

**Facebook, Inc. (FB)**  
**Second Quarter 2016 Results Conference Call**  
**July 27<sup>th</sup>, 2016**

**Operator**

Good afternoon. My name is Chris and I will be your conference operator today. At this time I would like to welcome everyone to the Facebook second Quarter 2016 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**

Good afternoon and welcome to Facebook's second quarter 2016 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](http://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 today.

We had another good quarter and first half of the year. Our community continues to grow around the world. 1.7 billion people now use Facebook every month, and 1.1 billion people use it every day. Our business is growing at a healthy rate as well. Total revenue grew by 59% year-over-year to \$6.4 billion, and advertising revenue was up 63% to \$6.2 billion.

Our results show our progress as we work to make the world more open and connected across our three-, five- and ten-year horizons. Over the next three years we are focused on continuing to build our community and help people share more of what matters to them. The next five years are about building our newer products into full ecosystems with developers and businesses. And over the next ten years we are working to build new technologies to help everyone connect in new ways.

I'll give an update on our progress across these areas, starting with how we're working to deliver better experiences for our community and more ways for people to share more of what they care about with anyone they want.

We continue to see excellent growth in our community. Over the past year we have added over 200 million people using Facebook on a monthly basis. And in the second quarter, time spent per person increased double digit percentages year-over-year across Facebook, Instagram and Messenger. And that doesn't even include WhatsApp yet.

One of the biggest opportunities to grow our community is in developing countries where connectivity is less advanced than what we take for granted here at home. So over the past couple of years, we've began making steady improvements to our apps to make them work regardless of the device or connection people are using. We also built a light-weight version of our Android app, called Facebook Lite, that is tuned to work on 2G networks and is now used by more than 100 million people.

We are also working on new tools to help people express themselves and understand what's going on with the people they care about. 10 years ago, most of what we shared and consumed online was text. Now it's photos. And soon, most of it will be videos. We see a world that is video first, with video at the heart of all of our apps and services.

Over the past six months we have been particularly focused on Live video. Live represents a new way to share what's happening in more immediate and creative ways. This quarter Candace Payne's Chewbacca mask video was viewed almost 160 million times. Live is also changing the way we see politics, as news organizations and delegates go Live from the Republican and Democratic conventions. And we have seen in Minnesota and Dallas how Live can shine a light on important moments as they happen.

This quarter we also launched 360 photos. You don't need a special camera to take them – you just take a panorama or use a 360 camera app on your phone and post it. Since we launched, more than 4 million 360 photos have been shared on Facebook -- with 1 million more being shared every week.

We're making good progress on core services within the Facebook app, like Search. A growing way people use search is to find what people are saying about a topic across more than 2.5 trillion posts in our network. Now people are doing more than 2 billion searches a day, between looking up people, businesses and other things that they care about. Continuous, steady improvement to services like search are an important part of helping people connect and realizing our mission.

We're also improving the experience for our community by building our business with more engaging ads. We have always emphasized the importance of measurement and value in driving real results for the businesses that use Facebook -- and that means helping them create more relevant and engaging ads.

Over the next five years we are working hard to build ecosystems around some of our newer products.

Instagram now has more than 500 million monthly actives, with more than 300 million daily. Now we're working to make the experience more engaging. Recently, Instagram began to rank its feed because we know that people have a better experience when they see more of the stories they care about. We're already seeing a positive impact in terms of time spent and the amount of content people are sharing. We've also introduced our advertising tools on Instagram and we're seeing marketers engage with people in creative and innovative ways.

In the two years since we separated Messenger from the main Facebook app -- which was a controversial decision at the time -- we've improved performance and given people new ways to express themselves. Now, for the first time, more than 1 billion people are using Messenger every month. I'm also happy with the updates we're making to WhatsApp -- which also has a community of more than 1 billion people. This quarter we launched new desktop apps and end-to-end encryption, and millions of people are using WhatsApp's voice calling features.

The scale we've achieved with our messaging services makes it clear that they are more than just a way to chat with friends. That's why we're also making it easier for people to connect with groups and businesses as well. We are going to keep focusing on this over the next several years.

I'm also excited about the early progress we're making on our 10-year initiatives. We are investing in new technologies to give more people a voice -- including the 4 billion people around the world who aren't yet online -- and helping more people take advantage of the opportunities that come with the internet.

We're still early in our journey with lots of hard work ahead, but we're making good progress -- like the first successful flight of Aquila, our solar-powered aircraft that will beam internet to places that have never been connected. Eventually, we're going to work with telecom operators and governments around the world to connect people on the outskirts of cities, rural areas and disaster zones where you can't get traditional connectivity today.

We've also been making progress with our initiatives around artificial intelligence and virtual reality. This quarter we announced DeepText, a deep learning-based engine that can understand the context of several thousand posts per second across 20 different languages. This is a long-term project but it also has some near-term benefits, like helping show people more of what they want to see and filtering out what they don't want to see.

