

Operator

Good afternoon. My name is Jay and I will be your conference operator today. At this time, I would like to welcome everyone to the Facebook Third Quarter Earnings Conference 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. (Operator Instructions). Thank you very much.

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

Deborah Crawford

Thank you. Good afternoon and welcome to Facebook's third quarter earnings conference call. Joining me today to talk about 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, and 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 on 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 will 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 Web site at investor.fb.com.

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

Mark Zuckerberg

Thanks Deborah, and thanks everyone for joining today. This has been a good quarter for Facebook and we've achieved strong results across the board. We've continued to grow our community in both size and engagement with 1.35 billion people now using each month and 64% using Facebook daily. On mobile 1.12 billion people now use Facebook each month and 703 million people each day, nearly 40% growth from this time last year.

Looking to our business, we continue to do well. This quarter total revenue reached \$3.2 billion and advertising revenue grew 64% year-over-year. Mobile now accounts for 66% of our advertising revenue. These results show

that Facebook is getting stronger every day, as a community, a partner for developers and marketers and as a business.

One thing that I'm particularly pleased about is that while we're investing aggressively and making progress towards our big long-term goals, we also continue to execute well against our near-term priorities. On previous calls, you've heard me talk about our big company goals of connecting everyone, understanding the world and building the next generation of platforms. These goals are important for us and part of our foundation of our strategy for the next decade, but achieving these will involve many different efforts and steps along the way, some that will be achieved rapidly and others that are going to take longer.

So with that in mind, I'd like to run through our progress this quarter on the different efforts that we expect to deliver a lot of impact over the next three, five and 10 years. Let's begin with our three-year goals. Over the next three years, our main goals are around continuing to grow and serve our existing communities and businesses and help them reach their full potential. When you look at the size and engagement of our community, our progress remains very strong. 864 million use Facebook every day and across our core products, we continue to see huge engagement. For example around 700 million people now use Facebook Groups every month. Achieving this scale shows that we're delivering experiences for the way that people want to share and connect.

Another example is our progress on public content. Last quarter I talked about how we're working to connect people around important public moments and personalities on Facebook. This quarter we've continued to build on our results and there are now more than 1 billion interactions every week between public figures and their fans on Facebook.

The investments we have made in video have also played a big part here. This quarter we announced a new milestone for video on Facebook achieving 1 billion video views, a day of made of videos. During the summers the ice bucket challenge drew more than 10 billion video views by 440 million people which is a good sign of how far our video product has come.

Instagram has also made a lot of progress this quarter. In August, the Instagram team launched Hyperlapse, a standalone app for time lapse of videos on iOS. The team has also invested heavily in improving the speed and performance of Instagram on Android. This has helped drive Instagram's strong international growth which in some countries has achieved more than 100% year-over-year growth. Globally, people using Instagram now spend around 21 minutes a day on average using the app. This is a strong figure compared to the industry and a good sign that Instagram's strategy is on

the right path. Our other big focus over the next three years is to continue to serving businesses well and creating a lot of value for marketers.

As our results show, our approach here is working. To continue delivering value for businesses, we work to improve the quality of ads and news feed by reducing low quality content and improving our targeting to show more timely and relevant content. We've also made some big advances in our ad tech, most importantly the launch of our new Atlas platform. Atlas offers marketers a lot of new capabilities to help reach people across devices, platforms and publishers as well as improving measurement in online campaign. We're very excited for the future of Atlas and Cheryl is going to talk more about this in a moment.

Next, let's talk about our strategy over the next five years. Over the next five years, our goals are around taking our next generation of services, Instagram, Messenger, WhatsApp and Search and helping them connect billions of people and become important businesses in their own right.

One big priority for us here is messaging. And continuing to build and grow Messenger and now WhatsApp as well as great services. This quarter we made an important change to our mobile messaging efforts by transitioning people to Messenger on iOS, Android and Windows Phone. We believe that this change allows us to offer a better and faster messaging experience on mobile, and our data shows that people who use Messenger, usually respond to messages about 20% faster.

This month we also completed our acquisition of WhatsApp. I'm excited to be working with this team and John to join our Board. WhatsApp continues to be on a path to connect more than 1 billion people around the world and we're going to be working into accelerate their efforts here. Another key part of our strategy is helping developers to build more great social experiences on our platform.

Over the next few years, our goal is to make Facebook a cross-platform platform that allows developers to build, grow and monetize their apps across every major mobile platform. We've continued to make good progress here. This quarter, we opened our audience networks to all developers and publishers, allowing over 1.5 million advertisers on Facebook to extend their campaigns across mobile and for developers to begin monetizing their apps.

We're also excited by the continued adoption of App Links, our deep-linking technology for mobile apps. App Links is now used by hundreds of apps across iOS, Android and Windows phone and in just the past six months, the developers have created links to more than 3 billion individual destinations in these apps.

Now let's talk about how we're approaching our goals over the next 10 years. For the next 10 years our focus is on driving the fundamental changes in the world that we need to achieve our mission, connecting the whole world, understanding a world with big leaps in AIs and developing the next generation of platforms, especially in computing.

This is a very big period, a very busy period for our efforts with Internet.org. In July we worked with Airtel to launch the Internet.org app in Zambia. This provides free data access to a set of basic internet services for health, education, employment and communication. The results from this are very encouraging. We've already heard a lot of amazing stories about how people are using the internet to add value to their lives. We hope to bring the Internet.org app to many more countries soon.

