

Facebook, Inc. (FB)
Fourth Quarter and Full Year 2017 Results Conference Call
January 31st, 2018

Operator

Good afternoon. My name is Mike and I will be your conference operator today. At this time I would like to welcome everyone to the Facebook fourth quarter and full year 2017 Earnings Call. All lines have been placed on mute to prevent any background noise. After the speakers' remarks, there will be a question and answer session. If you would like to ask a question during that time, please press star then the number 1 on your telephone keypad. This call will be recorded. Thank you very much.

Ms. Deborah Crawford, Facebook's Vice President of Investor Relations, you may begin.

Deborah Crawford, VP Investor Relations

Thank you. Good afternoon and welcome to Facebook's fourth quarter and full year 2017 earnings conference call. Joining me today to discuss our results are Mark Zuckerberg, CEO; Sheryl Sandberg, COO; and Dave Wehner, CFO.

Before we get started, I would like to take this opportunity to remind you that our remarks today will include forward-looking statements. Actual results may differ materially from those contemplated by these forward-looking statements.

Factors that could cause these results to differ materially are set forth in today's press release, and in our quarterly report on form 10-Q filed with the SEC. Any forward-looking statements that we make on this call are based on assumptions as of today and we undertake no obligation to update these statements as a result of new information or future events.

During this call we may present both GAAP and non-GAAP financial measures. A reconciliation of GAAP to non-GAAP measures is included in today's earnings press release. The press release and an accompanying investor presentation are available on our website at investor.fb.com.

And now, I'd like to turn the call over to Mark.

Mark Zuckerberg, CEO

Thanks Deborah, and thanks everyone for joining us today.

2017 was a strong year for Facebook in many ways. Our community continues to grow with more than 2.1 billion people now using Facebook every month and 1.4 billion people using it daily. Our business grew 47% year-over-year to \$40 billion.

I'm proud of the progress that our team has made and the ways Facebook is helping people around the world: giving people a voice who didn't have one before, strengthening relationships by helping family and friends stay connected wherever they are, and enabling more than 70 million small businesses to grow and create jobs.

But 2017 was also a hard year. The world feels anxious and divided—and that played out on Facebook. We've seen abuse on our platform, including interference from nation states, the spread of news that is false, sensational and polarizing, and debate about the utility of social media. We have a responsibility to fully understand how our services are used, and to do everything we can to amplify the good and prevent the harm. This is my personal challenge for 2018.

One of the most important things we can do is make sure our services aren't just fun to use, but also good for people's well-being and for society overall.

So far this year we've already announced a couple of important updates:

The first is prioritizing meaningful social interactions over passive consumption of content. Research shows that strengthening our relationships improves our well-being. When we use social media to connect with people, that correlates with long term measures of well-being that you'd expect, like happiness and health. But passively watching videos or reading articles may not have those same effects.

You can think about it this way. When you see a photo from a friend in News Feed, that's not just content that makes you smile or laugh, it's an opportunity to connect with that friend, to reach out to them and to remind them that you care about each other. That connection is deeply important to us as people. But when you see a video or a news article—even if it's informative or entertaining—unless you start a conversation around it, you're not building a relationship.

We've also gotten feedback from our community that these moments that lead us to connect are the unique experience that people want and expect from Facebook. But in the last couple of years, the ecosystem of public content like video, news, and posts from businesses has grown massively—to the point where it's starting to crowd out the personal connection people value most.

News and video will always be an important part of Facebook. But when people are spending so much time passively consuming public content that it starts taking away from the time people are connecting with each other, that's not good. So let me be clear: helping people connect is more important than maximizing the time they spend on Facebook.

As a result of this update, you will now see more content from friends, family and groups that lead you to interact with people, and less public content that leads to more overall time spent.

Now, as I made clear announcing these changes, I expect the time people spend on Facebook and some measures of engagement will go down as a result. But I also expect the amount we actually interact with each other to go up over time.

We're already starting to see this play out. On our last earnings call, I said that video done well can bring people together, but too often today, watching video is just a passive experience. To shift that balance, I said that we were going to focus on videos that encourage meaningful social interactions. And in Q4, we updated our video recommendations and made other quality changes to reflect these values.

We estimate these updates decreased time spent on Facebook by roughly 5% in the fourth quarter. To put that another way: we made changes that reduced time spent on Facebook by an estimated 50

million hours every day to make sure that people's time is well spent. That's how serious we are about this.

Now, we don't normally share time metrics because they're not the best way of understanding engagement. But this shows how committed we are to making sure the time you spend on Facebook is valuable.

Through this process, we have also gotten a sense for how some updates impact other metrics as well. For example, changes we made to improve quality in the fourth quarter contributed to a decline in people using Facebook daily in some countries.

By focusing on meaningful interactions, I expect the time we all spend on Facebook will be more valuable. And I always believe that if we do the right thing and deliver deeper value, our community and our business will be stronger over the long term.

In this case, it intuitively makes sense. If people interact more, that should lead to a stronger community. And we already know that time in News Feed interacting with people is more valuable than time passively consuming video or news. When you care about something, you're willing to see ads to experience it. But if you just come across a viral video, then you're more likely to skip over it if you see an ad.

So I want to be clear: the most important driver of our business has never been time spent by itself. It's the quality of the conversations and connections. And that's why I believe this focus on meaningful social interactions is the right one.

The second update we announced is about making sure the information you see on Facebook comes from broadly trusted and high-quality sources, in order to counter misinformation and polarization.