We're also investing in new platforms to help people connect and share. We believe that virtual reality can help people share richer experiences and help everyone understand what's going on around the world. It's really early for us in VR but we're hitting some important milestones. As of the second quarter more than 1 million people a month are using Oculus on mobile phones through our Gear VR

partnership with Samsung. More than 300 apps are already available at the Oculus store for Gear VR, we've filled all of our pre-orders for Oculus Rift and we are seeing increasing demand from retail as stores plan for the holidays. While it's still early for augmented reality, we're doing AR research and are seeing lightweight versions of AR technology today in mobile apps like MSQRD.

So that's a recap of the progress we're making in our 10 year plan. We have a saying at Facebook that our journey is only 1% done -- and while I'm happy with our progress, we have a lot more work to do to grow our community and connect the whole world. That means making big investments and taking risks -- focusing not just on what Facebook is, but on what it can be.

I want to thank everyone in our community, all our teams, our partners and our shareholders for being a part of this journey with us.

And now, here's Sheryl.

**Sheryl Sandberg, COO**

Thanks Mark and hi everyone.

We had a great second quarter. Q2 ad revenue grew 63%. Mobile ad revenue reached \$5.2 billion, up 81% year-over-year, and was approximately 84% of total ad revenue. Our growth was broad-based across verticals, marketer segments and regions.

We're excited to announce that we now have 60 million monthly active business Pages on Facebook. We also continue to grow the number of active advertisers on our platform. This shows that both our free and paid products are providing value to marketers of all sizes around the world.

We continue to focus on our three priorities — capitalizing on the shift to mobile, growing the number of marketers using our ad products, and making our ads more relevant and effective.

First - capitalizing on the shift to mobile.

For 62 years, the advertising industry has gathered in Cannes to celebrate creativity. People have shifted to mobile and marketers know they need to catch up. Mobile is no longer a “nice” to do — it's a “must” do and we're working closely with marketers to help them make this transition.

The best marketers understand that people watch video differently in mobile feed. The goal is to create what we think of “thumb stopping creative” — videos that grab attention in the first few seconds, even without sound. For example, to drive awareness for Sour Patch Kids Gum, Mondelez targeted teens with non-chocolate candy interests. Working with VaynerMedia, Carat, and the Facebook Creative Shop, they created punchy 10-second looping videos tailored for Facebook and Instagram. The campaign helped the Sour Patch Kids portfolio beat sales benchmarks for the entire candy industry.

We're excited to bring more relevant video ads to people both on and off Facebook. In May, we

expanded Audience Network to include video for brand objectives. This means that advertisers can place brand video ads not just on Facebook and Instagram but across a network of apps and sites.

Our second priority is growing the number of marketers using our ad products.

Over a third of small and medium businesses in the U.S. don't have a website — and having a mobile presence is even more difficult and expensive. Creating a business Page on Facebook is as easy as setting up a personal Profile. This is why Facebook Pages are the mobile solution for many of the 60 million businesses using our products each month in the U.S. and around the world.

We've made it easy for business owners to manage their Facebook Page from their mobile device. Over 85% of active business Pages use mobile and 40% of active advertisers have created a Facebook ad on their mobile device. In Q2 we rolled out new tools to make it easier for businesses to promote posts and track performance directly from the Instagram app.

We've worked hard to make becoming an advertiser as easy as possible for these businesses. With just a few steps, and for as little as a few dollars, businesses can boost their posts to reach more people. Simplifying our ad products is key to advertiser acquisition — over 80% of new advertisers in Q2 started with simplified products, like boosted posts.

Once these businesses begin advertising with us, we make it easy for them to take advantage of even our most sophisticated capabilities. For example, Lighting Etc., a third-generation family-owned business, used Facebook and Instagram ads to drive in-store sales. They targeted 25-45-year-old homeowners interested in interior design, living within 35 miles of their showroom in Fort Worth, Texas. It was striking to them that on Facebook the size of our community meant they could reach over 300,000 people even with such specific targeting. They've seen a 40% increase in revenue in 2016 and they attribute this increase to their ads on Facebook and Instagram.

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

Our goal is to help our clients grow their businesses — whether it be moving products off shelves, driving online sales or building their brands. Our system constantly looks for the most efficient and effective way to drive these objectives.

Businesses that want to build their brands need to reach a large audience with a compelling story, and they're seeing strong results from immersive formats like Video and Canvas Ads.

Businesses working to acquire new customers need to reach high quality leads and convert them to action. We introduced Lead Ads in Q1 to make it easy for people to fill out forms on mobile devices right from News Feed. In Q2 we made it possible for advertisers to retarget people who opened or completed a Lead Ad form. For example, Nissan Turkey and the SEM Agency used Lead Ads to collect over 20,000 high-quality leads from people interested in buying a new car. They then used retargeting to show relevant ads to people who had completed these Lead Ads and ultimately drove vehicle sales. The cost of a high quality lead was 9.3 times lower on Facebook than all other online media.

Businesses selling products are getting search-like ROI from Dynamic Ads. Dynamic Ads allow advertisers to upload their product catalogue and target people with specific products in real time. Over 300 million people see Dynamic Ads each month and over 2.5 billion unique products have been uploaded by marketers. In Q2 we expanded Dynamic Ads to Instagram and also launched Dynamic Ads for Travel. For example, you can now advertise specific destinations and dates for hotel rooms.

We're pleased with the value we're driving for our partners and the progress we're making across our three priorities. With only a small fraction of our 60 million business Pages advertising, we have a lot of opportunity ahead. We also have a lot of hard work to do to help businesses make the shift to mobile and to drive results for our clients.

