

Twitter Q1 2018 Earnings Report SAN FRANCISCO, CALIFORNIA April 25, 2018

PRESENTATION

Krista Bessinger, Twitter, Inc. - Senior Director, Investor Relations

Hi, everyone. Thanks for joining our Q1 earnings conference call. We have with us today our CEO, Jack Dorsey and CFO, Ned Segal. We hope you've had a chance to read our shareholder letter which was published on our Investor Relations website this morning. Like last quarter, we'll begin with just a few prepared remarks before opening the call directly to your questions.

During the Q&A, we'll take questions asked via Twitter in addition to questions from conference call participants. Questions submitted via Twitter should be directed to @TwitterIR using the #TWTR.

We would also like to remind everyone that we'll be making forward-looking statements on this call such as our outlook for Q2 and the full year of 2018 and our operational plans and strategies. Actual results could differ materially from those contemplated by our forward-looking statements, and reported results should not be considered as an indication of future performance. Please take a look at our filings with the SEC for a discussion of the factors that could cause our results to differ materially. The forward-looking statements on this call are based on information available to us as of today's date, and we disclaim any obligation to update any forward-looking statements, except as required by law.

Also during this call, we will discuss certain non-GAAP financial measures. Reconciliations to the most directly comparable GAAP financial measures are included in our shareholder letter. These non-GAAP measures are not intended to be a substitute for our GAAP results. And finally, this call in its entirety is being webcast from our Investor Relations website. An audio replay of this call will also be available via Twitter and on our website in a few hours.

And with that. I would like to turn it over to Jack

Jack Dorsey Twitter, Inc. - Co-Founder and CEO

Good morning, everyone, and thank you for joining us today. We were pleased with our progress this quarter, especially in 3 key areas of our business. Our revenue growth accelerated and drove better-than-expected profitability, our audience and engagement continued to grow as we made improvements to our product and we made meaningful progress in our ongoing safety and information quality work. I'll outline each of these in more detail.

First, we accelerated revenue growth in the first quarter with total revenue up 21% year-over-year and owned-and-operated ad revenue up 28% year-over-year, driven by continued strong ad engagement growth, improved ROI and better sales execution. We also drove GAAP profitably for the second consecutive guarter with net income of \$61 million and net margin of 9%.

Second, daily active usage grew 10% year-over-year, making another quarter of double-digit year-over-year growth. We continued our work to make it easier for people to follow topics, interests and events on Twitter with new curated timelines of tweets around breaking news and sports events at the top of the home timeline and launched new product features, including video timestamps and Bookmarks to help people discover and discuss what's happening.

And third, this quarter, we committed to help increase the collective health, openness and stability of public conversation on Twitter and to hold ourselves publicly accountable towards progress. We're investing in improving the health of our service by building a framework to help encourage more healthy debate, conversations and critical thinking. And we're soliciting external experts to help us to get this right. This is a holistic approach inclusive of our ongoing work in safety and information quality where we continue to make progress.

We aim to build meaningful, lasting solutions to address the issues affecting our service. It's the right thing to do for the people who use Twitter and critical to growing our business and it will remain a focus for us throughout 2018.

And now back to Krista for questions

QUESTION AND ANSWER

Krista Bessinger, Twitter, Inc. - Senior Director, Investor Relations

Great, thank you and it looks like our first question will come from Anthony DiClemente at Evercore.

Anthony DiClemente, Evercore ISI

I have one for Jack and then one for Ned. Jack, just on everything that's gone on in terms of data privacy, I think investors are wondering about the data licensing business that Twitter has and perhaps how should we think about that business in light of potential privacy regulation? Is it possible that there would be a business impact to that presumably high-margin business that Twitter has? And then for Ned, my question is about users. You showed double-digit DAU growth in the quarter. But I wanted to ask about MAUs because I noticed in the shareholder letter you talked about information quality, efforts, GDPR and other operational decisions as a headwind to MAUs. And so I just wondered to what extent are some of those factors in the letter near-term headwinds to MAU growth as compared to kind of the longer-term opportunity for broadening out the base of MAUs, yes, over a longer period of time?