Over the last few months, I've also travelled to several countries and met with policy makers, key distributors and people and communities that are coming online for the first time. Increasingly industry and governments are seeing expanding internet access as one of their core priorities. This is positive development for our work with Internet.org in our long-term goal of connecting everyone in the world.

Finally, let's talk for a minute about our progress of Oculus. As I've said before, with Oculus, we're making a long-term bet on the future of computing. Every 10 to 15 years, a new major computing platform arrives and we think that virtual and augmented reality are important parts of this upcoming next platform. This quarter, Oculus continued to make progress towards this vision.

In September, the first Oculus developer conference took place, where we announced a new prototype VR headset on the path of a consumer version of the Rift. We continue to see a lot of excitement in the developer community and we've now shipped more than 100,000 of Rift developer kit to over a 130 countries. It's still early for Oculus but we are encouraged to see the variety of apps and games being developed for this platform.

Internet.org and Oculus are just two of the huge opportunities ahead. Our efforts here will take longer to achieve their full impact, but we're going to continue preparing for the future by investing aggressively. So that's how we're approaching our strategy over the next three, five and 10 years, while focusing on our big goals of connecting everyone, understanding the world and building the next generation of platforms.

This has been a quarter with strong results. I want to thank the entire Facebook community, our employees, our partners and our stockholders for their continued support. Because of your contribution, Facebook continues to

grow in strength and to create greater value in the world for people, partners and businesses. We have a long journey ahead, we're on the right path and I'm excited about the progress that we're making.

Thank you and now here's Sheryl.

Sheryl Sandberg

Thanks Mark and hi everyone. We had another strong quarter and we're continuing to execute well on our priorities; capitalizing on the shift to mobile; growing the number of Facebook marketers and building products to make our ads more relevant. Our growth this quarter was again very broad-based. We saw strong performance around the world as well as across verticals on our four marketer segments, brands, direct marketers, developers and small and medium businesses.

I'd like to briefly highlight some of our progress on the product front and then focus on important new investments we're making in ad-tech. One of our main ad protocols is to make ads more relevant. Just like content and news feed, when ads are more relevant, they provide a better experience for people using Facebook and a better return for marketers.

One of the best ways to improve relevance is to help advertisers reach the right audience with their messages. Facebook age and gender targeting is 45% more accurate than the digital industry average. Working with Facebook advertisers can also target based on people's interests. In addition, we're continuing to build out custom audiences, which enable marketers to use their own data to segment current and prospective customers. We're pleased with the response from clients and we're focused on driving deeper penetration with those existing and new clients.

We also offer lookalike audiences, which help marketers find potential new customers who are similar to their current customers. To share one recent example, earlier this year global financial services company MetLife wanted to find new customers for life insurance policies. Working with this agency Markel, they used lookalike audiences to find people more like their existing customers, MetLife ran ads that let people to their get a quote website page. Over the six-month campaign, the leads that came from Facebook resulted in new policies at a 2.4 times higher rate than MetLife's next best performing channel and at half the cost of display ads.

We're also making steady progress with newer ad initiatives. Throughout this quarter we continue to enable auto play for more video ads. We're also continuing to roll our ads on Instagram. We think there is good opportunity with both video and Instagram ads but we're going to remain deliberate and slow in our approach to scaling those businesses.

We're also making longer-term investments that we believe will be important for Facebook and the ad industry. In Q3, we re-launched Atlas, closed our acquisition of LiveRail and rolled out our audience network. So I want to spend a few minutes discussing our longer-term ad-tech strategy. We're investing in ad-tech for a simple reason. Consumers are shifting quickly to mobile and the advertising industry is not keeping up.

2013 was the first year the average American adults spent more time on digital media than watching TV and that gap has continued to grow. Today the average adult in the U.S. spends nearly 25% of their media time on mobile, but advertisers spend only about 11% of their budgets there. One of the main reasons the budgets aren't moving as quickly as consumers is that advertisers hasn't yet had an effective way to serve ads and measure their returns on mobile. Current solutions work well for person with one device, especially, a PC and for sales that happen online.

But today people often have multiple devices and still make many purchases in physical stores. Nilsson OCR [ph] data shows that the digital industry is less than 60% accurate in demographic targeting of ads, which means that four in 10 people are seeing the wrong ads.

Similarly marketers are not confident that they can measure mobile ad performance. Many of the most commonly used measurement systems over emphasize the value of the last click. This does not make sense, given that studies of Facebook campaigns show that over 90% of ad driven in-store sales come from people who saw an ad but didn't click on it.

It's clear that marketers and publishers need better tools for the mobile world. This is an industry problem that we believe we are well placed to solve. Our re-launch of Atlas last month during Adweek was an important early step that builds on the advancements and measurements we have made over the past two years. The new Atlas is an ad serving and measurement platform, we completely rebuilt. By using Facebook data, Atlas can deliver highly relevant ads, regardless of device.

Atlas is also able to provide accurate measurement by connecting online marketing to in store sales. Importantly, Atlas does all of this in a privacy protected way. Neither Atlas nor Facebook tells marketers who you are. At Adweek, we had productive conversations about Atlas with many marketers and agencies. We are pleased with their interest.

We're also investing in additional pieces of our ad-tech platform. Our audience network improves the relevance of ads inside mobile apps. LiveRail provides tools for publishers to enable personalized marketing at scale via

their apps and websites. We believe LiveRail can build on their success in desktop video with the concrete solution for mobile publishers.