The idea is this update will show more news from sources that are broadly trusted across the community and not only by those who read them directly. For example, take the Wall Street Journal or the New York Times. Even if you don't read them or if you don't agree with everything they write, most people have confidence that they're high quality journalism. On the flip side, there are blogs that have intense followings but are not widely trusted beyond their core audience. We will show those publications somewhat less.

Preventing false news, hate speech, and other abuse is another important area of focus for us. In order to protect the security and integrity of our platform, we're investing in both people and technology. We now have around 14,000 people working across community ops, online ops, and our security efforts. That's almost double where we were a year ago. We've also built new technology to detect suicidal posts that has helped first responders reach more than 100 people who needed help quickly, and we've built AI systems to flag suspicious behavior around elections in real time and remove terrorist content. Thanks to our AI systems, 99% of the ISIS and Al-Qaeda-related terror content we take down is now removed before anyone even flags it to us—and in some cases, before anyone sees it.

We've also made progress demoting false news in News Feed, which typically reduces an article's traffic by 80% and destroys the economic incentives that most spammers and troll farms have to generate these false articles in the first place.

Finally, we've started rolling out a major ads transparency effort. We support Congress passing legislation to make all advertising more transparent, but we're not going to wait for them to act. We've already begun launching a way for anyone to view the ads a page is running on Facebook, Instagram, and Messenger—even if they aren't the intended audience. We're testing in Canada first with the goal of rolling it out in the US this summer ahead of the midterm elections.

As I said last quarter, I expect these investments—on top of other investments we're making—will significantly impact our profitability. But just like the changes we're making that will impact time spent, these investments will help us build a stronger community over the long term.

Now, building a stronger community also means delivering on our product roadmap for the next 3, 5 and 10 years.

Over the next three years, we know video will continue to grow, so our job is to build video experiences that help people connect with family, friends, and groups. That's why I'm excited about Watch as a place to connect with people who have similar interests, and it's why we launched products like Watch Party where friends can watch a show together.

Another important shift that we're seeing across the industry is the growth of Stories. We expect Stories are on track to overtake posts in feeds as the most common way that people share across all social apps. That's because Stories is a better format for sharing multiple quick video clips throughout your day. The growth of Stories will have an impact on how we build products and think about our business, including WhatsApp and Instagram, which are the #1 and #2 most-used Stories products in the world.

Beyond video, we have a long roadmap working to help people connect in meaningful ways.

Today, more people are using groups than ever. These include smaller groups of friends and family, and also larger communities where people connect around shared interests. We're focused on helping more people find the right communities for them and giving group admins and leaders the new tools they need to run these groups and help them grow.

The goal of Marketplace is to connect people through commerce. More than 700 million people each month now come to Facebook to buy and sell things. We launched Marketplace in 30 countries last year, including 11 countries in the last quarter alone.

Over the next five years, we remain focused on building ecosystems around our services that lots of people already use.

In Messenger and WhatsApp, we're working to give businesses more ways to communicate with their customers. We launched a plug-in for Messenger so people can chat live with companies on their websites, and now more than 2 billion messages are sent between businesses and customers every month.

WhatsApp recently crossed 1.5 billion monthly actives, with people now sending more than 60 billion messages every day. A growing number of these messages are between people and companies, which is why we launched WhatsApp Business—a new app designed specifically for small and medium businesses to connect with people they want to reach.

Over the next 10 years, we're working on the foundational technologies needed to bring the world closer together.

Our goal with AI is to understand the meaning of all the content on Facebook to help us build better services. In addition to making it easier to get people the help they need and remove harmful content, this will also help us show more content that encourages connection and conversation.

On the VR side, we're excited to get Oculus Go into people's hands this year. Time Magazine named it one of the top inventions of 2017, and I can't wait for more people to use it.

So 2017 was a good year in many ways, but it was also challenging. That's why our focus this year will be making sure our services are not just fun, but also good for us—and I'm confident that we will rise to the challenge. Thanks to all of you for being part of this journey, and I'm looking forward to making more progress together.

And now, here's Sheryl to talk about our business.

Sheryl Sandberg, COO

Thanks Mark and hi everyone.

We had a strong fourth quarter and a great end to the year. Q4 ad revenue grew 48% year-over-year. Mobile ad revenue was \$11.4 billion, up 57% from last year, and contributed approximately 89% of total ad revenue in Q4. Full year 2017 mobile ad revenue grew 56% compared to 2016 – and was broad-based across regions, marketer segments and verticals.

We continue to make progress on our three priorities: helping businesses leverage the power of mobile, developing new ad products and making our ads more relevant and effective.

Facebook and Instagram are where people and businesses connect and are especially meaningful platforms for small businesses. Globally, 70 million businesses use Facebook. We surveyed small businesses in 18 countries, and 57% of them are employing more people due to growth in demand since joining Facebook. Last week, I met Adam of Kings Barbers Club who started with 2 employees in Birmingham, England and now has 15 salons and 70 employees. I also met Domingo from Pescaria, a restaurant in Southern Italy that uses Facebook and Instagram to connect with customers. 80% of their diners – and 70% of their revenue – comes from Facebook. They opened their second restaurant, and now employ more than 60 people. Like Adam and Domingo, small business owners are some of the most dedicated entrepreneurs. They are the heart of every economy and create the majority of new jobs throughout the world.

As Mark said, we are taking strong action to maximize the good we do in communities. As part of this, we are investing heavily in small businesses and in helping people gain digital skills. In November we launched our Community Boost program, which provides digital training for people in need of work and helps local businesses and nonprofits get the most out of the internet. During my trip last week, I announced we're expanding the program to the EU. This year we'll visit more than 30 cities in the U.S. and Europe to work side-by-side with SMBs, startups and NGOs. Over 2 million people and businesses have already used our online and offline training – and by 2020, we'll have trained 1 million people and businesses across Europe alone.

