of its policy in 2015. The price of Facebook shares declined substantially following the company’s disclosure.

8. Based on the foregoing conduct, and the conduct described below, Facebook violated Sections 17(a)(2) and 17(a)(3) of the Securities Act of 1933 (“Securities Act”) and Section 13(a) of the Securities Exchange Act of 1934 (“Exchange Act”) and Rules 12b-20, 13a-1, 13a-13, and 13a-15(a) thereunder.

JURISDICTION AND VENUE

9. The Commission brings this action pursuant to Sections 20(b), 20(d), and 22(a) of the Securities Act [15 U.S.C. §§ 77t(b), 77t(d), and 77v(a)] and Sections 21(d), 21(e), and 27 of the Exchange Act [15 U.S.C. §§ 78u(d), 78u(e), and 78aa].

10. This Court has jurisdiction over this action pursuant to Sections 20(b), 20(d)(1) and 22(a) of the Securities Act [15 U.S.C. §§ 77t(b), 77t(d)(1), and 77v(a)] and Sections 21(d), 21(e) and 27 of the Exchange Act [15 U.S.C. §§ 78u(d), 78u(e) and 78aa].

11. Defendant, directly or indirectly, made use of the means and instrumentalities of interstate commerce or of the mails in connection with the acts, transactions, practices, and courses of business alleged in this complaint.

12. Venue is proper in this District pursuant to Section 22(a) of the Securities Act [15 U.S.C. § 77v(a)] and Section 27(a) of the Exchange Act [15 U.S.C. § 78aa(a)]. Acts, transactions, practices, and courses of business that form the basis for the violations alleged in this complaint occurred in this District. Facebook employees who participated in the events alleged in this complaint worked in the company's headquarters, which is located in Menlo Park, California. In addition, the relevant offers and sales of Facebook securities took place in this District.

13. Under Rule 3-2(d) of the Civil Local Rules, this civil action should be assigned to the San Francisco Division because a substantial part of the events or omissions which give rise to the claims alleged herein occurred in San Mateo County.

DEFENDANT

14. **Facebook, Inc.**, a Delaware corporation based in Menlo Park, California, is an Internet platform that allows its users to share photos and other digital content with their "friends" on-line. Since its initial public offering in 2012, Facebook's Class A common stock has been registered under Section 12(b) of the Exchange Act and trades on the Nasdaq Global Select Market.

RELEVANT ENTITY

15. **Cambridge Analytica** ("Cambridge") was a data analytics and advertising firm affiliated with an entity in the United Kingdom known as the SCL Group. The firm and its affiliated entities filed for bankruptcy protection in the United States and the United Kingdom in 2018. These organizations are collectively referred to as "Cambridge."

FACTUAL ALLEGATIONS

Overview of Facebook's Business

16. Facebook derives substantially all of its revenue from advertising aimed at its users. More than 2.3 billion people used the company's Facebook service on a monthly basis in the first quarter of 2019, and more than 2.7 billion people regularly used its broader family of services, which include Facebook, Instagram, and other services. The company generated more than \$55.8 billion in revenue in its 2018 fiscal year and had a market capitalization of more than \$500 billion as of March 31, 2019.

17. Since it filed for its initial public offering in 2012, Facebook has acknowledged in its periodic filings with the Commission that the size of its user base and level of its user engagement are critical to its financial success. Facebook has recognized that its users' willingness to engage with its services depends in part on users believing they have control over the way their data is shared. The "Risk Factor" disclosures in Facebook's periodic filings warned investors that concerns relating to data privacy and sharing could result in Facebook failing to retain or add users or in users decreasing their level of engagement, which could significantly harm its business, revenue, and financial results.

18. One of the ways Facebook engages users is to allow unaffiliated software developers to create applications (or "apps") that can access information that users share on Facebook. Facebook originally permitted developers to gather information from many app users' friends in addition to the app user. Facebook deactivated this permission in April 2014 but developers of existing apps were allowed to continue to collect data relating to an app user's friends until April 2015.

19. Developers who create Facebook apps must consent to Facebook’s “Platform Policy,” a set of rules governing what developers are allowed to do with the apps they create and the data that they gather. Since at least 2012, the Platform Policy has prohibited developers from selling user data or transferring user data to anyone who intends to profit from the data. The Platform Policy is maintained and updated by Facebook’s policy group, which works with others in the company to establish rules that govern, among other things, user privacy. Facebook also established a “Developer Operations” group within the company to prevent and address violations of the Platform Policy.