I want to emphasize that the investments we're making in ad-tech are long-term. These are large and strategic investments. The path will take time, but we think that provide a necessary foundation for the advertising industry to make the shift to mobile and for Facebook's long-term growth. We recognize that by staffing engineers in these strategic ad-tech areas, we forego shorter term product improvement improvements which would generate revenue more quickly. We believe these are the right decisions.

As we look toward 2015, we're going to stay focused on the areas I've talked about today; capitalizing on the shift to mobile, growing the number of Facebook marketers and building products that make ads more relevant. Our investments in ad-tech will be an increasingly important part of all of these efforts.

Thanks everyone and now here is Dave.

Dave Wehner

Thanks, Sheryl and good afternoon everyone. Q3 was a solid quarter across the board. We had strong revenue growth, generated \$766 million in free cash flow and continued to make investments to position us for long-term growth. 864 million people use Facebook on an average day in September, up a 136 million from last year. This represents 64% of the 1.35 billion people that used Facebook during the month of September.

Mobile continues to be the core driver of our growth. Over 1.1 billion people used Facebook on mobile during the month of September, up 250 million from last year. In addition, we have hundreds of millions of people on mobile using Instagram, Messenger and WhatsApp.

Turning now to the financials. Total revenue in Q3 was \$3.2 billion, up 59% compared to last year or 58% on a constant currency basis. Total ad revenue was nearly \$3 billion, up 64% compared to last year or 63% on a constant currency basis. Ad revenue growth was strong around the world with each of our four reported geographic regions growing by 50% or more compared to last year.

Mobile ad revenue was approximately \$1.9 billion or 66% ad revenue, compared to approximately \$881 million or 49% of ad revenue last year. Desktop ad revenue was up 11% compared to last year, but was flat sequentially. In Q3, the average price per ad increased 274% compared to last year, while total ad impressions declined 56%. The increase in the average effective price per ad was driven primarily by the redesign of our

right hand column ads which resulted in larger, more engaging ads that delivered more value to marketers and thus had higher reflective prices. These right hand column ads were also fewer in number, which drove the decrease of impressions in the quarter. To a lesser degree, the shift of usage to mobile, where we don't have right hand column ads also continued to contribute to the reported price volume trends. The price volume trends were largely consistent across our four geographic regions.

Total payments and other fees revenue was \$246 million, up 13% versus last year, however payments volume from gains which represents the substantial majority of our payments and other fees revenue declined 2% compared to last year, notably for the first time and we expect this trend to continue as desktop usage continues to decline.

Turning now to expenses. Note that beginning in Q3 our definition of non-GAAP also excludes the amortization of intangible assets and historical non-GAAP measures discussed today have been updated accordingly. You can find our GAAP to non-GAAP reconciliations on page 10 of the Q3 press release.

Our Q3 total GAAP expenses were \$1.8 billion, up 41% from last year and non-GAAP expenses were \$1.4 billion, up 39% from last year. Cost of revenue grew 11% on a GAAP basis and 7% on a non-GAAP basis. We incurred expenses in the third quarter of 2013 related to the transition out of certain lease data centers. This mitigated our cost of revenue growth rate in Q3 2014, as it has done in the last two quarters. Operating expenses excluding cost of revenue were up 61% on a GAAP basis and 72% on a non-GAAP basis versus last year, primarily due to an increase in headcount related costs.

We ended Q3 with 8,348 employees, up 44% from last year. Of the nearly 1,200 people we added sequentially about a quarter were from acquisition. Organic growth was high as the third quarter is our seasonally strongest new hire start period. Overall we are pleased with our ability to attract and retain talented people who enable us to make strong progress against our mission.

Q3 operating income was \$1.4 billion, representing a 44% operating margin, up from 37% last year and our non-GAAP operating income was \$1.8 billion, representing 57% operating margin, up from 51% last year. Interest and other income and expense was a net expense of \$61 million in the quarter, versus a net expense of \$10 million last year. This increase in expense was primarily due to foreign exchange losses resulting from the periodic re-measurement of our foreign currency balances and largely resulted from the substantial reduction in the value of the euro relative to the dollar

experienced from the beginning to the end of the quarter. Our GAAP and non-GAAP tax rates for the quarter were 40% and 35% respectively.

GAAP net income was \$806 million or \$0.30 per share and our non-GAAP net income was \$1.1 billion or \$0.43 per share. In Q3, we spent \$482 million on CapEx and generated \$766 million of free cash flow. We ended Q3 with approximately \$14.3 billion in cash and investments. This does not reflect the approximately \$4.6 billion cash payment that we made in conjunction with the WhatsApp acquisition, which closed earlier this month.

Turning now to outlook. I'd like to start by noting that my forward-looking statements include the impact of both Oculus and WhatsApp. In addition, as part of the WhatsApp deal, we agreed to file a registration statement to register for resale approximately 178 million shares issued to the WhatsApp stockholders. Nearly all of those shares will be fully registered and tradable during open trading windows in Q4 2014 and Q1 2015 under the registration statement we plan to file later this week.

In light of our recent acquisitions and our plans to file this registration statement, we are providing some additional guidance this quarter, including a more specific outlook on the current quarter revenue and a preliminary view on 2015 expenses. This is a more detailed outlook than we have historically provided or plan to provide on future earnings calls.

Let me start with 2014 expenses, we expect our full year 2014 total GAAP expenses, including cost of revenues, stock compensation and the amortization of intangibles will grow approximately 45% to 50% versus the full year 2013. This increase from our prior range of 30% to 35% is primarily due to the impact of this WhatsApp acquisition on stock-based compensation charges in the fourth quarter.