As people and businesses shift to mobile, Instagram continues to grow quickly. There are more than 2 million active advertisers on Instagram and we announced in November that more than 25 million businesses have profiles on Instagram – up from 15 million in July. Instagram is a business’s mobile visual shop, and we’re seeing more people seek out businesses there. About two-thirds of the visits to Instagram business profiles are from people who don’t follow them yet – and this is helping bring in new customers.

Our second priority is developing innovative ad products.

Each year mobile advertising reaches new milestones during the holiday shopping season. A year ago, we saw mobile conversions – actions taken on a mobile website after viewing an ad on Facebook – surpass desktop conversions for the first time. In 2017, mobile conversions continued to accelerate. Data from 17 markets shows mobile accounted for 69% of online conversions on Black Friday and 64% on Cyber Monday. It also drove 80% of conversions on Singles’ Day, a popular day for online shopping in China and increasingly other countries. Big shopping days like these are the kind of global events that Facebook and Instagram are uniquely positioned to support.

During these events and throughout the year, businesses are using our innovative ad products like Dynamic Ads to connect and reconnect with shoppers. For example, Holiday Inn Express recently used Dynamic Ads for Travel with our Collection format to advertise to people who searched for hotels on their website but hadn’t yet booked. They ran ads with a video that showed a personalized selection of hotels for the city and dates people had looked up. This resulted in 3X higher return on ad spend than their previous campaigns. In Q4 we also launched Dynamic Ads for Auto, which allows dealers and manufacturers to show the right cars to the right audiences.

As we expand and improve our ad products, advertisers are increasingly developing mobile-first ads rather than simply taking their TV creative and putting them online. Mobile-first video was 50% of our video ad revenue this quarter, compared to 41% last quarter. We’re seeing these short-form videos work well in Instagram Stories, where people can watch a full-screen vertical video and swipe up to quickly learn about a product or brand. 60% of these ads are viewed with sound on.

Recently, Open Table used Instagram Stories to advertise their reservation service to US adults who are frequent diners or are interested in dining. They combined food and restaurant footage with a “Book Now” button. The ads reached 1.5 million people and achieved 33% lower cost per reservation than their other campaigns. We are making it easier for any advertiser to try Stories ads as part of their other campaigns on our platform.

Our third priority is making our ads more relevant and effective.

Targeting makes advertising better – more relevant to people and more effective for businesses. This is especially important for small businesses as they have limited budgets and need to make every dollar count. Facebook gives small businesses the same powerful tools that were previously only available to large advertisers – so they can reach the right people at the right time. For example, we’re continuing to invest in Value Optimization, which helps advertisers show their ads to people who are likely to spend more with them. We’ve been gradually rolling this out to advertisers using Web conversion, Dynamic Ads, and Mobile App Install ads. The early results are promising – over 2,500 businesses have tried Value Optimization since June and many are putting more of their budgets toward it.

We take our responsibility to prevent abuse of our ad systems very seriously, and we are investing heavily in both people and technology to protect the integrity of our platform. In addition to rolling out the ads transparency tool in Canada that Mark mentioned, we've disabled the option that lets advertisers exclude people in specific multicultural affinity segments until we can develop better safeguards against discrimination.

We're also focused on improving ad quality and delivering a better experience for people who interact with marketers on our platform. This holiday we took additional steps to penalize e-commerce advertisers who created misleading or negative ads.

In 2018, we'll continue to focus on our same three priorities – and do more to ensure the quality, transparency, and authenticity of ads on our platform.

As part of our effort to be more transparent, last quarter we published our Advertising Principles which have long guided our approach across all of our platforms. These principles are our commitment to the people who use our services. They are:

- We build for people first
- We don't sell your data
- You can control the ads you see
- Advertising should be transparent
- Advertising should be safe and civil; it should not divide or discriminate
- Advertising should empower businesses big and small
- And we're always improving our advertising

As Mark said, 2017 was a challenging and important year for Facebook – a year where we committed to increasing our investment in the safety and security of our community. It was also a strong year for our business, where our investments in helping our clients grow paid off. We will continue to make all of these investments in 2018 and in the coming years.

I'm thankful to our partners around the world and to our employees who work so hard to make us better every day.

Thanks, and now here's Dave.

David Wehner, CFO

Thanks Sheryl, and good afternoon everyone.

Q4 was a strong quarter for Facebook and a great end to the year. Full-year 2017 total revenue grew 47% to over \$40 billion and we generated over \$17 billion of free cash flow.

Let's begin with our community metrics.

Overall our global community is strong and growing. Daily active users on Facebook in Q4 reached 1.40 billion, up 14% compared to last year, led by growth in markets like India, Indonesia and Brazil.

This number represents approximately 66% of our 2.13 billion monthly active users in Q4. MAUs were up 269M or 14% compared to last year.

As Mark mentioned, certain product quality changes impacted our DAU growth. In the US & Canada, these changes contributed to a DAU decline of 700,000 compared to Q3. We don't see this as an ongoing trend, but we do anticipate that DAU in this region may fluctuate given the relatively high penetration level.

We continue to see healthy growth across the Facebook family of apps including Instagram, WhatsApp and Messenger.

Turning now to the financials. All comparisons are on a year-over-year basis unless otherwise noted.

Q4 total revenue was \$13 billion up 47% or 44% on a constant currency basis. Foreign exchange tailwinds contributed \$329M of revenue in Q4.

Q4 total ad revenue was \$12.8 billion, up 48% or 44% on a constant currency basis.

Mobile ad revenue was \$11.4 billion, up 57%.