Jack Dorsey Twitter, Inc. - CEO

Thank you, Anthony. I want to start with our principle here. So we believe that privacy is the fundamental right for everyone we serve on our service. Our data business is something we continue to feel really good about. We are different from our peers in that Twitter is public. We serve the public conversations, so all of our data is out in the public, out in the open. And our data business just organizes that public data in real-time to make it easier for brands, researchers and organizations to utilize it. And it's useful just to go over some examples of how people use the data business to add some color here. We do a lot of sentiment analysis for brands for them to figure out how people feel about their products or services. We see a lot of citizen services being used. A good example of this is Virginia. Their Department of Emergency provides citizens info -- citizen info for the residents. And also research, we see a lot of research. A good example of this is Northeastern who developed a flu tracking technique. We do not provide any personal identifiable information that's not already visible on the service. So we feel really good around the data business, especially with all the conversations going on, and we will continue to hold ourselves publicly accountable to make sure that we fulfill that fundamental right of privacy.

Ned Segal, Twitter, Inc. - CFO

Hey, Anthony, your second question was on MAU and potential impacts. So a couple of things there. First, our focus continues to be to drive usage of Twitter as a daily utility. So we were thrilled to have our sixth consecutive quarter of double-digit DAU growth with the 10% year-over-year growth that we reported. MAU grew 6 million to 336 million. There were a couple of impacts this quarter. We saw some ongoing impact from the changes that were made to the Safari third-party app integration in the fall. That was about 1 million impact.

You can imagine a chunk of that was in the U.S., the rest was overseas. This is probably the last quarter that we talk about that. It may linger from here, but in small enough numbers that we probably won't have to mention it. The broader health initiatives that is removing spamming and suspicious accounts from Twitter continues to be something that will impact MAU. As we look ahead, to your question, there are a handful of things that we think about. One is the ongoing health and information quality efforts. We're always going to do the right thing to make sure that the service is great for those that should be on it and that's going to be removing spamming and suspicious accounts whenever we can and we continue to improve with that. GDPR could have some impact over time. And then we may make decisions over time that affect MAU and we just want to flag it. Sometimes it could happen in 1 period or another. So this wasn't meant to be a near- or long-term comment so much as it was that there are going to be better ways for us to deliver the benefits of Twitter to people than SMS messages. And frequently, we will come to the decision that we're not going to pay for SMS messages to be delivered in certain markets when the Twitter app that we all use or Twitter Lite can provide a better experience to people. Now we just wanted to flag those as things that could be headwinds. We aren't going to quantify them or talk about the time frame because it's hard to predict things like that. These are things that should impact MAU more than they do DAU, and we still feel like there's lots of room ahead for us to grow DAU both within the MAU base and beyond.

Krista Bessinger, Twitter, Inc. - Senior Director, Investor Relations

Thanks. And our next question comes from Ross Sandler at Barclays.

Ross Sandler, Barclays

Great. Just 2 questions. Ned, I guess in the letter, you mentioned on revenue trajectory that the sequential growth is going to look more like 2016 instead of '17. So just a little color there. I guess it kind of implied an exit run rate in 2018 for owned-and-operated that is a good amount below where you are right now. So is there something you're seeing in the pipeline? Or is that just conservatism in terms of that comment? And then I guess related to that, a couple of quarters ago you guys gave out the growth of top 100 accounts. Given the acceleration that we're seeing right now, any color about where the growth is coming from related to top accounts or smaller accounts would be helpful.

Ned Segal, Twitter, Inc. - CFO

Great, thanks, Ross. I'll start on the question on revenue and then we can talk about where is the strength is coming from. So it's still early in the quarter. We've got a big global event in the World Cup in front of us, and lots of work to do this quarter. We're also facing tougher comps in the second half of this year as we lap the beginning of our strong business recovery that began in Q3 of last year. As we talked about in February, we continue to believe that our sequential growth rates for total revenue for the remainder of 2018 will resemble those from 2016 more than they will those from last year. We recognize that as you mix-and-match and try to do math that it may be tempting to back into revenue outcomes from our EBITDA and EBITDA margin guidance, but I really suggest that you focus on the sequential revenue growth rate comment when you're modeling revenue. Your second question was where the growth is coming from, and the strategy for the last couple of guarters has been to take all the great things that were really resonating with the top 100 advertisers as an example of the momentum that we're building and the improved advertiser sentiment that we talked about in Q3 and Q4 and to extend that to other advertisers. So we saw broad-based strength this quarter across products, across geographies and we were thrilled to see the momentum continue in the conversations that we were having with advertisers. So we'll work hard to continue to deliver a better ROI for both the largest advertisers and what we call the torso accounts, which are those in the middle where we still feel like there's execution opportunity for us, as well as the SSA business, which grew nicely this quarter and is where we hope smaller businesses and self-serve accounts get advertising on Twitter.