We continue to expect that our full year 2014 total non-GAAP expenses, including cost of revenue but excluding stock compensation and amortization of intangibles will likely grow in the neighborhood of 30% to 35% versus the full year 2013.

Turning now to revenue, we expect that total revenue in the fourth quarter will grow in the range of 40% to 47% versus the same quarter of last year. Please keep in mind that Q4 of 2013 was our first holiday season with the rollout of new seed ads at scale, which makes for a difficult comparison.

For taxes, we anticipate the GAAP tax rate in the fourth quarter will be approximately 45% to 50%, which is higher than the current rate due to large non-deductible stock-based compensation charges related to the closing of the WhatsApp transaction. Our Q4 non-GAAP tax rate should be similar to our Q3 rate.

For share count, we expected our fourth quarter fully diluted share count will be approximately 2.8 billion shares, taking into account the shares that we issued upon the closing of the WhatsApp deal. We expect that our 2014 CapEx will be at the low end of our prior \$2 billion to \$2.5 billion CapEx guidance.

And lastly, while it is relatively early, I wanted to provide some preliminary color on our expense outlook for 2015. As Mark discussed in his remarks, we believe that we have very substantial growth opportunities in front of us and we plan to invest aggressively to capitalize on those opportunities. As such, we plan on 2015 being a significant investment year.

Our current expectation is that total cost and expenses on a GAAP basis, inclusive of stock-based compensation charges related to the recent transactions are likely to increase 55% to 75% compared to the full year 2014. On a non-GAAP basis, we expect total cost to increase approximately 50% to 70% compared to 2014. Tax rates for 2015 should be similar to our fourth quarter rates on both a GAAP and non-GAAP basis.

In summary, we're very pleased with the growth of our network, the great momentum we continue to see in our ads business and the significant investments we're making to drive near-term and long-term growth. We have large opportunities ahead of us and we're focused on capitalizing on those to achieve our mission and track long-term shareholder value.

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

Question-and-Answer Session

Operator

We will now open the lines for a question-and-answer session. (Operator Instructions). Your first question comes from the line of Douglas Anmuth with JPMorgan. Your line is open.

Douglas Anmuth - JPMorgan

Dave, just to follow up on the comments that you just made on the outlook or expenses for '15, can you just help us understand more on the non-GAAP expenses, the 50% to 70% and where we should be thinking about the incremental dollars being spent there primarily? And then secondly, can you just talk Sheryl, perhaps about what you're seeing in terms of branded advertising, whether you're seeing more of it in fraction there as more bigger brand CPG companies, auto OEMs are coming onboard and how you're positioned there for the holidays? Thanks.

Dave Wehner

Sure Doug, I'll take the first part. So we're investing where we think there is a great opportunity for long-term growth and that's going to be really investing and continuing to grow the talent base of the Company. So, we're investing in the people and that's a big part of it. And we're also investing on the product side to grow the existing products, but also to invest in new areas like Oculus, WhatsApp and then the ad-tech initiatives that Sheryl was talking about.

From an infrastructure side, we plan to invest to support the growth of the core business. That includes things like video. It also includes things like our global growth efforts with Internet.org. So we're really kind of investing across the board on that. And I guess in summary, we've got -- the strength of the business today is really putting us in a strong position to invest smartly for the future and we're doing that.

Sheryl Sandberg

On brand, we're seeing very strong growth among our brand marketer segment. We're really excited about the engagement we're having right now with brand marketers and agencies. We think we're the first technology platform to offer the ability to do creativity and storytelling app scale in a personal way and we talk a lot with our clients and partners about personal marketing at scale. You'll find that our clients -- that they are different parts the adoption curve. We have clients who are very early on and they don't want any products or think about their ongoing messages without including Facebook and there are some for whom we're not yet core and we are working on that.

With all of this, we know we need to go client by client and we're especially focused on measurement because measurement is so key for this segment. A lot of the products that brand marketers are selling are bought in store and so showing that online and mobile ads lead to in store purchases is a hugely important part of our strategy going forward as I talked about, and video is really exciting as well.

When you think about the holiday season, Q4 is a really important time for our client and that makes it a really important time for us. And I think people are increasingly recognizing that mobile is important. 65% of people use their phones while they are out shopping and people are recognizing that opportunity.

From an earnings perspective, last Q4 was a great quarter, both because our business was growing but also because that was when we rolled out ads fully

into news feeds and so it's worth keeping that in mind when you think about how you think about our business going forward.

Operator

The next question comes from Ben Sachachter with Mcquarie. Your line is open.

Ben Sachachter - Mcquarie

A few questions. David, there was no mention of a '15 revenue range but I was wondering if you could give us any thoughts on how much margin should compress in '15 versus '14? Then a couple for Mark. Mark, now that you've spent more time with the Oculus team, can you update us on how your plans for Oculus have evolved since you first tried the device on. And then you mentioned it when you talked about your 10 year outlook. Does that mean we shouldn't expect any consumer Oculus product in the next one or two years? And then similarly on Search, you mentioned your five plan. So does that mean we shouldn't expect anything on Search for the next five years?

Dave Wehner

Hey, Ben, it's Dave. We're not really giving any guidance on 2015 revenue. We gave the growth range that we're expecting on Q4, which was 40% to 47% and that's down from 59% in Q3. But we're not providing any specific guidance on 2015. Revenue sort of outlined the expense growth that we expect because of the substantial investments that we're making, also driven by some of the acquisitions that we've made. So hope that, that is helpful for everybody.