In Q4, the average price per ad increased 43% and the number of ad impressions served increased 4%, driven primarily by feed ads on Facebook and Instagram.

Payments & other fees revenue was \$193 million, up 7%.

Total expenses in Q4 were \$5.6 billion, up 32%. Headcount remains a primary driver of total expenses. In Q4, we added approximately 1,900 people and ended the year with over 25,000 employees, up 47% compared to last year.

In 2017, we made significant investments in R&D and security. On the R&D side, we added more people in 2017 than we did in 2016 and 2015 combined.

On the security side, as Mark mentioned, we have accelerated our efforts and at the end of the year had around 14,000 employees and contractors working across community operations, online operations, and integrity efforts. We also continued to invest aggressively in key areas such as content and our long-term innovation efforts.

Q4 stock based compensation expenses were \$814 million which was down from the \$831 million in Q4 of last year due to a decline in deal-related stock based compensation expenses. As a reminder we acquired Oculus and WhatsApp in 2014 and we expect the deal-related SBC expenses to be substantially recognized by the end of 2018.

Q4 operating income was \$7.4 billion, representing a 57% operating margin.

Our effective tax rate was 43%. In Q4, we recorded approximately \$2.3 billion in one-time charges as a result of the 2017 Tax Cuts and Jobs Act. This was largely driven by the mandatory transition tax based on the accumulated earnings from our foreign subsidiaries.

Net income was \$4.3 billion or \$1.44 per share. Again, the one-time charges related to the tax on accumulated earnings reduced EPS by approximately \$0.77.

Full-year 2017 capital expenditures were approximately \$6.7 billion, driven by investments in servers, data centers, office facilities and network infrastructure.

In 2017, we generated over \$17 billion in free cash flow and ended the year with nearly \$42 billion in cash and investments.

In 2017, we bought back approximately \$2 billion of our Class A common stock and had approximately \$4 billion remaining on our current authorization as of December 31st. We remain committed to repurchases of our stock to help manage dilution.

Turning now to the revenue outlook.

We believe we have good opportunities to grow the business across both Facebook and Instagram in 2018. We continue to improve the effectiveness of our ads which helps drive ROI for advertisers and demand for our ad products. On the supply side, we expect we will be able to continue to grow ad impressions at a modest pace.

In 2018 we expect constant currency ad revenue growth rates to decelerate consistent with the trends we have seen over the past year. I would also note that in the first half of 2018 we will likely benefit from favorable exchange rate tailwinds due to the recent depreciation of the dollar.

Moving on to expenses.

We continue to expect full-year 2018 total expenses will grow approximately 45 to 60% compared to full-year 2017.

Turning now to Cap Ex. We expect that our full-year 2018 capital expenditures will be in the range of \$14 to \$15 billion, driven by increased investment in data centers, servers, office facilities and network infrastructure.

We currently anticipate that our full-year 2018 tax rate will be in the mid-teens.

In summary, 2017 was another good year for Facebook. We continued to grow our global community and deliver great results for our advertisers.

Importantly, we accelerated our investments to make our products better and the community stronger as we push forward on our mission of giving people the power to build community and bring the world closer together.

With that, Mike, let's open up the call for questions.

Operator: We will now open the lines for our question and answer session. To ask a question, press "star" followed by the number "one" on your touchtone phone. Please pick up your handset before asking your question to ensure clarity. If you are streaming today's call, please mute your computer speakers.

Your first question comes from the line of Brian Nowak with Morgan Stanley.

Brian Nowak: Thanks for taking my questions. I have two. The first one, the quality changes that you mentioned that lead to an impact on daily active users in North America. I guess any further detail on what those quality changes were? And what makes you feel comfortable that this isn't likely to continue? I think you may need to make further changes in cleanup throughout the course of the year.

And the second one, Mark, I thought your commentary on Stories engagement was really helpful. I'd be curious to hear about early learnings on monetization of the Stories format and any challenges made to overcome to drive monetization through that consumption.

David Wehner: On the quality changes and the impact on DAU and the U.S. and Canada, really, no further I think elaboration on that. I would just say that we don't anticipate that that will be a continuing trend, but given the high penetration rates, we do think that there will be some fluctuation there. There's a lot of different effects that come from the different quality changes and the focus on meaningful social interactions. But that's our expectation at this point.

Sheryl Sandberg: On story monetization, ads in Stories and Instagram is a small but quickly growing part of our revenue. There are 300 million daily actives on Instagram alone. And the format is pretty exciting from a sales point of view because it has a lot of potential. It's full screen, it's authentic, it's very engaging. So the opportunity in the future for us to combine the power of this new format with the targeting and measurement we offer, we think is going to be really powerful in the business of our clients. Its early days, but I'm pretty optimistic about this.

Operator: Your next question comes from the line of Doug Anmuth with JPMorgan.

Douglas Anmuth: Thanks for taking the question. First, Mark, you made it pretty clear that driving meaningful social interactions is the company's priority this year. But can you talk a little bit about how the changes you're making impact advertising? Maybe you can talk about how you're thinking about any changes around ad load or just overall impression volume.

And then how do ads work in an environment of more friends and family content, in an environment where you don't see as many business posts? And then secondly, can you talk about GDPR as well? I don't think you mentioned it, but just curious. I mean, you put the blog post out the other day. But if you could talk about how you're preparing here, that's a little out over the next few months, and whether you think that presents and the risk to engagement or monetization.

David Wehner: Doug, it's Dave. I'll start off on the impact on the business. The biggest focus -- the biggest impact on the focus on meaningful interactions, as Mark mentioned, will be in areas like passive video where from a business perspective, we monetize less on the time spent basis. So if you think about it in terms of things like posts, views in News Feed which drives impression growth, we think this will have a less of an impact.