***The Sale of Facebook Data to
Cambridge Analytica***

20. In November 2013, an academic researcher in the United Kingdom created a Facebook app in connection with his studies. In doing so, he agreed to abide by Facebook’s Platform Policy. Initially, the researcher used the app only for his own research.

21. In January 2014, Cambridge approached the researcher about a possible business relationship. Cambridge was exploring a new model of election campaigning by targeting advertising based on voters’ personalities, and both Cambridge and the researcher were familiar with an academic study that correlated an individual’s personality with Facebook “likes.”

22. Pursuant to a June 2014 agreement between Cambridge and the researcher, the researcher would collect data from the users of his Facebook app and their friends, use that information to create personality “scores” for both app users and their friends, and then

match these personality scores to individuals in Cambridge's U.S. voter database. Cambridge would provide the researcher with funding to help recruit users to download and use the researcher's app.

23. The researcher configured his app to deliver a standard academic personality survey to app users. In addition to the survey results, the app obtained the name, birthdate, gender, location, and Facebook page likes both for the app users and the app users' friends.¹⁶

24. In the summer and early fall of 2014, a business entity created and controlled by the researcher retained a surveying firm to recruit and pay approximately 270,000 Facebook users to download the researcher's app and take the personality survey. This enabled the researcher to collect Facebook user data from both the 270,000 app users and many app users' friends, which collectively amounted to tens of millions of Facebook users. From the survey responses, the researcher created personality scores for all 270,000 app users. Then, by analyzing the correlations between survey responses and page likes, the researcher derived "predicted" personality scores for the survey-takers' tens of millions of friends. The researcher matched the personality scores against Cambridge's database of American voters in 11 states, and transferred this matched data back to Cambridge, in violation of the Platform Policy. Cambridge used the scores to target advertisements in connection with its political consultancy

¹⁶ On Facebook, "pages" are profiles that businesses or other organizations create in order to have a presence on Facebook. Organizations use Facebook pages to share information about products, services, and events. Individuals register their affinity to a particular organization by "liking" the organization's Facebook page. "Page likes," accordingly, represent a set of affinities connecting particular individuals to particular organizations.

services. Cambridge paid the researcher's business entity for the costs associated with the work done by the surveying firm.

25. In January 2015, the researcher and Cambridge signed a follow-on agreement. Pursuant to the agreement, Cambridge paid the researcher's business entity £200,000 GBP, and the researcher, in violation of the Platform Policy, gave Cambridge the previously-collected names, birthdays, gender, location, personality scores, and an agreed-upon number of page likes for approximately 30 million Facebook users in all 50 states. By the end of May 2015, the researcher had transferred this information to Cambridge.

26. The researcher also entered into a separate agreement with another entity, "Company A." Pursuant to that agreement, the researcher provided Facebook demographic data and all page likes relating to approximately 30 million U.S. Facebook users to Company A in the fall of 2014.

***Facebook's Investigation into
Cambridge Analytica's Use of Facebook Data***

27. On December 11, 2015, the British newspaper *The Guardian* published an article about the researcher and Cambridge reporting that the researcher had obtained Facebook data from tens of millions of Facebook users and used this data to create personality profiles for Cambridge's use in American elections.

28. The newspaper contacted Facebook before publishing its report and shared the allegations they intended to publish. Facebook provided the following quote attributable to a company spokesperson: "We are carefully investigating this situation. To be clear, misleading people or misusing their information is a direct violation of

our policies and we will take swift action against companies that do, including banning those companies from Facebook and requiring them to destroy all improperly collected data.” The *Guardian* included the company’s statement in the article published on December 11, 2015.

29. The day the *Guardian* article was published, a Facebook employee with responsibility for interpreting and administering the company’s Platform Policy contacted both the researcher and Cambridge. Within days, both the researcher and Cambridge confirmed to Facebook that the researcher had used a Facebook app to collect user data and then used that data to create personality scores, which were then transferred to Cambridge.

30. The Facebook employee concluded that the researcher’s transfer of personality scores derived from Facebook user data to Cambridge violated the company’s Platform Policy. This conclusion was shared with others in Facebook’s communications, legal, operations, policy, privacy, and research groups. The employee told the researcher and Cambridge to delete the personality scores and told the researcher to delete all of the Facebook data that his app had collected, and Cambridge subsequently told Facebook that it had deleted the data received from the researcher.