Mark Zuckerberg

Sure. And on your questions around Oculus and Search and some of the other things that we're doing; the strategy for Oculus is to help accelerate their growth. They have two products around Rift on PC and they are supporting Gear VR and the Samsung team and building the mobile version. And I'm really excited about both of them.

I don't think that this is going to be -- it needs to reach a very large sale, 50 million to 100 million units before it will really be a very meaningful thing as a computing platform. So I do think it's going to take a bunch of years to get there. Maybe -- I don't know, it's hard to predict exactly but I don't think it's going to get to 50 million or 100 million units in the next few years. So that will take a few cycles of the device to get there and that's kind of what I'm talking about.

And then when you get to that scale, that's when it starts to be interesting as a business in terms of developing out the ecosystem. So when I'm talking about that as a 10 year thing, its building the first set of devices and building the audience and the ecosystem around that until it eventually becomes a business.

Some of the things like Search and some of these other products, this may sound a little ridiculous to say, but for us, products don't really get that interesting to turn into businesses until they have about a 1 billion people using them. And so for Facebook, we're there with News Feed and that's why in the near term our priority is really around continuing to grow and serve that community and making sure that the business around News Feed and those mobile ads fully reach their potential.

Over a five year time frame, we have a number of services, which we think are well on their way to reaching a 1 billion people. Messenger, WhatsApp, Instagram and Search are a number of them. And once we get to that scale, then we think that they will start to become meaningful businesses in their own right. And I think that the right way to think about that, as I've tried to say repeatedly on these calls is, not that we're going to try to monetize them very aggressively in the next year or two, because I really think for each of those categories, the right strategy is to first focus on connecting 1 billion plus people and reaching the full potential before very aggressively turning them into businesses.

But I do think that this is such a big opportunity ahead of us. I can't think of that many other companies or products that have multiple lines of products that are on track to reach and connect 1 billion that have a clear path of how we can turn them into a business. So that will be a very fun and exciting challenge to work on over the next five years.

Operator

Your next question comes from Heather Bellini with Goldman Sachs. Your line is open.

Heather Bellini - Goldman Sachs

I just had two. I guess, one for Sheryl, if you could talk about the comments you made about giving advertisers a better feel for attribution, I was just wondering what percent of attribution do you find today is given to the last click and how overstated do you think that is right now? And then just a follow up question for Dave. Given your total expense range of 50 to 70, wider than what we've seen in the past. I'm just wondering how should we think about the low end versus the high end. Under what scenarios are you thinking about those ranges?

Sheryl Sandberg

Heather to your first question. We think measurement really, really needs to evolve for the world we're in today in many ways. One of those is over emphasizing the last click and the percentages by which that's done really varies but we think substantially across the industry are over emphasized. But there are also other problems. The current measurement systems don't work on mobile, because they are largely cookie based. They are not accurate and we think they are only 59% accurate in even the most basic demographic targeting, they just go offline to online. They really work well for one person with one device, usually a PC, thus making online purchases. The world we live in today, I bet you, everyone on his phone call has multiple devices and people look at ads online and then purchase offline, as well as deserve more relevant ads and better targeting. So, as we re-launch Atlas, as we think about investing in ad-tech, we're looking to solve all of these problems and we think our re-launch is the first step in doing that.

Dave Wehner

Heather, yes, and on the range of guidance, it is wider, it is obviously an early view into 2015. And so consequently it is a wide range. It's giving you the best view that we have on it at this time and we'll be updating that in the future in terms of the expense guidance range that we have in the past on an annual basis each quarter. So the big drivers will be things like the pace of hiring, the success we have in building, the great teams that we want to build at Facebook, but we'll be updating that on an ongoing basis,

Operator

Your next question comes from Eric Sheridan with UBS. Your line is open.

Eric Sheridan - UBS

Mark you made comments about public content and the way that's evolved on Facebook. I'd love to get deeper thoughts there about the way you think content distributions sort of develops on pace over the longer term? And then one for Sheryl. With the ad-tech acquisitions and moves you've made over the last year or to two, wanted to know when you think we should be looking at ad-tech being fully deployed in the marketplace, and what sort of returns that might generate for Facebook? Thanks.

Mark Zuckerberg

Sure, well I can start off by talking about public content. So historically a lot of people use Facebook for sharing moments in their lives with their friends and smaller sets of people, right? So we have Messenger for one-to-one

communication, Group that just reached 700 million monthly active this quarter and then News Feed, which is kind of the primary thing that people are using to share with all their friends at once.

And one of the big things that we -- looking at the FICO system, thought that there was a big opportunity in was public content, where its content that people are either comfortable sharing with everyone or want to consume that is public and shared with everyone. So we're looking at a few different areas. Video is a very big priority. News is a very big priority, because a lot of people want to share that on Facebook already. And enabling public figures, whether they are celebrities, they are athletes, they are actors, or politicians or leaders in different kind of communities to get on Facebook and use the platform to distribute the content that they want. So those are the three areas that where -- that you'll probably see us investing the most in over the next year or so. And we're making a lot of progress and I shared some of the stats before, but we're very proud of what we're doing and we'll have more to report soon.