So that's sort of built into what I had said about the business commentary when I commented on 2018 revenue outlook. We still, I believe, we have an opportunity to grow impressions on a modest pace year-over-year across the platform.

Sheryl Sandberg: When I think about the MSI changes, obviously any change that's beneficial for the community is good for the long-run health of our business. Because as Mark said, we care not just about time spend on Facebook, but time well spent. But even in the shorter term, all time spent on Facebook is not equal. Because when people spend time viewing more posts, because they're interacting with family and friends, and they're not involved in longer posts, we have actually more monetization opportunities.

We're not doing this to be positive or negative for revenue, we're doing it because it's the right thing for our community. But the impact it has on monetization is certainly not clearly negative. When you think about GDPR, the Facebook family of apps already applies the core principles in the GDPR, which are transparency and control. And we're building on this to make sure that we're ready to fully comply by May.

We're going to continue to give people a personalized experience and be clear how we're using data and give choices. And we realize that this means that some users might opt out of our ads targeting tools. We also know that there may be a DAU impact for implications on European usage. But from the targeting, we're not forecasting a big impact here. There's some risk and we're watching closely. Over the long run, we feel confident that we're very well placed to navigate the transition.

Operator: Your next question comes from the line of Heather Bellini with Goldman Sachs.

Heather Bellini: Great, thank you. I had two questions. One, I was just wondering what the advertiser response is then to the lower engagement, and also just the kind of, I guess cleaning up of the News Feed, if you will. What's kind of their view on this? And also, can you share with us any metrics on Watch? And I know it's really early, but anything that's interesting from an engagement perspective here and kind of how you think this could evolve? Thank you.

Sheryl Sandberg: On the DAU impact and the advertiser response, our business is strong. We have over 184 million people using Facebook every day in the U. S., which is considerably more than Super Bowl every day on mobile alone. We also have we think the best ability to make advertising relevant for businesses and people who see ads.

We're continuing to build products that allow business to get a higher return for the dollars they spend and allow people to see more relevant information and ads on our platform. So we're pleased with the growth, and we believe that delivering the strong quarter we have shows that. On Watch, it's just early days. We have a dedicated place for people to watch and comment. We're heavily focused on the social aspects of video viewing, but it's too early to report any real findings.

Operator: Your next question comes from the line of Eric Sheridan with UBS.

Eric Sheridan: Maybe following up on the theme around engagement and the changes on product first. How would you be defining success? What will you be watching for in terms of either the time spent on the platform, or the user growth on the platform, or relative engagement to say that you got the mix right and that people are seeing the right content and have a healthy experience with Facebook over the next couple of years?

That would be number one. And number two, Dave, with respect to the OpEx and CapEx, given the intent of the company that you get a lot of things right on the security side and with repositioning product, should we expect there to be a different cadence this year in terms of the investments that the company might make, maybe more first half versus second half? Want to know if there was any color there.

Mark Zuckerberg: I can take the first point about meaningful social interaction. So the product directive that I've given to all of our teams is to shift from focusing on showing the most meaningful content to people to instead to now encouraging the most meaningful social interaction. So that will first take hold as a series of News Feed changes. But over time, there are going to be new products that we build, new interfaces that the team has designed with that goal of encouraging interactions between people.

So the thing that we're going to be measuring is basically, the number of interactions that people have on the platform and off because of what they're seeing that they report them to us is meaningful. One interesting thing that I think that's worth being clear about in terms of how we develop News Feed, I think there is this myth that we designed News Feed in order to adjust optimize for a time, or for likes or comments or some signals like that.

The reality is the way that we've done this for years is we've had a panel, a survey, of thousands of people who basically we asked, what's the most meaningful content is that they had seen in the platform or they have seen off the platform. And we design our systems in order to be able to get to that ground truth of what people, real people are telling us is that high-quality experience.

So now we're going to shift that methodology a little bit to instead of just being focused on the content, now to be more focused on trying to measure and have people tell us what is creating the most meaningful interaction in their lives right? Not just on Facebook. It could be a message that you have on Messenger or WhatsApp, but it could also that you see something on Facebook and have a conversation about that in the world with someone who's meaningful to you.

And that's something that we need to understand that. But that's basically what -- where we're going to be moving all the systems towards -- over the next period of time and is not going to be one News Feed change that happens overnight. It will be

a series of rollouts and then a number of product changes that go to the interface of the product of things we launched of those things as well.

David Wehner: And then, Eric, you had a question about how we might expect expense growth to progress through the year. There's no specific one item that's going to drive it. So we would expect expense growth to ramp throughout the year, largely due to the factors that we've talked about on prior calls in terms of what's driving the overall acceleration. There's the continued investment on the security front.

We talked about that in both Mark's comments and my comments, and we're continuing to ramp that investment. We are continuing to invest to support this video strategy on Watch so we expect that content investment to continue and ramp. And then finally, we're continuing to invest in the long-term initiatives in areas like AR, VR, AI and connectivity. So across the board, we would expect expense growth to ramp throughout the year.

Operator: Your next question comes from the line from Peter Stabler with Wells Fargo Securities.

Peter Stabler: Thank you, Two if I may, one for Dave and one for Sheryl. First of all for Sheryl, I'm wondering if you could update us on the search opportunity. Given the rapid growth of product advertising on the platform, is there an opportunity for Facebook to transition from more of a demand generation platform to demand fulfillment?

And then for Dave, can you give us a sense of the timing changes to the News Feed? Is this a fully completed rollout where there are different cohorts that saw it first? Was there any regional phasing or anything like that. Thank you.