31. Six months later, in June 2016, Facebook and the researcher signed a settlement agreement. In a certification attached to that agreement, the researcher reported—contrary to his and Cambridge’s representations in December 2015—that, in addition to the personality scores, he had also transferred actual U.S. Facebook user data, including names, birthdays, location, and certain page likes, to Cambridge. He also represented that he deleted all the Facebook data his app had collected.

32. Almost a year later, in April 2017, Cambridge provided Facebook with a similar certification reporting that Cambridge had received from the researcher underlying raw Facebook user data in addition to the personality scores, as well as that it had deleted that data.

33. All told, more than 30 Facebook employees in different corporate groups including senior managers in Facebook's communications, legal, operations, policy, and privacy groups, learned that the researcher had transferred information to Cambridge in violation of Facebook's Platform Policy. However, as discussed more fully below, Facebook had no specific policies or procedures in place to assess or analyze this information for the purposes of making accurate disclosures in Facebook's periodic filings.

Red Flags Raised About Cambridge Analytica's Other Potential Misuse of User Data

34. At the time of the December 2015 *Guardian* article, Facebook was already familiar with Cambridge and had suspicions that Cambridge had misused user data. In September 2015, employees in Facebook's political advertising group requested an investigation into possible "scraping"-the automated and unauthorized aggregation of Facebook user data- by Cambridge. After the *Guardian* article was published in December 2015, these employees reiterated their concern about scraping. The political advertising employees recognized Cambridge as a well-known firm within the political advertising space and a client of Facebook's advertising business, and had described it as a "sketchy (to say the least) data modeling company that has penetrated our market deeply."

35. Throughout 2016, red flags were raised to Facebook suggesting that Cambridge was potentially misusing

Facebook user data. Following the *Guardian* article, several Facebook employees became aware of media reports on Cambridge's use of personality profiles to target advertising in the summer and fall of 2016. Facebook lawyers and employees in the company's political advertising group saw and discussed an October 27, 2016, article in *The Washington Post* reporting that Cambridge combined psychological tests with "likes" on "social-media sites." Employees responsible for coordinating Facebook's response to the *Guardian* article also circulated a link to a video of a marketing presentation by Cambridge's chief executive officer about the firm's ability to target voters based on personality. As an additional indication to Facebook that Cambridge might have been misusing Facebook user data, some employees on Facebook's political advertising team knew from August 2016 through November 2016 that Cambridge named Facebook and Instagram advertising audiences by personality trait for certain clients that included advocacy groups, a commercial enterprise, and a political action committee.

36. Despite Facebook's suspicions about Cambridge and the red flags raised after the *Guardian* article, Facebook did not consider how this information should have informed the risk disclosures in its periodic filings about the possible misuse of user data.

Facebook's Misleading Public Filings

37. Since the time of its initial public offering in 2012, Facebook has warned investors about the potential for misuse of its users' data by developers and the possible consequent financial effect on the company's business. For example, in the Risk Factor disclosures in its Form 10-Q filed on October 30, 2014, Facebook cautioned that "Improper access to or disclosure of user information, or violation of our terms of service or policies, could harm our

reputation and adversely affect our business.” In the same Form 10-Q, the company advised that if developers “fail to comply with our terms and policies . . . our users’ data may be improperly accessed or disclosed.” This, the company acknowledged, “could have a material and adverse effect on our business, reputation, or financial results.”

38. Facebook modified this language beginning in January 2015 and continued to warn investors about the possibility that third parties might improperly access or misuse its users’ data. For example, in its Form 10-K filed on January 28, 2016, only weeks after it had confirmed that the researcher had improperly transferred personality scores derived from Facebook user data to Cambridge in violation of its Platform Policy, Facebook cautioned that “Any failure to prevent or mitigate security breaches and improper access to or disclosure of our data or user data could result in the loss or misuse of such data, which could harm our business and reputation and diminish our competitive position.” The company further asserted that if “developers fail to adopt or adhere to adequate data security practices . . . our data or our users’ data may be improperly accessed, used, or disclosed.”¹⁷

39. During the relevant period, Facebook’s Risk Factor disclosures misleadingly suggested that the company faced merely the risk of such misuse and any harm to its business that might flow from such an incident. This hypothetical phrasing, repeated in each of its periodic fil-

¹⁷ During the relevant period, Facebook filed three annual reports on Form 10-K for the fiscal years ended December 31, 2015, December 31, 2016, and December 31, 2017, and six quarterly reports on Form 10-Q for each fiscal quarter in 2016 and 2017.

ings during the relevant period, created the false impression that Facebook had not suffered a significant episode of misuse of user data by a developer.

