Operator

Good afternoon. My name is Mike, and I will be your conference operator today. At this time, I would like to welcome everyone to the Facebook Second Quarter 2012 Earnings Conference Call. [Operator Instructions] Ms. Crawford, you may begin your conference call.

Deborah Crawford

Thank you. Good afternoon, and welcome to Facebook's first earnings conference call. Joining me today to talk about our second quarter results are: Mark Zuckerberg, CEO; Sheryl Sandberg, COO; and David Ebersman, CFO.

Before we get started, I'd like to take this opportunity to remind you that during the course of this call, we will make forward-looking statements regarding future events and the future financial performance of the company. We caution you to consider the important risk factors that could cause actual results to differ materially from those in the forward-looking statements in the press release and this conference call. These risk factors are described in our press release and are more fully detailed under the caption Risk Factors in our final prospectus filed with the SEC on May 18, 2012.

In addition, please note that the date of this conference call is July 26, 2012, and any forward-looking statements that we make today are based on assumptions as of this date. 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. This call is being broadcast on the Internet and is available on the Investor Relations section of the Facebook website at investor.fb.com. A rebroadcast of the call will be available after 6:00 p.m., Pacific Time, today. The earnings press release and an accompanying investor presentation are also available on our website. After management's remarks, we will host a Q&A session.

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

Mark Zuckerberg

Thank you, Deborah. And thanks to everyone listening for joining Facebook's first earnings call as a public company. We appreciate having the opportunity to speak directly to all of you and to share our perspective on how we're doing in fulfilling our mission of making the world more open and

connected. Hopefully, you'll come away from today's call with a clear sense of the investments we're making to create value over the long term by making Facebook even more useful for all of the people who use our services worldwide.

We ended June with 955 million monthly active users, over 1/2 of whom used Facebook on a daily basis and over 1/2 of whom used Facebook for mobile devices. We saw more people using our services at the end of June than at the end of March across all key countries, including 3 million more people in the U.S. Growing the network of people who use Facebook and expanding the social experiences available to them remains the foundation of our efforts and the key to our future success.

I'm going to focus the rest of my comments today on our top priorities across our product areas for 2012, specifically mobile, platform and social ads.

Let's start with mobile. Mobile is a huge opportunity for Facebook. Our goal is to connect everyone in the world. And over the next 5 years, we expect 4 billion to 5 billion people to have smartphones. That's more than twice as many people that have computers today. So building great services for these devices is essential for us to help people connect. We also think that people are inherently social, and having a device with you wherever you are creates more opportunities for sharing and connecting.

We're finding that people are quickly adopting our mobile services. As of the end of June, 543 million people were actively using our mobile services every month, each month. That's 67% more people than the 325 million who were using our mobile services just a year ago. We've also found that people who use our mobile services are more active Facebook users than people who only use our desktop services. On average, mobile users are around 20% more likely to use Facebook on any given day. So mobile not only gives us the potential to connect more people with our services, but it also gives us the ability to provide more value and a more deeply engaging experience.

We don't just want to have the most widely used mobile apps, though. We want to build the best apps and we also want to build experiences that are as deeply integrated as possible into every device and mobile app that people use. We're investing very heavily in improving our mobile apps, primarily across iOS, Android and the mobile Web. This involves building out world-class teams with competencies in different technical stacks, making significant investments in improving the technical foundation of our apps and designing new products and integrating into these mobile systems as deeply as we can.

We've made some good progress from the past quarter as we released our Camera app, shipped new releases of Messenger, shipped 2 releases of our Android app, agreed to acquire Instagram and worked with Apple to integrate Facebook into their upcoming release of iOS. Going forward, you should expect to see a frequency of improvement to each of these mobile experiences.

Finally, we're also beginning to demonstrate that we can advertise effectively within the mobile experience. I'll discuss social ads more in a minute. But at a high level, our Sponsored Stories, which we launched in mobile News Feed earlier this year, have grown quickly and demonstrated early success.

Now let's shift to platform. We believe one of the biggest opportunities we have is to create the identity and social layer that all new apps and websites can be built on top of. We think almost every product is better when you can experience it with the people you care about. So over time, we expect almost all of these products should naturally become social. Since there's no way we could ever build all of these ourselves, we're focused on building a successful platform, which enables developers to build great social experiences into their own apps by integrating with and exchanging information with Facebook.

Our platform strategy enables millions of developers to build better products and helps us provide a lot of value to the people who use Facebook. We've already seen how social dynamics can transform industries, like gaming, and we believe other industries, like music, are starting to follow as well. Our goal is to make it easy for developers to build these social apps. We do this in 2 ways: first, by enabling people to sign in to apps using Facebook and thereby bringing their real identities, friends and other information to the apps so that the apps can offer a more personalized experience; and second, by enabling people to share what they're doing in these apps to their friends back on Facebook so these apps can get accessed to our distribution and they can scale and grow quickly.

Today, you could download Spotify, log in with Facebook and immediately see our music player light up with songs your friends are listening to and recommending. We can imagine a day when you buy a new car and by logging into the car's computer with Facebook, you can similarly have it immediately light up music, addresses, restaurants, stores and other destinations targeted specifically for you based on your friends and your interests.

We believe social products like this will provide better experiences. But if we're right, then Facebook is in a unique place to enable these experiences

to get built. It's worth calling out that our vision for platform is bigger than what most people perceive. We believe our platform is about bringing social context to apps and providing distribution for apps regardless of what environment they're built in, including mobile apps, websites or on our own Canvas on our own website. When many people think about our platform, they think only about games that are built inside of the Facebook website directly and not all of the other kinds of apps that developers can build.

Our Open Graph platform is what we call the tools we've launched last year that enable developers to easily integrate more kinds of actions and experiences with Facebook. Open Graph has already been adopted by many of the most popular websites and mobile apps. Many of the top apps in the iOS and Android app stores are integrated with Facebook. Apps like Spotify, Netflix, Pinterest, foursquare, Instagram, Airbnb, Tumblr, VeeHD, Nike+, SongPop and thousands more have integrated with Open Graph to provide better social experiences and grow their user bases. Already people are sharing nearly 1 billion pieces of content each day using Open Graph.