David Wehner: Yes, Peter. I'll take the second part first. We began to make changes around a number of different quality initiatives in the fourth quarter so that affected metrics that we've talked about, including both the time spent and the DAU. But we continue to make changes to improve and to optimize around driving meaningful social interactions, as Mark talked about.

That's going to be an ongoing journey throughout the year. So there's no -- I don't think we ever are going to declare that we are done making changes. changes. So I'd expect we would continue to make changes and evolve.

Sheryl Sandberg: On the search opportunity, there's a growing number of searches on Facebook, but we're still a ways off from monetization. It's worth noting though that because of our ads targeting and our ability to reach people multiple times, we do believe that some of our ad success is taking people from demand generation through demand fulfillment.

So we have multiple clients who will show an ad, video ad to everyone in the U.S., for example, or to a big cohort of people. And then they'll follow up with an ad that targets on either Instagram or Facebook. The people who engaged with that first ad; then they can follow up with the next team. And we are seeing as businesses are increasingly measuring their ad spend in terms of their real ROI per sales that even within our own platforms, we can move people down that marketing tunnel from demand generation to demand fulfillment.

Operator: Your next question comes from the line of Justin Post with Bank of America, Merrill Lynch.

Justin Post: Great, thank you. Dave, maybe you could talk a little bit about the sustainability of the pricing growth that you're seeing with advertising. Obviously your outlook for next year suggests that it decelerates modestly, but it's certainly at a very high level, and talk a little bit about that. And then maybe Mark or Dave, just talk about how the Watch tab is evolving. Are you seeing a lot of usage there? And how do you think about content in the Watch tab versus the new feed? Thank you.

David Wehner: Yes. Sure, Justin. On pricing growth, I think there, we feel like we're making good progress in our goal of driving better outcomes and ROI for our advertisers through things like better targeting, better ad units, driving better conversion. And we think we're making good progress there and the willingness of advertisers to continue to grow budgets with us, I think highlights our progress there.

Remember, they're optimizing at the end of the day for business results for given dollars spent, not the impression price that we're kind of normally reporting here. So you think of all this work. And Sheryl talked about the Value Optimization efforts as part of that of being an effort to improve the yield of the impressions that we have to drive downstream business results for our advertising partners.

And if we can drive those effectively, that will translate into higher effective prices for our business. And as I mentioned, I think we believe we still have a lot of work to do you to continue to improve that. So we think there's opportunities here.

Mark Zuckerberg: And for Watch, I -- it's early, there are some promising signs. But in terms of how we think about this overall compared to News Feed, I would say it's really important to internalize that the News Feed video ecosystem and the Watch video ecosystem are almost completely separate things, right. So the Watch behavior that we're building is one where people come intentionally to watch specific videos and to interact with the community around that.

That's in contrast to what we worry is too passive consumption of an experience in News Feed today, where people just happen to often see a video, and maybe they'll watch it for a few minutes, but may not interact around it as much in News Feed.

So we're still very optimistic long term that Watch will be a use for video that helps to be bring people closer together, and that will correlate with all the things that our community is telling us they want and that correlates with the measures of well-being that we think that social products can generate by helping people build relationships in terms of all the long-term measures of well-being that we care about; like long term happiness and health, etc.

Operator: Your next question comes from Mark Mahaney with RBC Capital Markets.

Mark Mahaney: Two questions please. European advertising revenue growth, or your ad revenue growth in Europe, accelerated. Is that just currency? Or anything else you would call right there? And then you talked about progress in moving away from kind of demand -- or creation towards demand fulfillment or including demand fulfillment.

And I was wondering if you could give any more examples of that. I know, Sheryl, two years ago or so, you mentioned booking.com being on the platform. I still think those OTAs, based on our work, are still doing 10x as much spend on Google. So there's a real opportunity versus Facebook. Are there examples or any other evidence you can show or talk about that companies are really finding the ability to do demand fulfillment on Facebook? And what's caused that to change? Thanks a lot.

Dave Wehner: So let me just quickly hit on the constant currency question I think you had at the beginning, Mark. The acceleration that we saw from Q3 to Q4 was currency for Europe. But Europe continues to grow at a very healthy pace, and on a constant currency basis. So we're very pleased with the results, both in constant currency terms and nominal terms. And then Sheryl.

Sheryl Sandberg: So to take the first question, the EU, the strength in Europe was driven by SMBs. We grew across the board with large companies too, but SMBs were really important for this. There are 18 million small businesses on Facebook in Europe, and I had a chance to meet a lot of them on my trip. But to mention just one, which just shows the point, a couple named Linda and Marius started a company called IELM. They're a kids clothing retailer.

They started on Sweden on Facebook. She was sewing in her living room and selling them. Facebook is driving about half their sales. They then opened a factory in Romania and moved back to Romania where they're now employing 100 people. And they're shipping across Sweden, Romania, Germany and Austria. They're still a small business at 100 people, but they're a growing business and showing the power of how our work with SMBs is growing jobs.

You were asking also for an example of demand generation going all the way down to demand fulfillment. Here's another one from Europe. Gym Shark is a fitness clothing brand based on the U. K. They ran Facebook video ads and Instagram story ads for their Black Friday campaign. And then they targeted with look-alikes people who had previously purchased, and Custom Audiences for people who started but didn't complete the purchase.

And they saw a 9.3x return of investment over the two week holiday period. What happens on our platform is often people that will start out doing demand generation and use the repeat opportunity to show people ads, moving down the funnel to demand fulfillment. If you use our targeting tools well, you can actually start out with demand fulfillment.