I want to thank our clients around the world for their partnership and their ongoing input, which informs our product development. I also want to congratulate our global teams on the results of their hard work and thank them for their dedication to our mission.

Thanks, everyone, and now here's Dave.

**David Wehner, CFO**

Thanks Sheryl and good afternoon everyone.

Q2 was another strong quarter for Facebook. Total revenue grew 59% to \$6.4 billion, and we generated over \$2 billion in free cash flow.

These results highlight the continued growth and engagement of our global community and the strength of our ads business, as advertisers benefit from our increasingly broad and deep portfolio of targeting, creative and measurement tools.

Let's start with our community metrics.

This past quarter was our strongest quarter in over 3 years in terms of absolute year over year growth of monthly and daily actives on Facebook.

In June, 1.13 billion people used Facebook on an average day, up 17% compared to last year. This daily number represents 66% of the 1.71 billion people who visited Facebook in the month of June. Mobile continues to drive our growth, with over 1 billion people accessing Facebook via mobile devices on an average day in June, up 22% compared to last year.

The growth of our other services also continues to be strong. WhatsApp and Messenger now each have over 1 billion monthly actives, and Instagram recently surpassed 500 million.

Turning now to the financials.

My comments today will focus on our GAAP financial metrics and all of our comparisons are on a year-over-year basis unless otherwise noted. A reconciliation of GAAP to non-GAAP financial metrics is included in our press release and earnings slides.

Total Q2 revenue was \$6.4 billion, up 59%. Q2 ad revenue was \$6.2 billion, up 63%. Exchange rates did not impact our overall revenue growth rates this quarter as headwinds in certain currencies were offset by tailwinds in others.

US & Canada and Asia-Pacific were our fastest growing regions with advertising growth rates of 69% and 67%, respectively.

Mobile ad revenue was \$5.2 billion, up 81% and representing approximately 84% of total ad revenue.

Let's turn to the supply and demand factors that continue to drive our growth. Advertiser demand was particularly strong in Q2 across a broad range of verticals and advertiser objectives. Additionally, supply-side factors including growth in users, time spent and ad load all contributed to our Q2 revenue growth.

In Q2, the average price per ad increased 9%, while total ad impressions increased 49%. The reported increase in price was again driven by the continued mix shift towards mobile where we show only higher-priced News Feed ads compared to the mix of News Feed ads and lower priced right-hand column ads on personal computers.

The 49% increase in total ad impressions was driven primarily by growth in ad impressions served in the Facebook mobile News Feed, where the majority of our ads are shown.

Payments & Other Fees revenue was \$197 million, down 8%. Remember that Payments & Other Fees revenue is largely generated from games played on personal computers which has declined as people spend less time on their PCs.

Q2 total expenses were \$3.7 billion, up 33%, inclusive of \$825 million of share based compensation expenses and related payroll taxes as well as \$193 million of amortization of intangible assets.

Q2 operating income was \$2.7 billion, representing a 43% operating margin. We continue to be pleased with the profitable growth of the business while we invest for the long-term.

We ended Q2 with approximately 14,500 employees, up 32% year-over-year. We added approximately 900 employees in the quarter with the majority of those in technical functions. We are seeing continued success with our efforts to hire top talent in a market that remains very competitive.

Our Q2 tax rate was 26%.

GAAP net income was approximately \$2.1 billion or \$0.71 per share.

Q2 capital expenditures were \$1 billion. Year-to-date, capital expenditures totaled \$2.1 billion, driven by investments in data centers, servers, office buildings and network infrastructure.

Facebook generated over \$4 billion in free cash flow in the first half of 2016, and as of June 30th, we had over \$23 billion in cash and investments.

Turning now to the outlook. First, some color on revenue.

We have been pleased with the strength of our advertising revenue in the first half of 2016. As I discussed on our last call, while we expect the main drivers of our advertising revenue growth will continue throughout 2016, we will face tougher comparables given the accelerating growth rates reported in 2015 and we anticipate lower advertising revenue growth rates in each successive quarter in 2016.

Additionally, we anticipate ad load on Facebook will continue to grow modestly over the next 12-months and then will be a less significant factor driving revenue growth after mid-2017. Since ad load has been one of the important factors in our recent strong period of revenue growth, we expect our ability to grow revenue will be impacted accordingly.

Turning now to expenses.

Based on our updated view of the remainder of the year, we are tightening our expense guidance ranges. We expect that full-year 2016 total GAAP expense growth will be approximately 30-35% narrowed from our prior range of 30-40%

We expect full-year 2016 amortization expenses to be approximately \$700-\$800 million, and that full-year 2016 stock-based compensation expenses to be approximately \$3.1-\$3.3 billion.

Accordingly we anticipate that our total Non-GAAP expenses, which exclude stock based compensation and amortization, will grow in the range of 45-50%, narrowed from our prior range of 45-55%.

We anticipate full-year 2016 capital expenditures to be approximately \$4.5 billion as we invest to support the rapid growth of the business.

Finally, we expect that our Q3 and full year 2016 tax rates will be similar to our Q2 rates.