Sheryl Sandberg

On ad-tech, I think we're in the middle of what is a very fundamental shift from marketing that is cookie based on a PC, one desktop to people based marketing on multiple devices, to marketing that is primarily for online sales, to marketing that affects those online and offline sales on mobile. So I think we're right now in a pretty big shift and we're not close to fully deployed there. We have a lot of pieces to do. Our Atlas re-launch is new. We're first growing our client base and we're pleased with our progress there and we're putting these other pieces in place on audience network and LiveRail. So I think we're pretty far from being fully deployed on even this big shift. But I think in our industry nothing ever fully deployed, that as soon as we catch up here, there is going to be another movement and something else that happens that we have to react to and build the technology for. And so we remain -- we're a long term company run by a founder with a long run vision and we want to keep our eyes ahead on these changes and technology and keep deploying against them.

Operator

Your next question comes from Ross Sandler with Deutsche Bank. Your line is open.

Ross Sandler - Deutsche Bank

I just have two questions, one for Mark and then a quick one for Dave. Mark, I don't think I heard you mention payments in the three, five, 10 year plan. There has been some speculation of payment offerings within Messenger.

Can you give us a sense at a high level of what you've envisioned Facebook potentially doing in the payment space longer-term across merchant payments, consumers' products like savings and lending or peer-to-peer? And then how do you see social interactions tied in with payments evolving? Does messenger make payments better than what's out there in the market?

And then Dave, just a clarification. So the high end of the 4Q revenue guidance assumes a pretty sharp drop-off, even normalizing for some extra currency hit. So are you seeing anything out there that makes you concerned about pacing into the quarter or is it largely business as usual or it's just a tougher law of large numbers type situation?

Mark Zuckerberg

I'll start on payment. So payments is an important part of the online business ecosystem, but we've traditionally thought about this as something that we're going to partner with other companies on to enable great solutions, rather than trying to compete and do it as a business ourselves. And the reason why we've taken this approach is it's very important for all online businesses and our customers and partners that there is a good online payment system. People run ads to get customers and sell products and at the end of that conversion, if there is a good payment system that is smooth, then people will buy more things, which ultimately makes the ads and all of whole online flow more valuable for those partners and therefore more revenue and profit for our business as well.

We view the ads part of the business as a more efficient part of the businesses than payments itself. Payments tends to be fixed fee whereas and ad, because of the option model, there is really good price discrimination built in. So a partner or business who is willing to pay us 30% of their revenue can bid that and some of these willing to only pay 5% of the revenue can bid that and the auction model inherently takes care of that.

So we think that focusing on the ads part is going end up being the more effective thing for us to do but we realize that it's important for the ad system over time for and for all of our partners for there to be a payment system, which is why we're excited about partnering with credit card companies and partnering with PayPal and all of the different folks doing online payments to make their solutions as good as possible as well.

Dave Wehner

Hey Ross, it's Dave. Our view now is that Q4 revenue will come in that 40% to 47% year-over-year growth range. As I mentioned, Q4 of '13 was just an absolutely fantastic quarter for us. We had News Feed sort of rolled out at scale. It was our first \$1 billion dollar mobile quarter. So we're comping

against just really outstanding quarter last year. That's really the largest issue. You asked about currency. We did see the euro drop about 7% in value over the course of Q3 and that really didn't pick up as you saw. It didn't pick up in an impact in Q3 at all because it happened at the end of the quarter. So that will be a headwind that we see and that's factored into the guidance.

Operator

Your next question comes from the Mark Mahaney with RBC Capital Markets. Your line is open.

Mark Mahaney - RBC Capital Markets

Great, Sheryl. You talked about being careful about -- and slow about the rolling of the video ads -- auto play video ads and Instagram monetization. Have you seen any pushback in terms of user experiences to date on videos or on video ads, is that overall caution? Is there anything you've seen in the data that suggests that you want to keep it at a really slow pace? Thank you.

Sheryl Sandberg

We're pleased with the consumer response we've had on both fronts and we remain really optimistic over the long run about Instagram and Video, because there's a lot of interest. I spoke before about creative story telling images. Video can be such a big part of that and it create a really resonant experience for brands and companies. We really believe in going slow, that as we grow products, we pay attention to the consumer experience. We want the consumer experience always to come first. So although we're very optimistic about the opportunity here, we continue to grow slowly and pay lot of attention to the quality of the advertising we see.

To share one example, we are seeing people using both Facebook and Instagram and also Video and other ad products in combination. Mercedes Benz launched the GLA, which was their first compact SUV on Facebook and Instagram and they found that by doing Facebook and Instagram together, they got a 54% increase on their website visit. So a lot of our products as you do one, you also do more Facebook ads as well and that's something we're paying a lot of attention to.

Operator

Then next question comes from Paul Vogel with Barclays. Your line is open.

Paul Vogel - Barclays

I was just wondering if you could talk a little bit on the engagement side. Your DAUs to MAUs continue to be very strong. Can you just sort of maybe talk a little about your older cohorts versus your newer cohorts and how they're behaving and then also geographically? And then sort of on top of that, on the frequency side, obviously DAU doesn't measure how often people come back more than once per day. So is there any update on increasing the frequency of visits? Thanks.

Dave Wehner

I don't think anything to update on the later front Paul, but the DAU to MAU ratio, which we focus on engagement was strong across all the geographic regions. So North America remains at the high end and we're really pleased with what we're seeing there.

Nothing to update on cohorts. Obviously we are really pleased overall, what the mobile impact has on the DAU to MAU ratio and really encouraged what we're seeing across the Board on engagement. So I don't think anything other than that specifically to call out.

Operator

The next question comes from Mark May with Citi. Your line is open.