These Open Graph integrations enable Facebook users to share more of the content they want with their friends. This helps make our service more engaging overall since there's more content to consume. Additionally, we found that our largest developers also tend to become our largest advertisers as they look to further boost the distribution they're getting from us.

We're still in the early days of our Open Graph effort, and we're continually working to improve how it works. A big focus for us right now is giving people more tools to control how they share their information using these integrations. We're also working on improving the distribution that these apps get in exchange for the content they help people share. These are some complex problems that will take time to work out, but you should expect us to make steady progress towards building out this ecosystem.

Finally, I'd like to discuss our social ads initiatives. The basic idea here is that the best type of advertising is a message from a friend. Facebook wants to offer advertisers the best tools to create ads that are social. We believe that the more our advertising include interesting content from people you care about, the more marketers will be able to create advertising that adds value to people's experience on Facebook. Advertisement on Facebook today is already delivering a compelling ROI, even though most advertising on Facebook today isn't social. We believe the experience can be better and more social. For experience -- for example, if I like a restaurant, then my friends might see that I like that place, and that's likely a more convincing ad than anything the restaurant would produce on its own. That's an example of aligning social activity in ads. One important aspect of social ads

is that since they're based on social activity, they've been to our News Feed product on both mobile and desktop. This is important because mobile users already spend so much time reading their News Feed. So these social ads in News Feed give us a clear path to building a strong business on mobile.

I mentioned earlier that we recently began to roll out our Sponsored Stories in both desktop and mobile News Feed. By the end of June, Sponsored Stories in News Feed was at a run rate of over \$1 million per day in revenue and about 1/2 of that is coming from mobile. This is an encouraging start in our effort to generate revenue from the mobile use of Facebook. We know that social ads perform much better than nonsocial ads, so our job over the next few years is to increase the percentage of ads that are social and engaging.

Overall, I hope my comments here give you a good sense of our priorities around mobile, platform and social ads. We have a lot of interesting things going on here. There are a lot of challenges and these are the types of problems that we like to work on. We're working hard to staff up across the company, especially in the technical groups, to make sure we make progress against these goals.

We just announced we've begun recruiting engineers to work in our London office to help us access talent across Europe. We're pleased that the company and culture are centered on building great products and around our mission to make the world more open and connected.

Thanks, again, for taking the time to be on the call with us today. And now I'd like to hand it over to Sheryl.

Sheryl K. Sandberg

Thanks, Mark. I'm going to focus today on Facebook's opportunities in the advertising market and the progress we've made in the past quarter. Our total second quarter revenue of \$1.18 billion, \$992 million came from advertising. This represents a 32% year-over-year increase overall and a 28% increase for advertising.

Facebook's power to change the way people and businesses influence each other creates unique advertising opportunities. We offer marketers the ability to reach a mass or a targeted audience and establish real and ongoing relationships directly with our customers. Marketers have always known that a recommendation from a friend is one of the most powerful ways to sell their products. Marketing on Facebook is fundamentally different than other mediums because messages can be shared from friend-to-friend. This is word-of-mouth marketing at an unprecedented scale. In an

increasingly crowded world, this is essential for the world's largest global companies, as well as the small business around the corner.

We believe we are very well positioned to compete for advertising dollars throughout the entire marketing funnel, from the very top where companies focus on generating demand, to the bottom where the focus is on fulfilling demand. The majority of the advertising spend that is migrated online to date has been for demand fulfillment, which happens when a customer already has intent to purchase. Search advertising has been the primary driver of this migration. Facebook is also effective at the bottom of the funnel, with gaming being a primary example. But we believe that Facebook also helps marketers build brands and generate demand. This is important because the majority of the \$600 billion global advertising market is spent on demand generation.

Over the past quarter, we have made important progress in our monetization efforts in 3 areas: first, rolling out new ad products; second, demonstrating their ROI of Facebook ad spend; and third, making it easier for businesses to advertise with us.

I'll start with the new products we introduced. Earlier this year, we launched Sponsored Stories in Facebook News Feed. Sponsored Stories are regular stores that people see in the News Feeds already, updates, likes, comments posted to Facebook every day that a marketer pays to highlight. For example, if I post a positive review of a product I purchased at Walmart, about 20% of my friends have seen the post, depending on things like when they check their News Feed. Using Sponsored Stories, Walmart can pay to boost distribution of this post so a larger percentage of my friends see it.

Delivering social messages in Facebook's News Feed is an extraordinary opportunity for marketers. On the Web, people spend more time using Facebook than any other service by far. We believe this is true in mobile devices as well. Moreover, Facebook users spend a large percentage of their time on News Feed. Sponsored Stories enable marketers to interact with their customers where their customers are spending their time. Our early results are encouraging. As measured by click-through rates, Sponsored Stories in News Feed perform multiple times better on both desktop and mobile than ads in the right-hand column.

Sponsored Stories in News Feed are the cornerstone of our mobile monetization strategy. News Feed functions in exactly the same way whether you're on the desktop or phone. This is important because we avoid the dilemma faced by other industry players, where to put ads on the smaller screens. With News Feed, marketing is incorporated seamlessly into the user experience on mobile devices. We recently enabled our advertisers

to buy us exclusively in mobile News Feed. We're seeing strong interest, particularly from our clients, who know mobile is critical to reaching new customers, especially in emerging markets.

As always, at Facebook, the user experience is paramount. We've been delivering and introducing Sponsored Stories in a way that maintains the experience users have with our service. As we continue to roll out Sponsored Stories in News Feed, we are carefully monitoring user engagement and sentiment, and we're pleased with the results today. We believe that Sponsored Stories in News Feed has the potential to be among the most relevant ad formats for marketers. As Mark mentioned, in the short amount of time since launch, by the end of Q2, we are already generating more than \$1 million a day from this product with approximately 1/2 of this generated in mobile.