In summary, Q2 was another great quarter for Facebook, illustrated by the strong growth and engagement of our global community and continued broad-based strength in our ads business. We're pleased with the results, and we will continue to invest in order to best position Facebook for our long-term growth opportunities.

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

### **Question & Answer Session**

**Operator:** Thank you. We will now open the lines for a question-and-answer session.



To ask a question, press star followed by the number one on your touch-tone phone. Please pick up your handset before asking your question to ensure clarity. And if you're streaming today's call, please mute your computer's speakers.

Your first question comes from the line of Eric Sheridan with UBS.  
Your line is open.

**Eric Sheridan:** Thanks for taking the questions. Maybe two. One on the video platform going forward and how you think about video as a distribution mechanism. How should we think about investments that need to be made in video on both the technical infrastructure side as well as the sourcing of content side to sort of broaden out the video offering over the next couple of years?

Then maybe on the last comment on ad load, just want to go back to that for a minute in terms of what you're seeing on ad load by region. Because we are seeing a widening gap in revenue per user between US and Canada and the rest of the world. How much of that might be driven by ad load or ad product?

Thank you so much.

**Dave Wehner:** Sure.

I can take the question on video distribution as it relates to CapEx and the ad load question and then maybe on the sourcing of content I'll pass it back to Sheryl.

So on the video platform, clearly from an investment perspective you've seen us step up our CapEx this year pretty substantially and that's baked into the guidance of \$4.5 billion of CapEx which if you recall is the high end of our prior range. We are investing across our infrastructure to prepare ourselves for growth across all of our different services and a part of that investment is really to support video.

That is definitely more taxing on the network and we're investing heavily on the network side. And as well, it does also impact our overall needs within the data center, servers and the like. So it's certainly an area we're investing in heavily and we expect to be investing in heavily going forward, Eric.

And then on the ad load question, ad load is not -- it's not something that varies that dramatically by region. So you're really looking at a number of factors. Really

what's driving that is just the dispersion of overall ad demand across regions. We're seeing really good strength across the globe on that front but ad load is not a big driver of discrepancies in ARPU that you see. That's really something that maps very closely to the size of the mobile ad markets per population in those countries. So it's not an ad load question.

And then I'll hand it over to Sheryl to talk about video from a content perspective.

**Sheryl Sandberg:** When you think about what's happening on video on our platform we're really excited by the production and consumption of video and we're seeing the full range from people posting the things in their personal lives; the power of what a mobile phone can produce and distribute now is pretty incredible when you compare it to just a few years ago to some of the most sophisticated content producers in the world producing for us.

We're experimenting across a wide variety of things. We're doing a partnership with the NBA to stream some US men's Olympic team games in the next couple of weeks. That said, our primary focus is on short form content, not long form content and we're pretty excited to see the different forms of content people will create, both to share messages to create new content and to engage audiences around the world.

**Operator:** The next question is from Douglas Anmuth of JPMorgan. Your line is open.

**Douglas Anmuth:** Thanks for taking the questions. I just have two. First on engagement, obviously the DAU and MAU numbers were strong and you gave the increase in the daily activity as well in the double digits but can you just give us some color on the user trends underneath that a little bit, more specifically perhaps what you might be seeing in terms of younger users and different age demographics?

Secondly, just going back to the ad load, we have in the past heard some caution from you guys before in that area. Granted it was a few years ago and at a much earlier stage. But I guess my question is if targeting continues to improve along with click-through rate and ultimately ROI, why does ad load have to become less of a factor going forward? Thanks.

**Dave Wehner:** Thanks, Doug. On the DAU and MAU front, couple things. One is DAU and MAU are up sequentially and year-over-year in all regions and with trends that are largely consistent with past quarters. So really good, strong growth across the globe on a DAU to MAU ratio. We don't do specific breakdowns of those metrics by demographic.

We're obviously pleased with our overall level of growth and engagement. On the teen front, younger users, we continue to be the best way to reach the largest global audience of teens and Millennials. Teens remain engaged on Facebook. Clearly how they've used our service has evolved over the years and in addition to Facebook they're using Instagram, Messenger and WhatsApp. So from a teen perspective, that's some color there.

On the ad load front, ad load is definitely up from where we were a few years ago. It's been an important driver of inventory growth and really I think one of the things that's enabled us to grow ad load has been improving the quality and the relevance of the ads as you mentioned. And we've been able to do that without negatively impacting the user experience.

We do expect that ad load will be a less significant factor driving overall growth especially after mid-2017. The optimal ad load is really a mix of art and science. We've carefully tracked the impact of ads on the user experience over the last several years. We aren't seeing a cause for concern.

We also want to be thoughtful about making sure that each person's overall feed experience has the right balance of organic and ad content. And that factors into how we think about ad load and where that might ultimately be. And that's really why we're talking about our expectation that as you get into mid-2017 ad load will not be a big factor in driving overall inventory growth.

We still see the opportunity to grow inventory from the growth of people and engagement on Facebook as well as our other services like Instagram. Instagram does have a lower ad load than Facebook.

**Operator:** The next question is from Brian Nowak from Morgan Stanley. Your line is open.

**Brian Nowak:** Thanks for taking my questions. I have two. The first one on the US advertising was particularly strong. Any specific ad category, branded, direct response, et cetera, or ad unit like video that's driving this growth in the US?