Mark May - Citi

Thanks. For the last couple of years, -- back on the OpEx for next year guidance, for the last couple of years you've grown your cash OpEx by around a \$1 billion a year with some consistency and I think that seems to be continuing in the second half of the year. But obviously your midpoint guidance -- OpEx guidance for next year represents a very significant -- I think it's like 2.5% -- \$2.5 billion increase at the midpoint. You obviously plan to change the level of investment in something quite significantly. So I'm just wondering if you could talk a little bit more specifically what are a couple of the projects that are capital intensive projects that you're planning for next year and is it physically possible to accelerate your hiring by that much next year?

Dave Wehner

Yes, thanks Mark. The projects really that Mark and Sheryl both outlined in terms of continuing to invest in the core Facebook experiences, growth engagement and monetization, they are building up the ad-tech side and the investments that we want to make, as well as the recent -- continuing to invest against the recent acquisitions that we made in terms of WhatsApp and Oculus. So it's really the investments we're making there.

We're also going to be supporting global growth with our Internet.org initiative, investing there. So it's a number of the key initiatives that Mark outlined in his comments that we're investing against and again we're giving a range on what we think is a reasonable range of guidance on that. You saw headcount. We had a good growth to headcount this quarter and we're going to be continuing to invest as we think that these will be good investments over the long run in terms of being able to drop our long-term growth.

Operator

The next question comes from John Blackledge with Cowen & Company. Your line is open.

John Blackledge - Cowen & Co.

Just a couple of questions on video. How should we think about Facebook as a video platform and how does the mix of video between user generated versus public content versus professionally produced content evolve over time? And for example, is the upcoming short-film content produced by Lionsgate around the Twilight franchise that will be shown exclusively on Facebook. Would that increasingly be the type of content Facebook users will see in the future? And then if you could just give an update on the Instagram monthly active user comp, that would be great? Thank you.

Mark Zuckerberg

I can speak to the video point. I think it's going to be all of the above in terms of what you said. Most of the content on Facebook is things that people are sharing with their friends and the people around them. So I think we'll continue to see that in video as well. There's definitely the mis-trend over the last few years where, if you go back five years most of the content was text. Now a lot of it is photos and if you look in the future, as networks get better and the ability to capture good video and share in a good way improves then -- I think that going forward a lot of the content that people share will be video. It's just a very compelling.

There is also a lot of great public content that's video, especially the shorter form content that they are mentioning I think will fit very well into the feed form factor that people consume on Facebook. So I think we're going to see a lot of both of these things and it's going to be an evolution over the next few years. But I think you can expect to see a ramp up of all this.

Dave Wehner

And on Instagram, we haven't updated the number. They continue to grow nicely, but we haven't announced a new public number on Instagram.

Operator

The next question comes from Justin Post with Merrill Lynch. Your line is open.

Justin Post - Merrill Lynch

Mark it seems like you taking a portfolio approach to apps and you've got a several different experiences for people on mobile devices and other devices. Can you give us your philosophy around that? And as people use things like WhatsApp and Instagram, is it actually, maybe partially hurting Facebook's reported metrics and how do you think about putting this altogether and helping every app kind of work?

Mark Zuckerberg

Sure. So one of the things that's happening on mobile is that there's an increased focus for apps to do one thing really well. Like so on desktop a lot of the things that might have fit well into a single Facebook website now are -- in order to best serve people, you need to build multiple standalone different apps. So we're seeing that with Facebook and Messenger and the work that we did to kind of split out Messenger from the Facebook app to give a dedicated experience or an app that we think is a better experience. And we're going to do more of that in the future, as well at the Facebook Creative Labs product that we're releasing.

Part of what we've seen is that the use cases for products like Instagram and WhatsApp are actually more different and nuanced from then the products that people compare them to, that Facebook had already built. So for example on the WhatsApp and Messenger side, Messenger is primarily used today for people to chat with their Facebook friends, within this context of maybe it's not like a real-time text. Like you would send an SMS on your phone, but it's something that you are sending to one of your Facebook friends and if they happen to be there, then you can text back and forth or maybe they respond later.

SMS and WhatsApp are more for kind of real-time activity. People have contacts on WhatsApp who they wouldn't want to make friends on Facebook. Their graphs are somewhat different. So one of the things that we found interestingly to us as well was that, Messenger and WhatsApp are actually growing quickly in the lot of the same countries. There's countries that they're growing in that are different and there are countries that they are growing in that are the same, which to me suggests that they actually are in

more different markets than you probably intuitively would have thought and that was definitely our understanding as we dug more into this.

Same with Instagram, and the type of sharing that happens on Instagram versus News Feed. We've recently started doing more to help promote and accelerate the growth of Instagram from the Facebook app itself because what we found is that by doing that, we're net overall increasing the amount of sharing the people can do and connecting what they can do within our whole family of apps. So we're definitely seeing that this is all accretive and positive and we think that in the future there will probably be room for more apps for sharing as well.

Operator

The next question comes from Anthony DiClemente with Nomura Securities. Your line is open.

Anthony DiClemente - Nomura Securities

First for Sheryl, I want to just come back to the theme of media measurement you gave us in good perspective. Can you help me with first party data versus third party data? Can you get where you need to go with brand marketers using your in-house tools like Atlas or do you think you need the validity and integrity of a third party measurement source i.e. Nicholson in order to get there.

And then second question for Mark. Mark I was just wondering, where do you see Facebook at this point in terms of its place in the hardware ecosystem? And given so much time is spend in your apps, do you think it's possible that you could get more aggressive in devices, in hardware in order to achieve some of your longer-term or 10 year goals that you've laid out?