So some of these examples I've shared on this call, from Holiday Inn to Gym Shark, are about people using the targeting tools to find people who are interested in the products, and then you can get closer and down the funnel to demand fulfillment.

Operator: Your next question comes from the line of Ross Sandler with Barclays.

Ross Sandler: Just two questions. Mark, on the topic of passive versus active consumption. Can you talk about what percent of the DAUs actively contribute today versus just the lean back passive consumption? And how has that ratio maybe changed versus 5 or 10 years ago based on some of the product changes that you had in News Feed?

And then, Dave, just to follow up on pricing. So there was a bunch of noise given the growth rates of desktop versus mobile. Can you talk about what pricing growth looks like in mobile on a like-for-like geography basis. Is that 20 percent, 30 percent? Any color there would be helpful.

David Wehner: Yes, Ross. I guess I'll take both. Yes, we don't break out the type of metric that you're talking about on the passive versus active consumption. So we don't have anything specifically to share there. In terms of breaking out pricing on a -- on a mobile basis I mean, I think overall that the trends reflect generally what's happening on mobile, but there is still an overlay of the shift from desktop. But overall, we are seeing prices increase on mobile in regions, so I think that's consistent with the reported trend.

Operator: Your next question comes from the line of Brent Thill with Jefferies.

Brent Thill: Thank you. On Instagram, I'm just curious if you could give a bit more color on the progress that you're seeing. Any metrics to help fill in what's happening there?

David Wehner: We continue to be pleased with the growth of Instagram, both on a user basis and on a revenue basis. It continues to make an increasing contribution to the business. So we're very pleased with the Instagram results, nothing specifically to highlight from a metrics point of view.

Sheryl Sandberg: On the business side, I think we have -- are both please that the results but see a very big opportunity in front of us. We have 6 million advertisers on Facebook, which means that we have a lot of opportunity on Instagram, where we only have two million advertisers, to grow their engagement with us and their spend.

Operator: Your next question comes from the line of Michael Nathanson with MoffettNathanson.

Michael Nathanson: I have one for Mark on news trustworthiness and then the group and sports. So Mark, I realize that you're taking great pain not to play the role of news editor on your platform. You're asking users about trustworthiness. But I wonder, does that pick up biases in our own theories of what we believe to be trustworthy, and how do you get past that?

And then would it make sense to just simply you play the role of populating a new News Feed, maybe its own tab, with news that we all believe -- we believe to be trustworthy. So at some point, you take a more active role and identify the news

that your platform believes to be real news and maybe create a new tab that way. Is that ever something in your thinking?

Mark Zuckerberg: The value that we care about here is helping to build common ground, right, and helping to do our part to fight false news and polarization. So what we're doing with this specific change, which is one of a number of News Feed changes that are geared at improving the quality and trustworthiness of news on Facebook, is to we basically ask people -- we don't want to assess by ourselves which sources are trustworthy.

I think that's not a situation that or a position we're comfortable with ourselves. I don't think personally that that's something that our community or our society wants us to do. So for all of the feedback that we get that we should take more of a view on that, I actually, I don't believe that, that is the right thing broadly.

What we try to do is get our community to tell us what matters to them. Because we believe that when we can get an accurate signal from the community, then -- people are smart. They know what they want and what's good. And they can tell us that if we can ask them in a simple enough way and get aggregate data. And so what we're doing is we're basically just asking people if they're familiar with news sources and whether they trust them.

And the effect of that is that it basically normalizes for -- there are going to be people who read a given news source, who will probably trust it because they need that. But the question is for people who don't read who are still familiar with it, do they think it's trustworthy? And that's the example I gave before of The Wall Street Journal or New York Times. A lot of people read those, a lot of people don't.

But people who don't still think the high-quality journalism in general. And that's not true for a lot of the other stuff that's out there. And we found that that's a reliable signal of content that helps to build common ground that is unlikely to be polarizing, that is unlikely to be false news. And what we're doing is helping to show that a little bit more. Again, we're not going to tell you that you can't share other stuff, right?

You can share that on the platform. People can go to your profile. But in News Feed, we're going to show that a little bit more do to what we view as our role is helping us building common ground and counter some of these other forces in the world.

Sheryl Sandberg: On the Sports answer, sports is one of the ways that people get together on Facebook and build community. We're excited to bring the UEFA Champions league soccer and college basketball to Facebook. And we're going to continue to experiment with developing many different forms of content for Facebook.

Operator: Your next question is from the line of John Blackledge with Cowen and Company.

John Blackledge: Great thanks. Two questions. On Marketplace, with the expansion to 30 countries, just wondering how the business model evolves over time. Does it kind of mirror Amazon's third-party business or eBay's marketplace business? And then just on the ad units, on a midroll video ad, just wondering, I know it's early, but just any color on the ad demand, and perhaps how you think about the impact of this ad units over the next couple of years.

Sheryl Sandberg: On Marketplace, we're just going to continue to iterate on the ads test. We're pretty encouraged by what we've seen, even though it's pretty early days. What we're excited about is that our business is helping people connect with things they want to buy. It's also important to note that commerce is a really important vertical in our ads business so it's not just that commerce is being driven in ads in Marketplace, but in a much bigger way, commerce, discovering products all the way through to sales is a big part of what's driving our ads business.

Operator: Your next question.

Sheryl Sandberg: Sorry, on ad breaks for mid-roll video. Early days, pretty good results, more than 70 percent of ad breaks up to 15 seconds in length on Facebook and Audience Network are being viewed to completion. Most are being viewed with the sound on, but again, it's very early for this.

Operator: Your next question is from the line of Anthony DiClemente with Evercore ISI.