In Q2, we also began testing another new ad product. The Facebook Ad Exchange, or FBX, allows marketers to bid in real-time for ad impressions on Facebook. Real-time bidding is a standard industry practice to help advertisers reach the right customer at the right time, and it will help us deliver more relevant ads to users. We're in an early-offer test with FBX, but advertiser interest is strong. eMarketer estimates this market to be approximately \$2 billion in the U.S. alone.

The second area of progress this quarter has come from our efforts to better demonstrate the effectiveness of ad spend on Facebook. Today, nearly every one of the Global Ad Age 100 advertisers spends with us every quarter. But to date, most only allocate a small size of their budget to Facebook, even though their customers spend large amounts of time using our service. This imbalance represents a substantial opportunity for us if we can educate the market about the ROI our ads deliver.

We have partnered with Nielsen to demonstrate that Facebook ads are not just seen but remembered. Studies of over 500 ad campaigns show that on average, Facebook ads drive 98% that are ad recalls and 31% higher brand awareness than non-Facebook online ad campaigns. Independent research has also demonstrated that social context significantly increases both ad recall and brand awareness of Facebook ads. This is not surprising since people are more likely to remember a message that comes from their friend.

We recognize that ad recall is important, but it's only the first step in delivering results for marketers. Marketers' ROI is generated when the cash register rings. We're making great progress measuring our ability to help marketers generate sales. Independent analysis of more than 60 campaigns, 45 of which were completed in the first half of this year, show that 70% of those campaigns delivered a return on ad spend of 3x or better. And 49% of

those campaigns delivered a return of 5x or better. I'd like to share a few examples.

Electronic Arts recently spent \$2.75 million promoting Battlefield 3 on Facebook. They attributed \$12.1 million of their sales to these ads, translating to a 4.4x return on their Facebook marketing spend.

Barclaycard agreed to purchase Facebook ads as part of the direct response strategy to promote NFL team-branded credit cards. They targeted the ads to people based on the specific teams those people like. Their Facebook ads generated a 40% higher conversion rate than any other online ad platforms they used in a campaign. This made their cost per acquisition 48% lower on Facebook than from other online ad buys. In total, 60% of the approved credit card applications from the campaign came from Facebook.

Wooga, an international games developer, used mobile News Feed to drive installs of its Diamond Dash game. They increased downloads by 26% in the U.S., 29% in Germany and 37% in France, all at attractive costs per app installed.

This is just the beginning of our important effort to educate the market about the ROI Facebook ads deliver. We will continue to work account-by-account and campaign-by-campaign to demonstrate the value we provide.

Finally, our third area of progress has been to make it easier for small- and medium-sized businesses to advertise on Facebook. Local business advertising is considered by many to be the Holy Grail of Internet advertising since the market opportunity is so great. This is proving difficult, however, because small business owners often lack the time or ability to adopt new technology. Facebook is uniquely accessible to them. As they typically learn to use Facebook by setting up personal profiles or Timelines, they then discover the value our service can provide them as business owners. Many of the world's approximately 60 million business owners are already Facebook users. Over 11 million businesses already have pages on Facebook. Over 7 million of these pages are actively used each and every month. In addition, hundreds of thousands of small businesses advertise with us. By making it easier to create a business page and run ads, we believe we can increase the number of small and local businesses who use our tools.

In the last quarter, we began testing simpler ads and easier purchase loads. For example, page owners can now turn a post into an ad campaign with just a few clicks. We're still in the early days of building our monetization engine. For the rest of 2012, we plan to focus on the same priorities I have discussed, in particular the ramp-up of Sponsored Stories in News Feed. If

we are successful working with advertisers to increase the amount of content they generate that are social and engaging enough to promote on News Feed, we believe we should be able to increase our revenue on those PCs and mobile devices.

In 2012 and beyond, we will also continue to invest in developing new products, particularly in mobile, and in educating the market on the value we deliver. We believe the world is becoming increasingly social and personal, and the future of marketing depends upon building where the map is scaled. We also invest tools for marketers to not just participate in, but to shape this evolution. This will close the gap between the audience we deliver and our share of advertising budget.

Now I'm happy to turn it over to David, to walk you through our financial results for the quarter.

David A. Ebersman

Thank you, Sheryl. And good afternoon, everyone, thanks for joining us on the call today. I'm going to walk you through our Q2 progress against our key financial metrics related to revenue, users and expenses.

As Sheryl mentioned, revenue in the second quarter was up 32% from last year. The strengthening of the dollar cost us a few percentage points of revenue growth, which would've been 36% with constant exchange rates. Ads revenue was up 28%, driven by an 18% increase in the number of ads delivered and a 9% increase in the average price per ad. The increase in ads delivered was primarily due to user growth and also benefited from the net effect of product changes that increased the average number of ads per page relative to last year. Ad impressions continued the recent trend of growing more slowly than users as more of our usage is on mobile devices. This trend is particularly true in markets such as the U.S., where smartphone use is expanding rapidly. The overall number of ads delivered in the U.S. this quarter decreased 2% year-over-year despite a 10% increase in daily users and despite the increase in ads per page from the product changes I mentioned earlier, as daily Web users in the U.S. declined in favor of mobile users. And we're seeing similar trends in other developed markets.

The 9% increase in price per ad was driven primarily by the United States, where CPMs increased by over 20% due in large part to the ramp-up of Sponsored Stories in News Feed on both PCs and mobile devices. Sponsored Stories in News Feed are displayed where the user's primary attention is and are stories that we believe users will find engaging based on their interest and connections. That makes Sponsored Stories in feed more relevant, resulting in stronger click-through rates and higher prices.

Price per ad also increased significantly in Asia and the rest of world markets. These markets are growing more rapidly in terms of users, and therefore, are receiving a growing share of our ad impressions each quarter, so we're pleased to see continued improvement in pricing. The relatively faster volume growth in Asia and rest of world does have the effect of reducing our worldwide average price per ad due to the relatively lower pricing in those markets.