40. The company's processes and procedures around the drafting of its periodic reports on Forms 10-K and 10-Q, including but not limited to its Risk Factor disclosures, failed to bring the researcher's sale of data from tens of millions of Facebook users to Cambridge to the attention of the individuals with primary responsibility for drafting and approving those reports. Although protecting user data is critical to Facebook's business, and Facebook had identified the potential for improper access to and misuse of user data as a significant risk, Facebook did not maintain disclosure controls and procedures designed to analyze or assess incidents involving misuse of user data for potential disclosure in the company's periodic filings.

41. During the relevant period, Facebook identified trends and events for possible disclosure through a series of quarterly meetings to prepare for the company's earnings announcements. This process relied on the employees and managers who attended these meetings to identify issues that might need to be disclosed. Although several employees in Facebook's legal, policy, and communications groups who attended these meetings during the relevant period were aware of the researcher's improper transfer of data to Cambridge, that incident was never discussed. Facebook also did not share information regarding the incident with its independent auditors and outside disclosure counsel in order to assess the company's disclosure obligations.

42. Facebook had no specific mechanism to summarize or report violations of its Platform Policy to employees responsible for ensuring the accuracy of Facebook's filings with the Commission. For example, the Facebook

employees responsible for monitoring violations of the company's Platform Policy were not provided with the draft disclosures pertaining to the misuse of user data.

43. As a result, Facebook senior management and relevant legal staff did not assess the scope, business impact, or legal implications of the researcher's improper transfer of data to Cambridge, including whether or how it should have been disclosed in Facebook's public filings or whether it rendered, or would render, any statements made by the company in its public filings misleading.

44. Based on the foregoing, Facebook filed materially misleading periodic reports with the Commission. Facebook knew, or should have known, that its Risk Factor disclosures in its annual reports on Form 10-K for the fiscal years ended December 31, 2015, December 31, 2016, and December 31, 2017, and in its quarterly reports on Form 10-Q filed in 2016 and 2017, as incorporated into its Form S-8 registration statements, were materially misleading.

45. The Risk Factor disclosures were incorporated by reference into Facebook's registration statements on Forms S-8 filed with the Commission on May 21, 2012 and February 1, 2013. These statements registered sales of shares of Facebook common stock under the company's employee and officer equity incentive plans, and incorporated future periodic reports filed with the Commission, including those filed during the relevant period.

46. During the relevant period, Facebook received approximately \$29 million in cash proceeds from the exercise of employee stock options. Facebook also granted restricted stock units to more than 17,000 new employees during the relevant period who, in some cases, agreed to

accept lower salaries in exchange for additional equity compensation.

***Facebook’s Statements to the Press
Reinforced Its Misleading Filings***

47. Beginning in November 2016, reporters asked Facebook about the investigation that the company said it was conducting in the December 2015 Guardian article. These inquiries were referred to Facebook’s communications group, which was aware that the company had confirmed that the researcher had improperly transferred personality profiles based on U.S. user data to Cambridge in violation of Facebook’s policy, and had told both parties to delete the data.

48. The communications group initially responded to the press inquiries indirectly. For example, beginning in February 2017, the communications group pointed reporters to Cambridge’s public statement that it “does not use data from Facebook” and “does not obtain data from Facebook profiles or Facebook likes.” This was misleading because it suggested that Facebook was unaware that Cambridge had improperly obtained Facebook user data.

49. On at least two subsequent occasions in March 2017, Facebook’s communications group provided the following quote to reporters: “Our investigation to date has not uncovered anything that suggests wrongdoing.” This was misleading because Facebook had, in fact, determined that the researcher’s transfer of user data to Cambridge violated the company’s Platform Policy. The quote served to reinforce the misleading impression in Facebook’s periodic filings that the company was not aware of any material developer misuse of user data. The on-line publication *The Intercept* included the quote, attributed

to a Facebook spokesperson, in an article dated March 30, 2017.

***Facebook’s Acknowledgement of the
Cambridge Analytica Incident***

50. In March 2018, *The New York Times* and *Guardian* contacted Facebook and informed the company that the publications planned to run stories about the researcher’s improper transfer of data to Cambridge, including that Facebook had told the researcher and Cambridge to delete their Facebook data. Reporters from the *Times* suggested that Cambridge had not deleted the data, contrary to its representations to Facebook.