And then the second one just on Live Video. Recognizing it's very early with Live Video but any help at all on what percentage of your users are engaging with Live Video and the type of uplift you're seeing on engagement? Thanks.

**Sheryl Sandberg:** Our growth this quarter was very broad-based across all of the regions. We had especially strong growth in APAC and the US and Canada. So that was part of the growth. In terms of our marketer segments from brands to direct response to SMBs to developers, the growth is really strong there as well. We're really excited today to announce that we have 60 million small business pages that are using Facebook on a monthly basis.

And we're very focused on the opportunity to upsell them to advertising products. We think we have a good track record there. We're also seeing a lot of strength in brands and I think that's because we have a combination of the creative and the story telling. So the art with the science of the targeting. And when people do that well together, you see great opportunities.

So to share one example. Jack in the Box used our Canvas Ads which are very immersive ads; they're really good for our brand experience to roll out a new menu item, their Double Jack Burger. They worked with agencies, Horizon, David and Goliath and Adaptly. They targeted Millennials on Facebook to create two different custom audience groups. One group was customers who visited the restaurant web page or engaged with previous video ads.

And the second group were people that hadn't engaged with them directly but were quick service restaurant purchasers. They had an average view rate of 23 seconds across those Canvas Ads, so clearly people were really engaged in the brand experience of the ad and they had a 13 point lift in ad recall and a nine point lift in purchase intent.

I think what you're seeing is that across all of the objectives people have from brands, marketers to direct response to SMBs to developers, as our ad products get more sophisticated our targeting and measurement get better, they have an

increased opportunity to grow. And that's why we think our growth to date continues to be broad-based.

**Dave Wehner:** Yes, and Brian, I'll take the Live Video question. It's hard to compete with a double Jack burger.

In terms of Live Video, it's really early. We're really excited about it in terms of it providing an authentic and real form of sharing for people and we're really trying to give people the full range of tools to share what they care about with anyone that they want and Live is really effective there.

We've seen experiences both in terms of light hearted like (Candace Payne) and also more serious issues around the US and around the globe. So it's really an important part of what we're offering for people to share real experiences.

Video as a whole is making a significant contribution to time spent growth. When we talk about the time spent per DAU growing worldwide across our family in double-digit percentages, video is making a contribution there more broadly.

**Operator:** The next question is from Justin Post with Merrill Lynch. Your line is open.

Justin Post : Yeah, a couple. First, Mark, maybe on core Facebook, there's been commentary out there that maybe there's less personal sharing. Just maybe comments on the direction of Facebook, what the activities are going on, how you feel about that.

And then just about the ad loads, how are you deciding how much ads to show? Could you hold back a bit and drive higher pricing? How are you balancing that and why not hold back a little bit more now for longevity there? Thank you.

**Mark Zuckerberg:** Sure, so I'll talk about sharing and then I think Dave can probably talk about ad load and pricing. So the overall level of sharing is up on Facebook and what we're seeing is that how people share is evolving, as we move from desktop to mobile. So you can imagine more photos on people's mobile cameras, fewer long full photo albums, more ability to capture video, probably a little bit harder to type on mobile.

So there's this evolution. The other thing that we see is that now people have tools to share more privately as well. So when you think about sharing on Facebook, you

shouldn't just think about the kind of sharing that you see in News Feed. So sharing with all your friends, sharing in groups on Facebook and public sharing, which are the trends that I was just talking about.

But another area that's growing incredibly quickly is private messaging. Between Messenger and WhatsApp I think we're around 60 billion messages a day which is something like three times more than the peak of global SMS traffic.

That is something that is growing really quickly and that we're really excited about as well and we're going to continue working on giving people the best tools across the spectrum from private to public and across the spectrum from text based and simple communication to richer type of media like photos, videos and then eventually more immersive forms like VR.

**Dave Wehner:** And, Justin, In terms of ad load we talked about the different factors that go into it. Obviously just in driving the overall business, advertiser demand, that was particularly strong this period. And then also we matched that with supply.

The supply, the two big drivers are user and time spent and then ad load. And getting the balance and mix right is important and clearly how the pricing plays out is via the auction. And we've had a good balance of demand growth and supply growth and that's led to our good, strong financial results and our ability to deliver very strong ROI to advertisers.

So we think we're in a good zone on the right ad load and we do think there's opportunities to grow that modestly. But as we look forward into 2017 we think it will be a less significant factor driving inventory growth. We still think there's opportunities to drive inventory through user growth and time spent.

I don't think we would think about necessarily dropping ad load to drive pricing. We're also very cognizant of providing good value to advertisers and getting that balance right is important to driving overall ROI as well as obviously providing better targeting and measurement tools for our advertisers.

**Operator:** The next question is from Anthony DiClemente with Nomura. Your line is open.

**Anthony DiClemente:** Great. Thank you for taking my questions.

I have one for Mark and one for Sheryl. Mark, you mentioned search in your prepared remarks, 2 billion searches a day on Facebook. I also noticed you said you're making it easier for users to connect to businesses. How far away are you from commercial search on Facebook being viable? Why can't you do that today? And how big of an opportunity could commercial search be?