In Europe, price per ad decreased a few percentage points compared to last year, similar to what we saw in Q1, and we believe due in large part to the overall macro environment there. Over the long term, we continue to believe that we have a significant opportunity to increase CPMs. There are a number of potential drivers including: increasing the number of Sponsored Stories delivered in News Feed across desktop and mobile; improvements in our ad products, including better targeting capabilities; increased advertising demand as we continue to demonstrate ROI and as our clients get better at creating social and engaging ads; and overall growth and development of online ad markets globally.

Payments revenue for Q2 was \$192 million. For the past 3 sequential quarters, payments revenue has been essentially flat. We believe this trend is due to the fact that gaming, in general, has been growing mainly on mobile devices, where our payment system is generally not utilized. We're continuing to invest in the gaming ecosystem on facebook.com, for example, with our new Facebook App Center, which is designed to help people discover new games and other types of apps as well.

In terms of revenue per user, ARPU increased by double-digit rates in North America, Asia and rest of world and by 8% in Europe, and worldwide ARPU was \$1.28 in the quarter. Our higher user growth in geographies with relatively lower revenue works to weigh down worldwide ARPU and the global growth rate.

Staying with user metrics for a minute. We ended June with 955 million monthly users, up 29% from 12 months earlier. On average in June, 552 million people accessed Facebook each day, up 32% from a year ago. Relative to last quarter, Brazil, India and Japan were key contributors to our growth in daily users. 58% of our monthly users were active daily users of the products, which we view as a positive measure of user engagement. And in addition, engagement patterns remain steady or grew across user groups as measured by the percentage of people creating content or providing feedback, such as likes and comments, and by the amount of content and feedback created per person.

We're encouraged that growth in engagement have remained strong as our network has expanded and as we've added later adopters to the service. We view this strong engagement as a sign of the utility of the service in the network and as the foundation for everything we're trying to accomplish.

A couple of points on user metrics. First, we reviewed our methodology for estimating users by geography, and as a result, have made small adjustments to the geographic distribution of users as of the March 31 measurement date. Second, we also refined and improved our methodology for recognizing what we call duplicate or false accounts. These refinements resulted in an increase in our estimate of duplicate or false accounts relative to our earlier global estimate, primarily driven by emerging markets such as Turkey and Indonesia. Please see Slides 18 and 19 for more detail. Since authentic identity is so important to the Facebook experience, we'll continue to try to improve our user measurement techniques with the goal of ensuring that every account on Facebook represents an authentic unique individual.

Turning now to expenses. In Q2, our GAAP expenses were \$1.93 billion. As planned and described in our prospectus, the biggest expense item was stock-based compensation, including associated payroll tax, which totaled \$1.3 billion in the quarter, driven by the completion of our IPO and the recognition of expense for RSUs granted between 2007 and 2011, which had a vesting condition tied to the IPO. Please take a look at Slide 9 for more information on the past and expected future flow of stock comp expense.

Excluding the effect of stock comp, our remaining expenses increased 60% to \$669 million, driven by headcount growth and infrastructure. Headcount at the end of the quarter was just under 4,000, a year-over-year increase of about 50%. While we will seek to remain disciplined in our spend across the company, hiring top talent remains a key priority, enabling us to aggressively pursue the opportunities in mobile, platform and monetization that Mark and Sheryl discussed earlier.

In the second half of 2012, we expect our operating expenses, excluding stock comp, to continue to increase significantly relative to our spend in the second half of last year, probably at a slightly higher growth rate than we observed in Q2. While we ultimately believe Facebook's business model should support attractive operating margins, at this early stage of our growth, investment is a top priority as opposed to managing for a target margin. Therefore, you can expect us to continue an aggressive pace of investment in R&D and infrastructure, in particular.

We had a GAAP operating loss of \$743 million in the second quarter. Excluding the effect of stock comp, our operating income would've been

\$515 million, representing a 43% operating margin. Our effective tax rate for Q2 was 79%, driven by the fact that a portion of our stock comp expense is not tax-deductible. Excluding the effect of stock comp, our tax rate would've been approximately 40%. We expect that over the long run, our tax rate will be similar to the rates of other U.S. technology companies that have a similar mix of business inside and outside the U.S. The future reduction in our tax rate will occur gradually over several years.

As described in our prospectus, the amount of cash tax we pay in 2012 and thereafter will be significantly different from the tax provision we report on our P&L, due to the deductions we expect to get from vesting of RSUs and exercise of options. At today's stock price, we estimate we will have a tax deduction of around \$13 billion that would reduce our cash taxes for several years.

Our net loss for Q2 was \$157 million or \$0.08 per share on a GAAP basis. Excluding stock comp, net income in Q2 was \$295 million or \$0.12 per share compared to \$285 million or \$0.12 per share in Q2 last year. We purchased \$413 million of property and equipment in Q2 and acquired another \$52 million of equipment financed through capital leases. As noted in our prospectus for 2012, we expect to invest approximately \$1.6 billion to \$1.8 billion in capital expenditures, including equipment purchased through capital leases. And we ended Q2 with \$10.2 billion in cash and investments on our balance sheet.

As we look to the second half of 2012, we're encouraged that the network of people using Facebook continues to grow and their engagement is strong. We remain focused on building out better and deeper social experiences for the people who use Facebook, while at the same time executing on the monetization strategies and initiatives outlined today.

Thank you for giving us the opportunity to discuss our progress. We're committed to providing you with balanced and thorough disclosure, and we welcome your feedback today and in the future in terms of how we can make our communications most helpful to you.

On a related note, I want to welcome Deborah Crawford, our new Director of Investor Relations, who you heard from at the beginning of the call. Deborah's been with us for 3 weeks now. And we're thrilled to have her leading our IR efforts.

And now we'd like to open the call for questions.

Question-and-Answer Session

Operator

[Operator Instructions] Your first question comes from the line of Spencer Wang from Credit Suisse.

Spencer Wang - Crédit Suisse AG, Research Division

I guess, maybe for Sheryl. I was wondering with respect to the Facebook advertising exchange, based on some of the initial tests, could you just talk about how that may impact monetization as you roll that out? And then the second question is on the Yahoo! patent deal. Just beyond the IP, can you talk about or provide any details on the advertising partnership or the expanded distribution agreement part of it?