51. After the close of market on Friday, March 16, 2018, Facebook preempted the newspapers’ publication by a post on its own online Facebook “newsroom.” The company publicly acknowledged, for the first time, that it had confirmed that the researcher had transferred user data to Cambridge, in violation of its Platform Policy, and that the company had told the researcher and Cambridge to delete the data in December 2015. When the market opened on Monday, March 19, 2018, the price of Facebook’s shares fell five percent, from \$185.09 to \$172.56, and continued to decline throughout the week, closing at \$159.39 per share on March 23, 2018.

FIRST CLAIM FOR RELIEF

*Violations of Sections 17(a)(2) and (3)
of the Securities Act*

52. The Commission re-alleges and incorporates by reference Paragraph Nos. 1 through 51, above.

53. By engaging in the conduct described above, Defendant Facebook, directly or indirectly, in the offer or sale of securities, by use of the means or instruments of

transportation or communication in interstate commerce or by use of the mails,

- (1) obtained money or property by means of untrue statements of material fact or by omitting to state a material fact necessary in order to make the statements made, in light of the circumstances under which they were made, not misleading; and
- (2) engaged in transactions, practices, or courses of business which operated or would operate as a fraud or deceit upon purchasers.

54. By reason of the foregoing, Defendant violated, and unless restrained and enjoined will continue to violate, Section 17(a) (2) and Section 17(a)(3) of the Securities Act [15 U.S.C. §§ 77q(a)(2) and 77q(a)(3)].

SECOND CLAIM FOR RELIEF

Violations of Section 13(a) of the Exchange Act and Rules 12b-20, 13a-1 and 13a-13 Thereunder

55. The Commission re-alleges and incorporates by reference Paragraph Nos. 1 through 51, above.

56. Defendant has at all relevant times been an issuer that has a class of securities registered pursuant to Section 12 of the Exchange Act [15 U.S.C. § 781].

57. As described above, Defendant's filings with the Commission, including its reports filed on Forms 10-K and Forms 10-Q, reflected misleading statements concerning the improper access to and misuse of its users' personal information.

58. Based on the conduct alleged above, Defendant violated, and unless restrained and enjoined will continue to violate, Section 13(a) of the Exchange Act [15 U.S.C. § 78m(a)] and Rules 12b-20, 13a-1, and 13a-13 thereunder [17 C.F.R. §§ 240.12b-20, 240.13a-1, and 240.13a-13],

which obligate issuers of securities registered pursuant to Section 12 of the Exchange Act [15 U.S.C. § 781] to file with the Commission periodic reports with information that is accurate and not misleading.

THIRD CLAIM FOR RELIEF

Violations of Rule 13a-15(a) of the Exchange Act

59. The Commission re-alleges and incorporates by reference Paragraph Nos. 1 through 51, above.

60. Defendant failed to maintain controls and procedures designed to ensure that information required to be disclosed in the reports that it files or submits pursuant to the Exchange Act is recorded, processed, summarized, and reported, within the time periods specified in the Commission's rules and forms.

61. Defendant also failed to maintain controls and procedures designed to ensure that information required to be disclosed in the reports that it files or submits pursuant to the Exchange Act is accumulated and communicated to its management, including its principal executive and principal financial officers, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure.

62. By reason of the foregoing, Defendant violated Rule 13a-15(a) of the Exchange Act [17 C.F.R. § 240.13a-15(a)].

PRAYER FOR RELIEF

WHEREFORE, the Commission respectfully requests that this Court:

I.

Permanently enjoin Defendant Facebook from directly or indirectly violating Sections 17(a)(2) and 17(a)(3)

of the Securities Act [15 U.S.C. §§ 77q(a)(2) and 77q(a)(3)], and Section 13(a) of the Exchange Act [15 U.S.C. § 78m(a)], and Rules 12b-20, 13a-1, 13a-13, and 13a-15(a) [17 C.F.R. §§ 240.12b-20, 240.13a-1, 240.13a-13, and 240.13a-15(a)] thereunder.

II.

Issue an order requiring Defendant Facebook to pay a civil monetary penalty pursuant to Section 20(d) of the Securities Act [15 U.S.C. § 77t(d)] and Section 21(d) of the Exchange Act [15 U.S.C. § 78u(d)(3)].

III.

Retain jurisdiction of this action in accordance with the principles of equity and the Federal Rules of Civil Procedure in order to implement and carry out the terms of all orders and decrees that may be entered, or to entertain any suitable application or motion for additional relief within the jurisdiction of this Court.

IV.

Grant such other and further relief as this Court may determine to be just and necessary.