And then Sheryl, you mentioned the expansion of the Facebook Audience Network. Can you talk more about the revenue opportunity of bringing Facebook's targeting tools to other video publishers, how fast is Audience Network monetization growing, is it accelerating for example and how you see the revenue opportunity of expanding the Audience Network across the mobile web as well? Thank you.

**Mark Zuckerberg:** I can take search. So when we talk about our strategy I often talk about how when we develop new products we think about it in three phases. First, building a consumer use case. Then, second, making it so that people can organically interact with businesses. And then third, on top of that, once there's a large volume of people interacting with businesses, give businesses tools to reach more people and pay. And that's ultimately the business opportunity.

So I'd say we're around the second phase of that in search now. We have a pretty big navigational use case where people look up people and pages and groups that they want to get to and look at and search. One of the big growing use cases that we're investing a lot in is looking up the content in the ecosystem and that is an area that we're very excited about which helps people find more content.

But certainly there's a reasonable amount of behavior in there which is looking for things that over time could be monetizeable or commercial intense and at some point we will probably want to work on that but we're still in the phase of just making it easier for people to find all the content they want and connect with businesses organically.

**Sheryl Sandberg:** On the Audience Network, we continue to invest in ad tech and the Audience Network is a key part of our focus there.

We don't break out revenue by our different platforms but the opportunity to take not just video ads but other ad formats we have, bring them to the rest of the web and other apps with our ability to target and measure -we think is a big one. And

what we're starting to see is that people are using Facebook, Instagram, and Audience Network to drive their objectives in a cohesive way.

So to share an example. Garmin launched the Fenix 3 Sapphire watch and they did it with Video ads on Facebook that worked without sound. They targeted outdoor enthusiasts, then retargeted people who viewed the Instagram videos with carousel ads on Facebook that highlighted the product features. Then they extended those ads on Audience Network to maximize reach and they used the Facebook pixel to measure the incremental sales and got to a 9.7 times return on ad sales.

That's a really good example of how you can take targeting and the ability to target across Audience Network, Facebook and Instagram and drive people all the way down the funnel and we think more and more people will do that particularly as we do a better job of combining the interfaces. For example you can buy now in one interface on Facebook, Instagram and Audience Network.

**Dave Wehner:** Anthony, just one thing to add on top of that. We recognize the majority of our third party advertising revenue is the audience network on a net rather than gross basis. That will also minimize the impact that will have on the top line.

**Operator:** The next question is from Mark Mahaney with RBC Capital Markets. Your line is open.

**Mark Mahaney:** Mark, when you see what seems like phenomenal success of Pokemon Go, what are your reactions to that?

And then David, could you talk about the monetization ramp that you've seen on the messaging platforms. I know it's still very early days. Anything in there that strike you as being particularly substantive for material yet? Thank you.

**Mark Zuckerberg:** I like everyone else am enjoying Pokemon Go. The biggest thing that I think we can take away from this as we invest in augmented reality in addition to virtual reality is that the phone is probably going to be the mainstream consumer platform that a lot of these AR features first become mainstream, rather than a glasses form factor that people will wear on their face.

I think we're seeing this in a number of places, whether it's location through Pokemon or some of the face filter activity, I referenced the Masquerade app that



we acquired earlier in my remarks. That's kind of a fun way to augment social experiences that you're having with someone.

I think there's a big opportunity to build out that platform and a lot more functionality around that. And one of the big themes that we're talking about here is becoming video first. And as people look for richer and richer ways to express themselves, just like people in the past have shared a lot of text and photos on Facebook, we think in the future more of that is going to be video and more of these augmented reality tools I think are going to be an important part of delivering that experience and making that fun to use and expressive as it can be.

**Dave Wehner:** And Mark, we've talked about our strategy on how we go about monetizing the different apps in our portfolio and we usually talk about it in terms of three phases. Phase one is really growing the user base and engagement and we're really pleased with where we are with Messenger and WhatsApp from that perspective, both over 1B Monthly actives.

Second phase is really working on building organic interactions between businesses and consumers. And then finally the third phase is about building those commercial opportunities. With Messenger we're really at the beginning of phase two. Messenger today has a billion organic interactions between businesses and consumers each month.

In terms of where we are in having in terms of actual monetization, incredibly early on that front. We're really in that phase two, we're really talking about building those organic interactions.

**Operator:** The next question is from Heather Bellini with Goldman Sachs. Your line is open.

**Heather Bellini:** Great. Thank you very much. I was wondering, I guess this is a follow-up on Anthony's question, is there a way to think about maybe the percentage of your kind of top 100 customers or however you want to define it that might be using FAN as an add-on to their Facebook spending?

And I guess I'm wondering if you're seeing increasing leverage of FAN? And then the other question would just be political spending obviously wasn't a big driver for you guys in 2012 but it does seem like it is potentially a great opportunity in the back

half of the year. Was just wondering if you could comment on that at all. Thank you.

**Sheryl Sandberg:** On the political spending, our business is broad based enough that no one event drives our business. We're pretty large and diversified. While the political campaign obviously a lot of money is spent in ads; that's also true of an Olympics. It's also true of a World Cup. It's also true of a Superbowl.