Sheryl Sandberg

To your first question, data is really important for both the measurement and targeting. And when you think about first party and third party data, you have to think about both of those usage. Certainly with measurement, third party verification of that data can be very important. A lot of our largest clients and agencies also build their own data systems, which are a very important part of measuring and kind of certifying everything we do with them. So we're using a combination of first party and third party.

I think where this really gets interesting is around relevance. And as I spoke about, that's a major theme for us because we think one of the best things we can do to drive more value for marketers and improve the consumer

experience on Facebook is improve relevance, and data is a great way of doing that.

So for example with custom audiences, custom audiences is a combination of our clients using the data they have on their client base, combined with the data we have that we can target. Let's say target one ad to existing customers to get them to engage more and buy more; and one add to brand new customers. And you could see how you're different ads for people who have never bought your product and a different ad for people who are currently buying your product would make a lot of sense. And then you look at something like look alike audiences, where we're looking to map customers who share characteristics, age, demos, likes, interests with current customers. And all of this takes a combination of first party and third party data, all of which we do in a very privacy protected way.

Operator

The next question comes from Stephen Ju with Credit Suisse. Your line is open.

Stephen Ju - Credit Suisse

So Sheryl, from a product development perspective, it feels like from the outside looking in that you have accelerated the roll out and delivery of various products. So wondering how you are thinking about how your product delivery cadence will change, especially given the investments you have guided to for 2015. Thanks.

Mark Zuckerberg

Before we go to that, I'll just quickly answer the hardware question that we didn't get a chance to answer on the last question. We actually probably do more with hardware already than is apparent because we design and work with folks to build up all of our data centers and the servers there. So I do think that if that ever became the right thing for us to focus on from a product perspective, we have some of the skills there already.

And when we are thinking about working Oculus, that's actually one of the areas where we think we can help out because we've up a supply chain team and we've been I think pretty effective at delivering what we've needed to run Facebook as this large system of scale. So -- but that said, I think that there is a huge amount of value in delivering these network and software services and that's where you should expect to focus, on the things that we talked about.

Sheryl Sandberg

To the question about the roll out of products. I think the usual way we do things is that we roll out products slowly and then we iterate. So one example is custom audiences. We roll out custom audiences. Then we add on that website custom audiences to target ads to people visiting websites or then mobile app custom audiences, ads to people who have visited mobile apps. And one is building on the next, building on the next.

Similarly, this month -- earlier this month we have launched local awareness targeting. It's a new option that allows local businesses to reach nearby customers. And what you saw that -- it wasn't a massive launch. It was a small launch where we enabled this targeting, get people to use it and we'll develop it. Then there are the exceptions such as Atlas. Atlas was one big launch that we're still in the process of doing and that's really because of the product that we've bought and needed to rebuild. But for the most part, our product development tends to be very iterative and that's what you can expect from us going forward.

Operator

The next question comes from Youssef Squali with Cantor. Your line is open.

Youssef Squali - Cantor

First question for Mark. Mark you recently came back from China. How do you think about that opportunity and what gives you the confidence that you can actually be successful where so many have failed. And then the second on Instagram; we've seen some very complementary data that shows that Instagram is actually becoming more popular than ever with some brand marketers. Just wondering what are the best performing ads formats on the platform right now and where is the ad load versus where Facebook is.

Mark Zuckerberg

Sure. So on China, we're already doing more in China on the business side than I think a lot of folks think about. A lot of Chinese businesses use Facebook to grow their export businesses and to help find customers around the rest of the world and grow the Chinese economy there. So that's actually a pretty meaningful thing for us already and we always are looking to find ways to help businesses around the world to grow. And that will be just a long term thing. I mean our approach to China and all these -- and every country is very kind of long term. We're going to be here for decades and we want to create good relationships with these countries and businesses around the world that will help and grow over the long-term.

On the Instagram side, I think we're pretty early. There have been a number of good ads, both video and images that I think have been pretty effective,

but it's fairly early and in the growth phase at this point, the top priority for Instagram is to grow from 200 to more and eventually connect billion or more people and I think that that's something that should be possible and that's what I'm really focused on and excited about now, while we also start building out some of the parts of the business as well.

Deborah Crawford

Operator, we have time for one last question.

Operator

Your last question will come from Scott Devitt with Stifel. Your line is open.

Scott Devitt - Stifel

I think this question is for Sheryl. The app download business seems to have grown quickly and become a big contributor of the ad revenue total for Facebook and just wondering how you think about app reengagement relative to app downloads and which of those you think is a larger, long-term opportunity for the Company. Thanks.

Sheryl Sandberg

I'm glad you asked the question because I think there has been some confusion around our mobile apps and our mobile app ads and our mobile app engagement ads. So engagement ads, it's still pretty early and we have rolled those out and rolled those out after mobile app ads. So we definitely seen lots of them. But we do think there is an opportunity. I think the broader point is that our growth in mobile ads is very broad based. It's across all market or segments and it's across all of our different ad formats and we talk about our mobile ad business growing. Mobile app ads are a small part of that, that's growing in line with our total business.

The other thing that I think people get a little confused about is who is using mobile app ads. I think commonly when you think about mobile app ads, people often think about developers and developers are moving them and we're pleased we're able to help them grow. But they're also being used by some of the largest branders and marketers in the world.

So for example Burger King. Burger King just used our mobile app ads to do app installs for their app. And the app was to find Burger King, look at their menu and nutritional options, use mobile coupons and use virtual gift cards. So that was one use of our mobile app ads, which is not what people typically think of.