Dated: July 19, 2019

* * *

**UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA**

SECURITIES AND
EXCHANGE
COMMISSION,

Plaintiff,

vs.

FACEBOOK, INC.

Defendant.

Case No. 19-cv-04241

**CONSENT OF
DEFENDANT
FACEBOOK, INC.
TO ENTRY OF
FINAL JUDGMENT**

1. Defendant Facebook, Inc. (“Defendant”) waives service of a summons and the complaint in this action, enters a general appearance, and admits the Court’s jurisdiction over Defendant and over the subject matter of this action.

2. Without admitting or denying the allegations of the complaint (except as provided herein in Paragraph No. 11 and except as to personal and subject matter jurisdiction, which Defendant admits), Defendant hereby consents to the entry of the final Judgment in the form attached hereto (the “Final Judgment”) and incorporated by reference herein, which, among other things:

- (a) permanently restrains and enjoins Defendant from violations of Sections 17(a)(2) and 17(a)(3) of the Securities Act of 1933 (“Securities Act”) [15 U.S.C. §§ 77q(a)(2) and 77q(a)(3)] and Section 13(a) of the Securities Exchange Act of 1934 (“Exchange Act”) [15 U.S.C. § 78m(a)] and Rules 12b-20, 13a-1, 13a-13, and 13a-15(a) [17 C.F.R. §§ 240.12b-20, 240.13a-1, 240.13a-11, and 240.13a-15(a)] thereunder; and

(b) orders Defendant to pay a civil penalty in the amount of \$100,000,000.00 under Section 20(d) of the Securities Act [15 U.S.C. § 77t(d)] and Section 21(d)(3) of the Exchange Act [15 U.S.C. § 78u(d)(3)].

3. Defendant agrees that it shall not seek or accept, directly or indirectly, reimbursement or indemnification from any source, including but not limited to payment made pursuant to any insurance policy, with regard to any civil penalty amounts that Defendant pays pursuant to the Final Judgment, regardless of whether such penalty amounts or any part thereof are added to a distribution fund or otherwise used for the benefit of investors. Defendant further agrees that it shall not claim, assert, or apply for a tax deduction or tax credit with regard to any federal, state, or local tax for any penalty amounts that Defendant pays pursuant to the Final Judgment, regardless of whether such penalty amounts or any part thereof are added to a distribution fund or otherwise used for the benefit of investors.

4. Defendant waives the entry of findings of fact and conclusions of law pursuant to Rule 52 of the Federal Rules of Civil Procedure.

5. Defendant waives the right, if any, to a jury trial and to appeal from the entry of the Final Judgment.

6. Defendant enters into this Consent voluntarily and represents that no threats, offers, promises, or inducements of any kind have been made by the Commission or any member, officer, employee, agent, or representative of the Commission to induce Defendant to enter into this Consent.

7. Defendant agrees that this Consent shall be incorporated into the Final Judgment with the same force and effect as if fully set forth therein.

8. Defendant will not oppose the enforcement of the Final Judgment on the ground, if any exists, that it fails to comply with Rule 65(d) of the Federal Rules of Civil Procedure, and hereby waives any objection based thereon.

9. Defendant waives service of the Final Judgment and agrees that entry of the Final Judgment by the Court and filing with the Clerk of the Court will constitute notice to Defendant of its terms and conditions. Defendant further agrees to provide counsel for the Commission, within thirty days after the Final Judgment is filed with the Clerk of the Court, with an affidavit or declaration stating that Defendant has received and read a copy of the Final Judgment.

10. Consistent with 17 C.F.R. § 202.5(f), this Consent resolves only the claims asserted against Defendant in this civil proceeding. Defendant acknowledges that no promise or representation has been made by the Commission or any member, officer, employee, agent, or representative of the Commission with regard to any criminal liability that may have arisen or may arise from the facts underlying this action or immunity from any such criminal liability. Defendant waives any claim of Double Jeopardy based upon the settlement of this proceeding, including the imposition of any remedy or civil penalty herein. Defendant further acknowledges that the Court's entry of a permanent injunction may have collateral consequences under federal or state law and the rules and regulations of self-regulatory organizations, licensing boards, and other regulatory organizations. Such collateral conse-

quences include, but are not limited to, a statutory disqualification with respect to membership or participation in, or association with a member of, a self-regulatory organization. This statutory disqualification has consequences that are separate from any sanction imposed in an administrative proceeding. In addition, in any disciplinary proceeding before the Commission based on the entry of the injunction in this action, Defendant understands that it shall not be permitted to contest the factual allegations of the complaint in this action.