With all of these events taking place around the world there's no one event we think drives a huge portion of revenue. That said we are pleased by what's happened on Facebook for the election cycle. Not just on the paid side but actually on the organic side as well. We really see Facebook being embraced by politicians all over the world to get in touch with their constituents and we're pleased with that.

Every member of Congress right now has a Facebook presence and we're seeing people like one example is Elise Stafanik who is the youngest person in the Congress. She made a pledge when she was elected that she would explain every vote she takes and she explains every vote she takes on Facebook with shorter explanations if they're not controversial but longer explanations.

That's the kind of mission based work we're happy about because it brings people closer to the people who are representing them. We don't break out how many advertisers are advertising on the Audience Network but we're seeing solid and growing adoption of the Audience Network across the board as we are with Instagram.

And we think all of these platforms together really help give us the ability to serve our clients in a very leveraged way and use the targeting and measurement capabilities we've invested in across multiple platforms.

**Operator:** The next question is from Carlos Kirjner with Bernstein. Your line is open.

**Carlos Kirjner:** Hi. Thanks for taking my question. First, some people believe that much of what users see in the news feed is driven by their behavior and preferences. And as a consequence, the stories they end up seeing are almost always in line with their existing views and preferences. Does this phenomenon in the end increase -- does

this phenomenon lead to increased adoption in the use of Facebook, creating more polarization of views and less effective communication? At least in some areas of people's lives?

Mark, how do you think about this line of thought that because people see things that are already in line with what they believe communication is hindered? When it comes to video ad formats, are you philosophically opposed to pre-rolls, and if yes, why, and if not, what is missing for you to adopt them? Thank you.

**Mark Zuckerberg:** So we have studied the effect that you're talking about and published the results of research that show that Facebook is actually and social media in general are the most diverse forms of media that are out there. And basically what -- the way to think about this is that even if a lot of your friends come from the same kind of background or have the same political or religious beliefs, if you know a couple hundred people there's a good chance that even maybe a small percent, maybe 5 or 10 or 15% of them will have different viewpoints which means that their perspectives are now going to be shown in your News Feed.

If you compare that to traditional media, where people will typically pick a newspaper or a TV station that they want to watch, and just get 100% of the view from that, people are actually getting exposed to much more different kinds of content through social media than they would have otherwise or have been in the past. So it's a good sounding theory and I can get why people repeat it. But it's not true. So I think that that's something that if folks read the research that we put out there, then they'll see that.

What was the other question?

**David Wehner:** Preroll.

**Mark Zuckerberg:** Preroll. I can take that one too. So we don't think it would be a good experience in news feed because a lot of when people are finding videos on Facebook is you're scrolling through news feed, you're looking at what stories seems interesting to you which is why we did the auto play videos so that rather than having to take an action you can start experiencing the video automatically and continue watching if it's something that you're interested in.

But if we started playing an ad in the middle of feed before you got to the video then that would really go against that. I think people would just watch a lot less of the organic videos that were posted because of that. But the important thing to keep in mind on this is we don't need to do prerolls because our model is not one where you come to Facebook to watch one piece of content.

You come to look at a feed and putting the ads in between the stories is a much more effective way to do it better for the user experience.

**Operator:** The next question is from Ross Sandler with Deutsche Bank. Your line is open.

**Ross Sandler:** Great. I had two questions for Mark. Mark, you guys mentioned when you released the latest Instagram MAU crossing the 500 million mark you give out the breakdown of US, international. Looks like US has been around 100 million for about the past nine months.

Is that just a pause along the growth path or is there something else that you're seeing that's causing that growth to stall out a bit in light of what you just said about engagement being up since you did the algorithmic reranking, any color there would be helpful.

Second question is just any update on Messenger M and how do you see that product potentially impacting engagement monetization on Messenger? Thanks.

**Dave Wehner:** On any update on M, I can start with that one.

**Mark Zuckerberg:** I was going to take that one.

**Dave Wehner:** You're going to take that one? On the Instagram MAU question, I don't think we're breaking out by region Instagram's MAU. So no, I don't think there's any update there that I'm aware of.

**Mark Zuckerberg:** Okay. Yeah, so we just haven't updated the stats.

**Dave Wehner:** Yeah.

**Mark Zuckerberg:** So for M, we've released the Messenger platform and bots in the last six months. F8 was the big announcement there. I think since then I think we've announced we

have more than 10,000 bots in the system which are basically making it so that different businesses can build automated ways to communicate with people.

The way we think about this experience is that qualitatively I don't know a single person really who wants to call a business to get support or interact with it, whether that's trying to get a reservation for a restaurant or getting customer support or calling the buy something. Those are slow interactions. They're synchronous.

They consume your whole attention while you're doing them. If we can make it so that you can have some of those interactions in an automated way where you fire off a text and then just get a response back quickly but asynchronously so it doesn't take up your full attention. I submit that's going to be a much better experience that people really enjoy and like.

So we're in the experimentation phase I think with the platform. We're seeing a lot of good ideas getting tried out and I'm -- I personally enjoy a lot of the different bots people are using or making especially the news ones where you get these digests at the end of the day of different kinds of content.