Sheryl K. Sandberg

Sure. Facebook Ad Exchange, our real-time being offered, which was advertisers getting real-time on a specific ad impressions. The goal of this is to show people more relevant ads. This is something third parties have been doing across the Web for a while. For us right now, we're at very early alpha stage test and we don't have more information to share. But we're really encouraged by how interested our advertisers and customers are because this gives them an opportunity to connect to users, our users, that they're trying to reach to other things they do across the Web. On the Yahoo! deal, the Yahoo! deal had 2 parts. The first part was a cross license of all the patents. And the second part was a partnership, where we worked with Yahoo! on tent-pole anchor events, such as the Olympics. We were really pleased to sign the Yahoo! deal because it really extended the platform relationship we've had and really brought us back to what was a very good relationship we've had historically with an important client. And I think we'd also like to take the opportunity to congratulate Marissa on her new job at Yahoo!

Operator

Your next question comes from the line of Mark Mahaney from Citigroup.

Mark S. Mahaney - Citigroup Inc, Research Division

2 questions for Mark. You talked about the engagement. Have you seen any trends in terms of the engagement with the younger cohorts, anything that indicates decline in engagement? And then broadly, how do you think about the size of the company? Facebook relative to other leaders in the technology space runs pretty thin. You've tried to have a pretty lean organization. As you think about the 3 elements of the 3 broad growth areas for the company in the future, do you think you -- is there any change in your thinking about how big the company physically needs to be?

Mark Zuckerberg

Sure. So just to take the first one first. I think what we're seeing is pretty steady growth in engagement in all these cohorts, including the younger ones. So really, nothing out of line with the overall metrics there. On your second question about the overall size of the company, we've always been significantly smaller per employee compared to the number of people who we serve in the world. So it's really baked into the company that we have to build systems and software that take into account the leverage that employees here have. And that's actually one of the reasons why a lot of people love working here and one of the biggest reasons why people cite for wanting to join the company and staying here. So it's also affected the strategy. I mentioned we believe that all these consumer products, and maybe even more than consumer products that people use, will become social over time. But we can't build all those things ourselves, so we focused on building this platform. Over time, it might make sense for us to build more of these things ourselves. But because of the scale that we're at, we really focus on the 3 things that I laid out today. This shift towards mobile is incredibly important. Building the highest quality applications and products is really critical. Building a platform so that the 1 million more developers who use Facebook can build these products. It's the highest leverage thing that we can do. And we think that social ads are just going to monetize much better than nonsocial ads as we increase the percent of our overall advertising that has social context in it. So that's kind of where we are, and we're basically growing by trying to find as many talented engineers as we can for the most part. But I think for the foreseeable future, we're just going to be way smaller than other companies that address significant or comparable size user bases.

Operator

Your next question comes from the line of Jason Maynard from Wells Fargo.

Jason Maynard - Wells Fargo Securities, LLC, Research Division

One of the questions I'm curious on the mobile front is when you look at monetization, I think there's a lot of different views on how this will play out over the next couple of years. And I'm curious just philosophically, do you think that it is important to own the entire experience, i.e. integrated device, versus being, if you will, purely an application? Or do you think it's, if you will, a federated view of kind of a platform feeding into many applications? How do you think about the different scenarios on that front and how that could potentially work for Facebook?

Mark Zuckerberg

Well, Facebook is the most used app on basically every mobile platform, right? So when we think about what we want to do right now, we want to increase the depth of the experience in addition to just growing users. We thought a lot about this question of -- and I even talked about it in my opening remarks today, we want to not just have apps that people use but also be kind of deeply integrated into the systems as possible. We want to support a development ecosystem, where other apps can build on top of Facebook. So that's why you'll see us do things like support Apple in the iOS integration that they wanted to do. There are a lot of things that you can build in other operating systems as well that aren't really taking -- that aren't really like building out a whole phone, which I think wouldn't really make much sense for us to do. So I think that there's a big opportunity for us here. The amount of time that people spend in the apps is greater. People come to the apps and use Facebook more when they have mobile phones. And I think we're really much closer to the beginning here than the end in terms of what we can do. If you use the apps today, they're relatively basic compared to what I think anyone can imagine they would want from their Facebook experience on a phone.

Operator

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

Douglas Anmuth - JP Morgan Chase & Co, Research Division

I just wanted to ask 2 things. First, Sheryl, you provided some color on click-through rates on Sponsored Stories relative to the ads on the right-hand rail. I was hoping you could provide a little bit of color on what you're seeing in pricing here on a relative basis early on. And then David, perhaps if you could talk a little bit more about the potential for margin expansion going forward, how you're thinking about that potentially into the back half of the year and '13.

David A. Ebersman

Sure. Doug, this is David. I'll start on the pricing, and then Sheryl can chime in. So we're very pleased by what we've seen in the early ramp-up of Sponsored Stories in feed in both desktop and mobile. But it's important to note that it's early, so we have a relatively limited amount of volume that we've put into the system at this point. I think the test over the second half of the year that we're excited to see happen is working with advertisers to increase demand for Sponsored Stories in feed creating better social content that we can put in feed without having a deleterious effect on the user experience and seeing where that takes us in terms of clicks and prices and things along those nature. So while the early data is quite positive, it is at

low volume, so we just have to be careful about extrapolating from it. In terms of margins, not a lot to add to what I said earlier in the call. At this point in time, we are growing the business really focused on the opportunities that we seek to invest in and the importance that they could have and should have for the long-term business that we can build. And so we're more focused on making sure that we're positioned to capitalize on what we're trying to do in mobile and platform and social ads and not trying to optimize for a short-term margin target. In the long run, I think we have the kind of business that because we have such a large network and so much value comes from the content that it's created and distributed by the members of the network to have a business that works really efficiently.

Sheryl K. Sandberg

I'll just add one thing, which is while we're not commenting on pricing specifically because it's early, it's really worth noting that higher click-through rates lead to higher CPMs over time even without pricing changes.

Operator

Your next question comes from the line of Herman Leung from SIG.