Anthony DiClemente: Thanks for taking my questions. Sheryl, just hoping you could help us think about how marketing budgets grow as retail moves online. So investors we speak to ask the question about the addressable market for Facebook. Is it -- is the addressable market running out of opportunity as the platform gets larger? Do you believe the overall ad market or the TAM is possibly experiencing structural expansion due to a shift in e-commerce overall?

And then Mark, I wanted to ask about AI. Can you just talk about the broader applications of the technologies that you are investing in to improve the user

experience and safety on the platform? So I understand you're using AI to improve the quality of the experience and engagement. But should we be thinking about these investments as also enabling new features and products over time whether it be shipping hardware or custom chips or potentially AI as a service externally?

David Wehner: Anthony, on the marketing budget, we continued to think we've got great opportunities to grow in the large global advertising market. When you get sort of down to the microlevel, you talked about e-commerce. E-commerce was -- is and remains one of our strongest verticals in Q4. And we think we're doing an excellent job of building the right products for e-commerce retailers.

And Sheryl talked about Value Optimization and that sort of work that we're doing. And so I think we've got continued opportunities with e-commerce going forward. So I think we're very well positioned in the e-commerce space. On AI?

Mark Zuckerberg: I can talk about AI. So machine learning is -- the improvements there are by far the largest technological trends that we're seeing in the industry and across the business. And we really see it in three ways. The first and most tactical are just the optimization to everything that you see, from ranking in News Feeds, to ranking of ads, or search, or improving our security systems.

And that's driving a lot of the business and the quality improvement that we're seeing, and that's really important. The second category, I would call qualitative changes in how we do business. For example, in News Feed, historically, all the content that's been in News Feed has been content you're connected to. You become friends with someone, or you follow a Page, and then their content can show up in News Feed.

But long term, -- or not even long-term, over the next several years as we develop an understanding of all the content on Facebook, that won't be a constraint anymore. At some point, we'll be able to understand the meaning of all the content that's posted that you could potentially see and use that as candidates to potentially improve your experience and make it that you can view more content than you might be able to today and of course we'll do that to help encourage more social interaction.

The way that this is improving the work that we're doing around security and integrity is also very fundamental. Today, that whole model is that people can post what they want and then a person can flag it and then our systems will look at it.

But increasingly, as we move into the future, we're going to be able to proactively take down some negative content. I gave the example of the terrorism-related content and some things around suicidal posts where someone posts something that they're thinking about suicide.

Now today, we don't have to wait for someone to report it a lot of the time. In the last few months, there have already been more than 100 instances where we've been able to reach out and get in touch with first responders that can give people the help that they need. That's a big structural change in the way we do business in terms of protecting the integrity of our community.

The third major category is going to be completely new products and platforms. So there, we've talked about all the things that we're building around VR and AR and the ability to be present with anyone, anywhere. Certainly, AI is going to be a big part of that, both on the vision side and the voice side. And there are going to need to be big advances there, but that's really exciting.

But I think in each of those three categories, the optimization, the upgrading how we do business and really changing how that works in our products today, and then the new products this is -- I would say that improvements in machine learning are the most important technological trend in the industry now by far.

Deborah Crawford: Operator, we have time for one last question.

Operator: Your last question comes from the line of Mark May with Citi.

Mark May: Just wanted to ask a follow-up question regarding Mark's comments that user engagement had declined by I think 50 million minutes and daily hours in the quarter. I guess the question is, how confident are you that that impact was due to News Feed changes that you made proactively versus some other factors outside your control?

And if you are still fairly early in the process of making these quality improvements to the News Feed, do you expect for engagement declines to continue going forward? And just for Dave, I know you choose your words carefully. Just wanted to clarify, you mentioned this year, you expect constant currency ad revenue growth to decelerate, consistent with trends that we've seen in the last year. I think your constant currency growth rate in '17 declined by about 12 percentage points. Is that kind of what you're trying to lead us towards?

David Wehner: I can take the second question first, Mark. I think what I am trying to say is that we do expect constant currency revenue growth to continue to decelerate, consistent with the steady deceleration that we've seen over the past year. So we do expect that trend to continue. I'm not putting specific percentages around it.

Mark Zuckerberg: I can speak to the first one.

David Wehner: Yes.

Mark Zuckerberg: So in Q4, we made a number of quality changes that were largely around video. We are going to continue to make quality changes now going forward around meaningful social interaction. And I do think that, that is likely going to continue this trend of decreasing passive consumption. But if we do our jobs well, it should increase the number of meaningful interactions that people have.

And we think that's going to be positive. So we think it will help make the community stronger over the long term, and we think it will be good for the business in the long term. But this is what people are telling us is what they want on the product. It's the unique value that you can expect from Facebook. You could go to a lot of places to consume content, but there aren't a lot of services where you could strengthen your relationships.

That's what people want, so that's the right thing for us to focus on. It also lines up with all the well-being research that we've done which, as you know, there's been a lot of debate over the last year about the utility of social media and the Internet. We take this very seriously. It's our responsibility to make sure that we understand everything that's going on on our platform.

And one of the big takeaways from that is that time when people are engaging and building relationships is good time. That correlates with all the aspects of long-term well-being that you would expect, like happiness and health and feeling more connected and feeling less alone, and all of the things that qualitatively matter in our life. And we think we can help drive that and improve people's lives by doing that, so we're absolutely going to do that.

Deborah Crawford: Great. Thank you for joining us today. We appreciate your time and we look forward to speaking with you again.

Operator: Ladies and gentlemen, this concludes today's conference call. Thank you for joining us. You may now disconnect your lines.

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