Krista Bessinger, Twitter, Inc. - Senior Director, Investor Relations

Great, thank you. And we'll take the next question from Heath Terry at Goldman Sachs.

Heath Terry, Goldman Sachs

Was wondering, Ned, maybe if you could disaggregate for us a little bit the divergence that we saw between revenue growth and DAU growth this quarter. I think a lot of us have been sort of anchoring against DAU growth to sort of better understand the potential growth in the business while you were going through the advertising restructuring last year. And so now that we've seen advertising growth accelerate well above DAU growth, wondering if you can give us a sense of how much of that is pricing, how much of it is ad load, how much of it is mix and particularly if there are any specific products that you see that are really driving that.

Ned Segal, Twitter, Inc. - CFO

Great, thanks, Heath. So let's talk about that a little bit. We're really focused on two things. The first is growing audience and engagement. That will always be a key factor in driving revenue growth and we're pleased with the progress we made this quarter, but there's lots of work in front of us. The second is increasing ROI for advertisers. We are pleased with the progress we made there as well. CPEs were down 28% and ad engagements were up 69%. When you combine those things and you think about the improvements that we're making in video and the ad formats that people are seeing and the relevance that we're driving, you're getting CPMs that continue to be healthy as well. When we made a comment going back a year or more or so ago that our audience would lead revenue and that proved to be true and we're now at the point, as you talked about, that revenue is exceeding audience growth. We think that revenue can continue to grow faster than audience and there are a handful of things that we look at: improving ad relevance, showing more compelling video ads and improving the advertiser experience that is making it easy for them to buy ads on Twitter; better sales execution, getting out there and talking to more advertisers and articulating to them all the ways that they can get in front of their customers on Twitter, All this leads to a better ROI, which leads to increased demand. We still feel like we are more demand-constrained than supply-constrained when we look across the platform, across geographies, across different surface areas on the platform and so there's still lots of work for us to do there. Ad load continues to -- there's still opportunity for us there. Ad load was up somewhat due to increased demand, but that really wasn't the driver this quarter.

Krista Bessinger, Twitter, Inc. - Senior Director, Investor Relations

Thank you. And the next question comes from Doug Anmuth at JPMorgan.

Douglas Anmuth, JP Morgan

One for Jack and then one for Ned. Jack, just on the 30-plus new live content partnerships in 1Q, can you talk a little bit about what you're particularly excited about going forward and perhaps give a little more color on the FIFA World Cup deal in particular? And then, Ned, just on the revenue growth, I think the U.S. grew 2% and international was up 53%. So obviously, overall MAU growth is a factor here and perhaps TellApart as well on the comp, but can you just help us understand the key differences geographically?

Jack Dorsey Twitter, Inc. - Co-Founder and CEO

Thanks, Doug. I'll take the first part. So one of the things we're really excited about is we continue to strengthen a lot of the product infrastructure that allows us to go beyond just a live stream, but actually show the conversation for any particular event. Something you may have noticed recently is we've been able to put more and more of Whats Happening, the Happening Now modules at the top of people's timelines. So any time we get a signal that you're interested in a particular team or an event or a breaking news story, we can actually put a Happening Now module at the top of your timeline. You can tap into it. And if we have a live stream, we will show the live event, whether it be a breaking news event or a sporting event. But more importantly, we can show the conversation around it.

Everything that people are talking about, experts in the field, top commentators, everything that mattered in a recap tab. So we get to show people what's happening in the moment, but also show them what mattered most if they didn't catch the particular event live. With regards to the 30 live partnerships, we are really excited about the World Cup in particular. We will have every single goal on Twitter where people can discuss it and share it and tweet it. And we're also really excited about some of the other partnerships

that we just took on, the MLB, Major League Soccer and PeopleTV. Anytime we have a live stream, it enhances the conversation. It enables people to see what's going on wherever they are. And we also launched a really compelling feature that allows even more conversation, which is timestamps. So anywhere within the live feed, you can start a tweet and actually show exactly the point in the live feed that you're talking about within your tweets. So we think this is a great way to highlight where people think something matters and also get a conversation started, but also gives us a lot more signal around what mattered within a particular live event. So really excited about this year and everything that's happening around the World Cup.