Herman Leung - Susquehanna Financial Group, LLLP, Research Division

Wondering if we can talk about some of the penetration of some of the social ads that you guys have on the platform. Wondering the level of penetration of social ads that you have today on the site and the opportunity -- and I have a guick follow-up.

Sheryl K. Sandberg

So fewer than 1/2 of our ads are social, and it's an increase. We're very focused on increasing the percentage of our ads, which are social in nature. We know from a large number of studies in working with advertisers that the ads that are social have higher engagement rates from users, much higher ROI for advertisers. So driving that percentage up is also, is really important to us. It also feeds into the Sponsored Stories in News Feed strategy that I've spent most of my remarks talking about, which is that we put things in News Feed that are most relevant. So the more social context the ads have and the more relevant they are to our users, the more we'll be able to drive up that percentage of our ads that go into News Feed.

David A. Ebersman

And just to add, just to make sure that we're communicating this clearly, a very small percentage of our ads are Sponsored Stories in News Feed at this point. We just started with that product recently and we're being very careful in terms of the volume that we've put into News Feed because it's such a core part of the user experience.

Operator

Your next question comes from the line of Scott Devitt from Morgan Stanley.

Scott W. Devitt - Morgan Stanley, Research Division

I had 2, please. Given the various testing that you always seem to be doing around products and monetization, you've talked a lot today about the success of Sponsored Stories. I was wondering if there are other areas that are looking promising to you based on recent testing. And then secondly, from our calculation, the DAU to MAU ratio declined moderately sequentially both in North America and Europe. I was wondering what you would attribute that to. Is it seasonality? And what are you doing to drive engagement in those regions?

Sheryl K. Sandberg

I can take the first part. Yes, the Sponsored Stories have shown really, really good results. And we are also seeing good results from other ads on the site that have social context. So as we rolled out more ways to make your ads social, we see increasing engagement, increasing ROI from those ads. FBX is early. But our initial testing showed very promising results for advertisers as they are able to connect what they're doing elsewhere across. It's also worth noting how optimistic we are around our early testing around mobile. Mobile for itself is an inherently social experience and for our service is inherently social. And what people are doing on their mobile devices is continuing their News Feed and sharing. So really, the big accomplishment we've had in ads over the last quarter or 2 as we rolled Sponsored Stories into News Feed and on mobile, has been very promising for us because the results show that users engage with those ads and advertisers get a high ROI from them.

David A. Ebersman

First, the DAU relative to MAU comparison. We remain really pleased with the percentage of our monthly users who come back every day. We have sort of assumed earlier on in our history that as we further penetrated the market of people in the world and got into late adopters that, that number would go down. And we've seen that just consistently go up, which I think speaks to the value of kind of the network effects, the more people that use Facebook, the more interesting it is. The number doesn't tend to move

dramatically from quarter-to-quarter. It's a slow-moving number. It did decline fractionally from Q1 to Q2 as you noted. I think that 2 things there. One is that we did make some changes to what we've described earlier as background pinging, or I think we called it automatic background activity in the prospectus, which is when phones contact our servers without there being a user active on the other end just to download information. We see that on several of the mobile services, it helps you to have more information from Facebook when you do check your phones. We try and understand what that looks like in terms of technically so that we don't count that as usage, and we sort of continually make some changes. That had some impact on the apples-to-apples nature of the DAU comparison, June versus March. You asked about seasonality. I don't know that we have a great handle on the seasonality effects as it relates to by month. We tend to see things like holidays. There would be some drop in daily level as engagement, so it depends on what month, holidays and other things happen in.

Operator

Your next question comes from the line of Anthony DiClemente from Barclays.

Anthony J. DiClemente - Barclays Capital, Research Division

One for Mark and one for David. Mark, wondering if you can give us an update on your acquisition of Instagram. I know it's early but would be curious to hear how the integration of that acquisition is helping your efforts on mobile and monetization, and if there are others out there, other acquisitions like Instagram out there that you see as potentially desirable. Are there other acquisitions like that one? And then David, just wondering on the outlook, most of the models have 2Q as the lowest quarter of the year in terms of your year-over-year growth in revenue. Can you -- I guess, can you validate or confirm that? Is 2Q the lowest quarter of the year in terms of year-over-year growth?

Mark Zuckerberg

Sure. So to the first one, the acquisition hasn't closed, right? So there's been no integration or anything like that. And there will be an update when that happens. In terms of what else we might acquire, I mean, our strategy has primarily been to buy companies for talent. I mean, we have this very entrepreneurial culture, where we want the type of people inside the company to take risks and be the type of people who would want to build out whole companies on their own. So often the best way to find a lot of those people is to find people who are building companies, who maybe are working on a problem where they think that they'd have more leverage if

they joined Facebook. So x of Instagram, most of the acquisitions that we've done fit that category, and that will continue to be the approach going forward.

David A. Ebersman

To your second question, I mean, if you sort of start by looking backwards a little bit in terms of how revenue has grown to get us to where we are today, a couple of years ago, we had a couple of hundred million dollars in revenue, and obviously it's grown a lot. It's sort of a combination of, I would say, 2 things: a series of ongoing optimizations that we make every day in trying to make the business work better, increase advertiser demand, better ad formats, et cetera; and then on top of that, major changes that we make, like the introduction of payments, which really started impacting the business late last year, or fundamental changes to the product and how we advertise on it. And so when we look forward to the second half of this year, I think we'll continue to make the kinds of optimizations we're always making to try and drive more advertiser demand, better targeting of ads, et cetera. But the big priority and the big opportunity for us is what we're doing with Sponsored Stories in News Feed. And I think it's just difficult to forecast what that's going to look like because we're still early into it. We started putting Sponsored Stories in feed earlier this year but really didn't ramp that up substantially until really June of this year is when the numbers, we started putting more volume in. And thus far, we feel like we're in a really good position because as we've ramped up to where we are today, we see high levels of advertiser demand and good levels of user engagement. But the forecasting part is difficult because we're going to proceed slowly with this. We want to be sure. The biggest mistake I think we could make is to move too guickly and to find ourselves in a situation where we're having an impact on user engagement that we didn't anticipate or is hard for us to manage. So I think as we continue to ramp up, we will learn from each change we make and see how quickly, or what kind of speed of ramp-up makes the most sense for us. But I think right now, trying to forecast that is difficult.