11. Defendant understands and agrees to comply with the terms of 17 C.F.R. § 202.5(e), which provides in part that it is the Commission's policy "not to permit a defendant or respondent to consent to a judgment or order that imposes a sanction while denying the allegations in the complaint or order for proceedings," and "a refusal to admit the allegations is equivalent to a denial, unless the defendant or respondent states that he neither admits nor denies the allegations." As part of Defendant's agreement to comply with the terms of Section 202.5(e), Defendant: (i) will not take any action or make or permit to be made any public statement denying, directly or indirectly, any allegation in the complaint or creating the impression that the complaint is without factual basis; (ii) will not make or permit to be made any public statement to the effect that Defendant does not admit the allegations of the complaint, or that this Consent contains no admission of the allegations, without also stating that Defendant does not deny the allegations; (iii) upon the filing of this Consent, Defendant hereby withdraws any papers filed in this action to the extent that they deny any allegation in the complaint; and (iv) stipulates solely for purposes of exceptions to discharge set forth in Section 523 of the Bankruptcy Code, 11 U.S.C. § 523, that the allegations in the

complaint are true. If Defendant breaches this agreement, the Commission may petition the Court to vacate the Final Judgment and restore this action to its active docket. Nothing in this paragraph affects Defendant's: (i) testimonial obligations; or (ii) right to take legal or factual positions in litigation or other legal proceedings in which the Commission is not a party.

12. Defendant hereby waives any rights under the Equal Access to Justice Act, the Small Business Regulatory Enforcement Fairness Act of 1996, or any other provision of law to seek from the United States, or any agency, or any official of the United States acting in his or her official capacity, directly or indirectly, reimbursement of attorney's fees or other fees, expenses, or costs expended by Defendant to defend against this action. For these purposes, Defendant agrees that Defendant is not the prevailing party in this action since the parties have reached a good faith settlement.

13. Defendant agrees that the Commission may present the Final Judgment to the Court for signature and entry without further notice.

14. Defendant agrees that this Court shall retain jurisdiction over this matter for the purpose of enforcing the terms of the Final Judgment.

* * *

**UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA**

SECURITIES AND
EXCHANGE
COMMISSION,

Plaintiff,

vs.

FACEBOOK, INC.

Defendant.

Case No. 19-cv-04241

**[PROPOSED]
FINAL JUDGMENT AS
TO DEFENDANT
FACEBOOK, INC.**

The Securities and Exchange Commission having filed a Complaint and Defendant Facebook, Inc. (“Defendant” or “Facebook”) having entered a general appearance; consented to the Court’s jurisdiction over Defendant and the subject matter of this action; consented to entry of this Final Judgment without admitting or denying the allegations of the Complaint (except as to jurisdiction and except as otherwise provided herein); waived findings of fact and conclusions of law; and waived any right to appeal from this Final Judgment:

I.

IT IS HEREBY ORDERED, ADJUDGED, AND DECREED that Defendant is permanently restrained and enjoined from violating Section 17(a)(2) of the Securities Act of 1933 (the “Securities Act”) [15 U.S.C. § 77q(a)(2)] in the offer or sale of any security by the use of any means or instruments of transportation or communication in interstate commerce or by use of the mails, directly or indirectly, to obtain money or property by means of any untrue statement of a material fact or any omission

of a material fact necessary in order to make the statements made, in light of the circumstances under which they were made, not misleading.

IT IS FURTHER ORDERED, ADJUDGED, AND DECREED that, as provided in Rule 65(d)(2) of the Federal Rules of Civil Procedure, the foregoing paragraph also binds the following who receive actual notice of this Final Judgment by personal service or otherwise: (a) Defendant's officers, agents, servants, employees, and attorneys; and (b) other persons in active concert or participation with Defendant or with anyone described in (a).

II.

IT IS HEREBY FURTHER ORDERED, ADJUDGED, AND DECREED that Defendant is permanently restrained and enjoined from violating Section 17(a)(3) of the Securities Act [15 U.S.C. § 77q(a)(3)] in the offer or sale of any security by the use of any means or instruments of transportation or communication in interstate commerce or by use of the mails, directly or indirectly, to engage in any transaction, practice, or course of business which operates or would operate as a fraud or deceit upon the purchaser.