And between that and M which is kind of our own internal bot that we're building I think this is going to be an interesting area to watch and encourage more interaction between people and businesses in that space

**Operator:** The next question is from Ben Schachter with Macquarie. Your line is open.

**Ben Schachter:** Couple questions for Mark. The first one, what are the lessons you're leveraging from seeing the growth of Snapchat and some of the other newer networks particularly among young people?

Obviously Facebook continuing to do well but these things are growing. Second, related to video, what are the key problems that you really think you need to solve for consumers and for video producers and how is Facebook going to evolve to help solve those problems? Thanks.

**Mark Zuckerberg:** Sure. And they're related. So overall people are spending more and more time on mobile and that means that there are always more services that people use,

whether it's YouTube or there's some really interesting ones with younger folks especially like Musically and Lively that I think are pretty interesting as well.

The Snapchat which you mentioned. Part of why I think you see this is that there are so many different ways that people want to share, so many different kinds of content ranging from text to photo to video to just richer and richer more immersive content.

Also there's a range from private one on one type sharing to small groups, all your friends at once, large intra-space communities and then ultimately fully public. There are different apps that explore different regions of that space and do a good job with it and offer ideas that I think the whole market needs to learn from.

Right now the big theme and strategy that we're executing is we're going to become video first and what I mean by that is that there's this trend where 10 years back most of what you saw and shared online was text. Then we went through a phase where most of it was photos.

We really believe that in call it five years, whatever the period of time that it takes to get there, I think most of what people consume online is going to be video. And that means that there need to be a whole range of new production tools and consumption experiences for enabling that.

For production I think that means that you need to get the camera experience, and the experience for capturing and uploading videos that you captured to be much better and a more central part of the experience. On consumption, there are innovations that we've had like auto play and feed. What's the next version of that that makes it so people can have an even more native and default video experience when they're in news feed as well as private areas like Messenger and WhatsApp.

I think you're going to see this across all of our apps, more focus on producing this kind of content and making it first class to consume as well, both in private and public context. And I think that's just a big trend across the market and one of the big things that if we get right I think it's going to unlock a lot of sharing and opportunity.

**Dave Wehner:** And then just following up on Ross' question on Instagram and US, because I think Ross you were asking, we've provided some rough percentages around international and US and I just wouldn't -- I wouldn't -- those were very approximate and I wouldn't base any trending on that, on those percentages.

**Operator:** The next question is from John Blackledge with Cowen & Company. Your line is open.

**John Blackledge:** Great. Thanks. For Instant Articles I think it went live globally for all publishers around the time of F8 in April. Just wondering if you can provide an update on the progress and how you see Instant Articles evolving over the next couple years. And then maybe Dave on the 49% year-over-year impression growth, how much of that was driven by ad loads? Thank you.

**Mark Zuckerberg:** I can take Instant Articles quickly. I think it's going well. It's a good user experience. People like it. The hypothesis when we rolled it out was that if we removed the latency which is often 10 to 15 seconds of opening up a web view for news feeds that more people would read news. I think the initial data suggests that that's probably true.

So that's good. We're getting more partners on and over the long term I think one of the big things that we need to do is see if we can not only make this good for engagement for our partners but also a really positive business driver for them too. That's something I'm excited about and we'll hopefully have more news on that coming up.

**Dave Wehner:** On the 49% year-over-year growth in impressions, we're not providing a specific breakdown there. I would say that it's primarily driven by growth in Facebook mobile news feed. We've talked about the drivers of supply being growth in DAU, growth in time spent per DAU and ad load.

And obviously we've given stats around -- rough stats around -- we've given specific stats around DAU. We talked about time spent per DAU being up double-digit. I think you can make some assumptions around that. So that's probably the way to triangulate on that.

I think we have time for one more question, Chris.

**Operator:** Certainly. The final question is from Mark May with Citi. Your line is open.

**Mark May:** Thanks a lot. I had two as well. You probably won't give specific revenue numbers but just if you kind of in aggregate look at some of the non-Facebook app revenue streams, if it's FAN, Instagram, et cetera, curious to get a sense of the traction and materiality of those.

Would you expect, Dave, that in aggregate that those would become kind of material meaning that sort of 10% plus threshold sometime this year? Just trying to get a ballpark sense of the level of traction and diversification of revenue outside the core Facebook app.

And then along the lines of your commentary around ad load, how should we be thinking about your MAUs are obviously very significant. DAU to MAU quite high. Do you continue to see that as being a primary driver of ad impression and ad revenue growth going forward as well? Thanks.

**Dave Wehner:** Yeah, thanks, Mark. Like you said, we're not specifically breaking out revenue numbers. One thing to just keep in mind is Instagram is an owned and operated property is represented gross in our revenue. Whereas I mentioned the Audience Network by and large is going to be recognized net rather than gross. That is going to make it smaller in how it's going to appear in the revenue numbers.

The overall growth is still being driven predominantly by Facebook. Instagram is clearly making a contribution, as is the Audience Network. In terms of ad load, as I said, it's been one of the factors driving supply. It's certainly been helpful.

But there's also DAU growth and time spent per DAU growth, time spent per person and we continue to feel there are opportunities to execute on those and continue to grow inventory in that way. So that's where we would focus. As we drive DAU faster than MAU, then that's going to increase that ratio but we're really focused on driving DAU and time spent per person.



**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.