Ned Segal, Twitter, Inc. - CFO

Hey, Doug, your second question was on U.S. versus international. It's a good question, glad you asked. So talking about revenue, it was up 21%. It's important to note that -- remember that TellApart business, which we deprecated last year, if you backed that out, we actually were up 27% and O&O was up 28%. Since TellApart was a U.S. business, if you backed that out from the comps, you actually end up at plus 9% as opposed to the 1% or 2% that you were referring to. 9% definitely is in 53%. There's still lots of room for us to improve in the United States, but it sounds a lot better than the 1%. It gives you a bigger sense for the trajectory of the business right now. We're growing off of a larger base, as you mentioned, in the United States but it feels like the message to advertisers really is resonating here, sentiment is getting better, our execution is improving and it's the same things that are driving the business internationally such as a better ROI from the new ad formats and better relevance being coupled with a larger audience.

I'll give you a couple of highlights internationally as well. Video in Japan continues to be an area of strength. Our video and agency partnerships in the U.K. contributed to the strength this quarter. And our performance ads in the China export market where we help Chinese brands outside of China as well as the performance ads Brazil and the Middle East were also areas of strength. So we think this strength internationally can continue and we're not that far away from international becoming more than half of revenue at Twitter.

Krista Bessinger, Twitter, Inc. - Senior Director, Investor Relations

Thanks. And our next question comes from Colin Sebastian at R.W. Baird.

Colin Sebastian, Robert W. Baird

First off, with video now accounting for more than half of revenues, I'm wondering how much of that format is driven directly or indirectly by live streaming and live events? Or is that still much more of an opportunity for monetization going forward. And then just given all the headlines around social media and data privacy, in particular during March, I wonder if there's any notable change in the linearity of your business worth calling out as you went through the quarter.

Ned Segal, Twitter, Inc. - CFO

Thanks, Colin. So on video and where the strength is coming from, we definitely saw strength from in-stream videos as a part of the advertising line this quarter, but that definitely was not the only source of strength and there still are much bigger parts of that line, as you can imagine. We saw real strength from the 2 new ad formats we talked about the last couple of quarters, Video Website Cards and a Video App Cards where we feel like they are driving incremental revenue to Twitter as engaging ways to get people to click through to apps and to websites. So we feel good about that. We feel like there's lots more opportunity for us to drive video higher as a percentage of revenue because it's just a more engaging way for advertisers to get in front of their customers on Twitter, whether it's through the ad formats that we have today, through in-stream opportunities or through others that may come up over time. Let me turn over to Jack on privacy.

Jack Dorsey Twitter, Inc. - Co-Founder and CEO

Yes, we haven't seen any change in the linearity of our business. We just released a new privacy policy yesterday to everyone on our service, and we continue to make sure that we're pushing ourselves around giving people simple, easy controls around protecting their privacy and seeing the data immediately that we have around them.

Krista Bessinger, Twitter, Inc. - Senior Director, Investor Relations

Great, thanks. And the next question we'll take is from Twitter. It's from the account of **@animalesmitologicos** and here she asks, "How is the use of Twitter Lite progressing and? What are the plans that you have there for reaching a greater audience?"

Ned Segal, Twitter, Inc. - CFO

Great, thank you. I'm not going to try to repeat the handle, but I'm going to get the question from Twitter. So Twitter Lite definitely saw growth this past quarter. We're pleased with the progress there, but it's going off of a small base. It's definitely an example of what's driving our growth internationally as we roll out Twitter Lite in more geographies and it gets into more people's hands. In our minds, it's a great example of what we're doing there and one of the reasons why we were able to grow DAU double digits in 5 of our 10 largest markets.

Krista Bessinger, Twitter, Inc. - Senior Director, Investor Relations

Great, thank you. And our next question comes from Lloyd Walmsley at Deutsche Bank.

Kunal Madhukar, Deutsche Bank AG

This is Kunal for Lloyd. A couple, if I could, one is on this new privacy policy that you just rolled out yesterday. How much of the data are you sharing with or actually sharing with third-parties? That would be one. And in terms of the like-for-like products, what are you seeing in terms of pricing and advertiser interest? So I understand that CPM as a whole is up, but on like-for-like products, how is that trending?

Jack Dorsey Twitter, Inc. - Co-Founder and CEO

So on the first part of the question, in terms of data to third-parties, again, our data business is a little bit different from our peers in that we organize the public information so that people can gain insights from them. Normally, this is used for brands, sentiment analysis for citizen services, governments, local governments in particular, and researchers. And we have a know-your-customer policy so that we do extensive research in terms of who is our customer around the data. But again, a lot of the data is in the public and we do not sell any personal identifiable information.