Operator

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

Heather Bellini - Goldman Sachs Group Inc., Research Division

Great. I just had a follow-up on that, David. In terms of how fast you -- how do you gauge how often to show Sponsored Stories? I mean, what type of feedback are you looking for from people to know that maybe you're

showing them too many in News Feed or that you have the ability to maybe put the foot on the gas pedal a little bit more? I also wanted to know if these are rolled out globally at this point to everybody. And then I guess, the last question maybe for Mark would be -- or Sheryl, how do you see local fitting into the mobile experience? And where do you see advertisers in terms of leveraging what Facebook can offer there?

Sheryl K. Sandberg

So for Sponsored Stories, in terms of rolling it out, what we're doing is we're looking at 2 things very carefully. We're looking at the social context to make sure it's really relevant. So the better stories we can generate, where people are interacting with things that are monetizable, the more Sponsored Stories we can roll out. We're also looking really clearly at user reaction. And the good news for us is that it's easy for us to measure user reaction because we can see if users are sharing, clicking, liking, commenting, if they're engaging with those stories. And we can look at how much they're engaging with those stories relative to others. We've also been pretty careful, even when both of those metrics are high, at just limiting the number of Sponsored Stories as we roll out. We've been fairly cautious on only rolling out a certain amount. And we intend to be continually cautious as we really work on user demand, on the user perception. We have not rolled out Sponsored Stories in News Feed across all countries. There are certain countries that we're still working out finishes, so it's not entirely globally rolled out. And with apologies, I'm not sure I remember this -- local, yes, I knew there was a third part of the question. Yes, I mean, local is huge. We've always talked about it. And I think I mentioned it in my remarks. Local is the Holy Grail of the Internet. Everyone is about to get people into local. And this is something, certainly, in my history of working on -- in this industry, I've spent a lot of time on. The problem is that local businesses are just not very tech-savvy. So if you look at local businesses in the United States, obviously one of the more developed markets, something like more than 40% of them have no Web presence at all. So they don't adopt things that are really, in our view, might be something that we would think they would obviously adopt. This is where I think Facebook has a huge competitive advantage because those same local business owners are using Facebook as users. So while they won't adopt something for their product, they've set up their profiles or their timelines, and when they use the product, they start to see messages from other businesses. And then they start thinking, "Wow, this could work for my business as well." The product we want them to use, which is pages, is also incredibly similar to their timeline or profile. And so the leap the small business owner needs to make is just smaller here than we think it is with anyone else. And the numbers bear that out. We have so many, as I mentioned before, 7 million small

businesses that are using their pages on a monthly basis. Which is something we've done without any really targeted marketing effort to them at all, and then hundreds of thousands of those get up-sold into becoming advertisers. Our push, which I mentioned in my remarks, to make it easier for them to advertise, so the thing we rolled out last quarter, which is you can just pick a poster, do it on your page and make it super easy to advertise. I think those things will make a business a really big difference in accelerating this even further.

Operator

Your next question comes from the line of Laura Martin from Needham & Company.

Laura A. Martin - Needham & Company, LLC, Research Division

A couple for Mark. So Mark, we've been writing a lot about the optionality or the option value of the Facebook platform globally. And I guess, I'm really interested outside the visible revenue streams, which today are payments in advertising. Could you talk through how you're thinking about commerce on this platform? And also video, because video is one of the most shared things, as you know. As we think about over the next 3 to 5 years other revenue streams, how do you think philosophically about what Facebook could become over a longer period of time in terms of revenue streams?

Mark Zuckerberg

Sure. Well, the basic approach that we have for now is we're building out this platform and other companies can build on top of that. And you can view our business as an advertising and payments business or you could view it as there will be these companies that help to transform these industries, and we will get some portion of the value that comes from that, that we're helping to provide, right? So in gaming, for example, we think that we're helping to provide a lot of the value, so we end up getting a relatively high percentage of the revenue that comes into those companies. Whereas in something like music or some of the media companies that are now getting built using Open Graph, I think we aren't providing guite as much of the percentage of the value as with games, so the overall amount of the revenue that comes to Facebook through, whether whatever the breakdown of ads and payments is, I think, will be somewhat less. But a lot of people will do that stuff, too. So I think the real way to think about this is that over time, more and more nuanced experiences will become social. So gaming is such a basic thing that people want to do with their friends, so even with a relatively basic platform, people could build that ecosystem out. Some of the media stuff required more nuance. I think commerce will

require a little more and so on. But as these things get built out, I think we'll build out the tools to both enable those products to get built and to be able to capture some percentage of the value that we're helping to create. But I mean, I don't really have any more plans that I'm going to share with you today about our product roadmap or anything like that.

Sheryl K. Sandberg

One thing to think about in the commerce area or in other areas like video is that our view of the world is things become increasingly social. And that takes time. Gaming was obviously first. But people are informed when they purchase things by their friends, and the commerce companies that are really adopting social are seeing good responses. Fab is one of them. Fab is very early on in its history, but it's a truly social shopping experience. And they're seeing near 20% to 40% of their traffic from Facebook on a daily basis, as well as a very good return on their investment on ads that their CEO has been talking about publicly. We look out at what people's shopping behaviors are. And so much of them really -- so much of their shopping behaviors really are social, that we think there's a big opportunity for the social context that we offer to be a major part of how people discover products.

Operator

Your next question comes from the line of Ken Sena from Evercore Partners.

Kenneth Sena - Evercore Partners Inc., Research Division

We hear from marketers a lot that the platform is relatively complicated still in terms of the ad products offered and services. How long -- or how quickly can marketers expect to see that simplified? And then also, in terms of the App Center, can you give us any sense of the economics behind that arrangement? And is there a rev share? And if so, how does that compare to your standard 30% on your platform for payments? And then finally, if you could look back over the last few months in terms of going public, is there anything that you would redo?