IT IS FURTHER ORDERED, ADJUDGED, AND DECREED that, as provided in Rule 65(d)(2) of the Federal Rules of Civil Procedure, the foregoing paragraph also binds the following who receive actual notice of this Final Judgment by personal service or otherwise: (a) Defendant's officers, agents, servants, employees, and attorneys; and (b) other persons in active concert or participation with Defendant or with anyone described in (a).

III.

IT IS HEREBY FURTHER ORDERED, ADJUDGED, AND DECREED that Defendant is permanently restrained and enjoined from violating Section 13(a) of the Securities Exchange Act of 1934 (the “Exchange Act”) [15 U.S.C. § 78m(a)] and Rules 12b-20, 13a-1, and 13a-13 [17 C.F.R. §§ 240.12b-20, 240.13a-1, and 240.13a-13] thereunder by failing to file, or by filing or causing to be filed, with the Commission any report required to be filed with the Commission pursuant to Section 13(a) of the Exchange Act and the rules and regulations promulgated thereunder, which filed report omits to disclose any information required to be disclosed or such further information, if any, as may be necessary to make the statements, in light of the circumstances under which they were made, not misleading.

IT IS FURTHER ORDERED, ADJUDGED, AND DECREED that, as provided in Rule 65(d)(2) of the Federal Rules of Civil Procedure, the foregoing paragraph also binds the following who receive actual notice of this Final Judgment by personal service or otherwise: (a) Defendant’s officers, agents, servants, employees, and attorneys; and (b) other persons in active concert or participation with Defendant or with anyone described in (a).

IV.

IT IS HEREBY FURTHER ORDERED, ADJUDGED, AND DECREED that Defendant is permanently restrained and enjoined from violating Exchange Act Rule 13a-15(a) [17 C.F.R. § 240.13a-15(a)] by failing to maintain controls and procedures designed to ensure that information required to be disclosed in the reports that it files or submits pursuant to the Exchange Act are recorded, processed, summarized, and reported, within the

time periods specified in the Commission's rules and forms, or by failing to maintain controls and procedures designed to ensure that information required to be disclosed in the reports that it files or submits pursuant to the Exchange Act are accumulated and communicated to its management, including its principal executive and principal financial officers, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure.

IT IS FURTHER ORDERED, ADJUDGED, AND DECREED that, as provided in Rule 65(d)(2) of the Federal Rules of Civil Procedure, the foregoing paragraph also binds the following who receive actual notice of this Final Judgment by personal service or otherwise: (a) Defendant's officers, agents, servants, employees, and attorneys; and (b) other persons in active concert or participation with Defendant or with anyone described in (a).

V.

IT IS FURTHER ORDERED, ADJUDGED, AND DECREED that Defendant shall pay a civil penalty in the amount of \$100,000,000.00 to the Securities and Exchange Commission pursuant to Section 20(d) of the Securities Act [15 U.S.C. § 77t(d)] and Section 21(d)(3) of the Exchange Act [15 U.S.C. § 78u(d)(3)]. Defendant shall make this payment within 30 days after entry of this Final Judgment.

Defendant may transmit payment electronically to the Commission, which will provide detailed ACH transfer/Fedwire instructions upon request. Payment may also be made directly from a bank account via Pay.gov through the SEC website at <http://www.sec.gov/about/offices/ofm.htm>. Defendant may also pay by certified check, bank cashier's check, or United States postal

money order payable to the Securities and Exchange Commission, which shall be delivered or mailed to

Enterprise Services Center
Accounts Receivable Branch
6500 South MacArthur Boulevard
Oklahoma City, OK 73169

and shall be accompanied by a letter identifying the case title, civil action number, and name of this Court; Facebook, Inc. as a defendant in this action; and specifying that payment is made pursuant to this Final Judgment.

Defendant shall simultaneously transmit photocopies of evidence of payment and case identifying information to the Commission's counsel in this action. By making this payment, Defendant relinquishes all legal and equitable right, title, and interest in such funds and no part of the funds shall be returned to Defendant. The Commission shall send the funds paid pursuant to this Final Judgment to the United States Treasury. Defendant shall pay post-judgment interest on any delinquent amounts pursuant to 28 USC § 1961.

VI.

IT IS FURTHER ORDERED, ADJUDGED, AND DECREED that that the Consent is incorporated herein with the same force and effect as if fully set forth herein, and that Defendant shall comply with all of the undertakings and agreements set forth therein.

VII.

IT IS FURTHER ORDERED, ADJUDGED, AND DECREED that this Court shall retain jurisdiction of this matter for the purposes of enforcing the terms of this Final Judgment.

* * *