Ned Segal, Twitter, Inc. - CFO

Your second question was on pricing from -- on a like-for-like basis. So just as a headline, CPE was down 28%. It was more about mix shift to video than it was like-for-like, but there was some like-for-like compression as well on a CPE basis. We continue to feel really good about the CPE as it is indicative of the improved ROI that we're delivering to advertisers when you couple it with the click-through rates, which continue to get better based on better formats such as video and better relevance against a bigger audience.

Krista Bessinger, Twitter, Inc. - Senior Director, Investor Relations

Thank you. And our next question comes from Brian Nowak at Morgan Stanley.

Brian Thomas Nowak, *Morgan Stanley*

I have two. The first one on user growth. I know in the past, you've talked about how many daily visitors you have to the platform and efforts to improve ultimately conversion and user growth. I guess could you talk about a couple of successes or tangible examples you've had in ways to bring more of these daily visitors into the ecosystem to make them stick? And what do you think is sort of the biggest point of friction you still need to solve? And then on the second one on the advertising side, you made some really good progress on the ad business. As you think about biggest areas of improvement or the constraint to

getting a bigger share of ad budgets, what are your 1 or 2 big focal points to improve the ad product as we go throughout 2018?

Jack Dorsey Twitter, Inc. - Co-Founder and CEO

Hey, Brian. So as we continue to add relevance to where people spend the majority of their time, namely, the timeline and notifications, we continue to see really positive results. So being able to show a relevant timeline immediately is definitely the stickiest aspect of Twitter. We've been looking a lot at onboarding and what we can do there, in particular. We are not a social network and we do not benefit from the same social graph that social networks do. People come to us because they're interested in something and they're interested in seeing what's happening within the world or within a particular topic or within a particular niche interest. And the faster we can get them to connect with that, the better, the more value they get out of our service. So we've been biasing a lot more of the service towards interest and towards topics, been doing a lot of experiments within the Explore tab to make sure that we are building the right experience before we build it into the timeline or right into onboarding, but you'll see a lot more of this sort of work where we try to get people to their interests much faster so they can follow them right in the timeline and right through notifications. And we have a number of product experiences that are live today that we continue to iterate and refine, refine and test and some new ones that we're excited to push out quite soon against this. The most notable of which that has matured quite a lot is the Happening Now module, which, again, you tap into. If we have a live video, we show it right at the top and that could be a sporting event or it could be breaking news. We may have multiple videos for a particular event -- multiple live videos for a particular event. And then we also show the entire conversation around it based around relevance, all machine learning and deep learning driven, and also a recap of what mattered most within that event if you were unable to catch it live or came in, in the middle of the event. So the more we do around interest, the more friction we remove for people to get there, the higher the benefit.

Brian Nowak, *Morgan Stanley*

And then the advertising spend?

Jack Dorsey Twitter, Inc. - Co-Founder and CEO

Sorry, almost forgot your second question. So in terms of our priorities for the ad side, we can -- the more we continue to improve our core offering through better performance and measurement, the stronger we get. This comes in multiple ways: one, we're focused on making sure that we are just improving the core ad platform. We continue to look for opportunities to differentiate our ad products and really match it with the public conversation that we serve. We're focused a lot on measurement. And we're focused on third-party accreditation. And we continue to benefit from tapping into new channels of demand, specifically online video, and new ways to buy ads on Twitter as well.

Krista Bessinger, Twitter, Inc. - Senior Director, Investor Relations

Thank you. And our next question comes from Mark May at Citi.

Mark May, Citigroup

You noted that video ads are now greater than 50% of the total, and I was hoping that you could speak to the impact on the monetization improvements from the increased mix of video ads and how that impacts yields and how much more room you know -- that you think you have there. And then, secondly, what was it about Japan that resulted in such strong growth in the quarter?

Ned Segal, Twitter, Inc. - CFO

Thanks, Mark. I covered some of this earlier, but let me go back through it. On the monetization side, so videos now more than half of ad revenues. It's the second quarter where that's been the case, but we still feel like there's lots of opportunity from here both through the formats that we have today, through better relevance, through new formats, through increasing audience. All of those are — and better sales execution. All of those are ways where we think we can continue to drive more penetration of video, whether it's against the timeline or live video or the events and topics broader strategy that Jack

described. So we still feel like there's lots of opportunity there. And as you mentioned, video, given the pricing dynamics, it can pull CPEs down. When you couple that with the positive impact that it has on ad engagements and on click-through rates, you end up delivering a better ROI to advertisers and CPMs continue to be stable and pretty healthy with that as a backdrop. If you look at Japan, we continue to see strength there that we're really pleased with. It's our second largest market. And our sales execution, coupled with the audience growth that we've seen, have been really strong business drivers. We have -- it's been a performance- and a video-driven ad market and we've been really pleased with the progress we've made there. We've also made really good progress with the agencies there and that's led to a better execution on the sell-side.