Sheryl K. Sandberg

I'll take the first 2 and hand off the third. When you think about the advertising experience on Facebook, it is complicated today. And that's mainly because we're a completely new kind of marketing. We're not TV, we're not search, we are a third medium. And that's presents a challenge because the messages that talk at consumers on other platforms need to really be adopted and changed to be more inclusive. The right ad on TV or on search is the wrong ad for Facebook. Facebook marketers need to learn

how to make their ads really a two-way dialogue with consumers. We also have a measurement challenge. When you see an ad on Facebook, you don't go and click to a purchase right there, but you're more likely to search later on and buy a product or to walk into a store and buy a product. So we have the challenge of teaching marketers how to develop social marketing, and then working with them so that we can tie the consumer experience of seeing a Facebook ad and interacting with that brand to a purchase that happens later on. And that's why we're so focused on the market education. With our clients who have done a lot with us, I think they're learning a lot on those trajectories and seeing very positive returns. But it took a long time for the TV market and advertising to be truly understood. It took a long time for search. And I think we're still in that learning curve with a lot of our clients. The good news is that our results are so strong. The ROI results I talked about in my remarks, where we've now done 60 campaigns, if you talk to CMOs, those ROI results of getting to 3x their ad spend or 5x their ad spend or better are truly good, compared very favorably with anything else marketers do. And so our view is that if our ads work and we continue to make our ads work and they work for advertisers and our users, we'll be able to educate the market over time, how quickly that will happen will depend. But we feel like we're on a good part of that growth trajectory. In terms of the App Center, the goal behind the App Center is that we believe social discovery will lead to app installs. You are more likely to want to use an app your friends are using than you are one that you know the generic population represents. Right now, we are not offering paid apps, so the revenue share issue you're talking about is not something we have a product to deal with right now.

David A. Ebersman

And Ken, you asked about lessons learned looking backwards. Obviously, we're disappointed about how the stock has traded, but I think the important thing for us is to stay focused on the fact that we're the same company now as we were before. We've got the same opportunity in front of us to build something really important and valuable over time. And if we stay focused on building great products, we expect and we want to be judged based on the quality of the experiences as we build and the value we can create over the long term.

Operator

Your next question comes from the line of Ben Schachter from Macquarie.

Benjamin A. Schachter - Macquarie Research

I had some phone problems, so I apologize if you got these already. But one question for Mark and one for David. David, when you're thinking about visibility into the back half of the year and how quickly ad revenue is ramping, how does that look versus sort of expectations that were earlier in the quarter pre-IPO? And then a similar question on the OpEx growth. Do you have more visibility, less visibility? How do things look now versus where they were just before the IPO? And then Mark, on the top of the sort of information in the News Feed that the user did not specifically ask for, trending stories or trending video and certainly Sponsored Stories, beyond click-through rate, how do you think about measuring and understanding that user experience so you know not to sort of go over the edge and degrade the user experience?

Mark Zuckerberg

Sure. So I mean, in terms of the methodology for building News Feed -- and at any given point, we have a lot of different tests, different algorithms running, and we measure engagement of everything downstream from News Feed and the whole system, right? So obviously, clicks and engagement and feedback in News Feed, how many people want to share, but also how many page views and how much time people spend on Facebook overall, ad performance, everything, down to all of the different tweaks that we do in News Feed, and user sentiment as well. So I think we have pretty robust systems that are built out around this. And one of the things that I think is pretty interesting is what we've seen is that we can put in good sponsored content and have it not degrade those metrics. So that's really what we're trying to do, is we're rolling some of these Sponsored Stories out more conservatively because we want to make sure that the quality is very high. And we're basically continuing to run those tests to make sure that we are producing the best product that we can.

David A. Ebersman

So Ben, thanks for your question on the looking forward part. I think the 2 things you asked are pretty different, at least from my standpoint. Trying to project operating expenses is, while not easy or precise, we have a fair amount of understanding of how things are trending and what we expect to spend in the second half of the year. So that's why we provided a little bit more specifics in my opening remarks or my prepared remarks about what we expect in terms of operating expense growth. I think revenue growth is just harder to predict, and it's particularly hard to predict when you're really focusing on a new product that you're in the early stages of launching, as we are with Sponsored Stories in News Feed. So as I said, we're pleased with where we are, where we were at the end of June, where we are now. And that's going to make, we hope, a sizable impact on what kinds of

performance we can deliver, not just in the second half of the year but over a longer-term horizon because we think this can be, fundamentally, a really important marketing product.

Operator

Your last question comes from the line of Dan Salmon from BMO Capital Markets.

Daniel Salmon - BMO Capital Markets U.S.

My question was on the Preferred Marketing Developer Program, where I think you're up to around 330 formal partners today, with a great many of them qualified for apps. But around 50 or so, and I think around 20 -- 50 for ads, 20 for insights, and I just wanted to see what your expectations are to see those numbers, both the total number of PMD developers growing and in those 2 categories, in particular.

Sheryl K. Sandberg

I think we're very optimistic about our platform partners. Our goal is to take everything people do, or at least close to everything people do, and make it social. And what we do is provide technology for our platform partners to do that. How many people go into specific programs is not the thing we most focus on. We focus a lot on how many developers out there are using our tools, how many of the apps that are growing quickly, how many of the services people are growing quickly are using tools like Open Graph, as well as ads, so that we can build an ecosystem. Mark said in his remarks that we really believe that we are going to provide the identity and the social layer for everything that happens across Web, across mobile. Given the size of our graph, this engagement people have with us, which even as we grow, is not just staying flat but in many ways increasing. We're very optimistic that if you were choosing to develop a service, you would choose to do it with us. We really consider ourselves a partnership company. And that means that we want to take social companies and make them big, and big companies and make them social, because we think bringing what Facebook provides, which is your friends, makes every service better.

Operator

I will now turn the call back over to management.

David A. Ebersman

All right. Thank you very much. We're grateful to all of you for joining us today. And we look forward to speaking with you again next time.