Krista Bessinger, Twitter, Inc. - Senior Director, Investor Relations

Great, thank you. And the next question comes from Rich Greenfield at BTIG.

Richard Greenfield. BTIG

If we look at your DAUs, the 2-year stack, I think, is up somewhere around 24% and you've continued to accelerate quarter after quarter. Wondering as you look at that as a proxy for engagement, could you give us any sense of what overall time spent is doing on the platform on a per-user basis? Is there any kind of color you could provide? And then, two, I think one of you talked last quarter about early signs of progress on the direct response side of advertising, which I know had been kind of a real trouble spot for Twitter 12, 18 months to go. Wondering if you could give us an update on how -- what you're seeing in DR and how big of an opportunity that whole market is for you as you go forward throughout '18?

Ned Segal, Twitter, Inc. - CFO

Hey, Rich, I'll take the first part on time spent. Nothing new to report there. We continue to be pleased with the engagement that we're seeing on the platform as we grow the base of folks who use Twitter on a daily basis. But let me turn over to Jack on direct response.

Jack Dorsey Twitter, Inc. - Co-Founder and CEO

Yes, direct response had another strong quarter. And just to take a step back, we see performance and brand blending together. So a good example of this, which we spoke about last quarter is the Video Website Card. So this combines power of video to drive both awareness and interest with the ability to drive our advertiser objectives. So we're looking at how these 2 things come together to fulfill the overall performance needs on the platform and it's doing well.

Richard Greenfield. BTIG

And maybe just to follow up on the time spent point. As you think about your pitch to advertisers as you move out over the next couple of weeks in New York, like what is the main message of kind of why someone should be shifting more dollars to Twitter versus other platforms?

Ned Segal. Twitter. Inc. - CFO

Rich, it's about a few things: it's the growing engaged audience, 6 quarters in a row of double-digit DAU growth really resonates with advertisers; it's the lower prices that they're getting on Twitter as we see mix shift to video and CPEs come down; it's better-performing products as indicated by the click-through rates and ad engagement rates that we talked about; it's improved measurement, as Jack described; and then the differentiated opportunity we offer to get them in front of their customers on Twitter. Whether we're the second screen and we are increasing brand awareness while they're watching something somewhere else or we're the place where they're deeply engaged at the moment around an event or topic or just going through their timeline, it feels like that's something that's really resonating. You mentioned in the next few weeks we have the NewFronts coming up and we're really excited about the opportunity to talk to advertisers about the content that they'll be able to advertise against on Twitter in the coming year.

Krista Bessinger, Twitter, Inc. - Senior Director, Investor Relations

Great, thank you. And our next question comes from Justin Post at Bank of America Merrill Lynch.

Justin Post, BofA Merrill Lynch

Just want to follow up on the video transition. As that kind of levels off, how do you expect that to impact revenues at that point? And do you still have a lot of pricing to go as you look at your video business? And then, second, on GDPR, looks like you're kind of helping us with the second quarter revenues with your numbers without giving formal guidance. But have you factored anything in your revenue outlook for the back half of the quarter post GDPR and how you're thinking about that for the second half?

Ned Segal, Twitter, Inc. - CFO

Okay, thanks, Justin. First, on video, so we still think there's a lot of room. You mentioned leveling off, we feel there's a lot of room in front of us to increase video as a way that advertisers get in front of their customers on Twitter and therefore increase there as a percentage of our ad dollars. That's through newer ad formats, the existing ad formats against a bigger audience and improving relevance over time. So those ought to continue to drive revenue from here. From a pricing perspective, to the extent video continues to have lower CPEs than other ad formats, we'll have to show more videos in order to offset that. But that's been the trend now for some time as indicated by that minus 28% in CPE and the plus 69% in ad engagements. So we're really pleased with the direction of video as a percentage of ad revenue and we'll continue to drive it higher in our work with advertisers. Secondly, you asked about GDPR and our thoughts around revenue. So we've incorporated our thinking around GDPR and everything else into the EBITDA and EBITDA margin guidance that we've given for the second quarter. But just if you take a step back, it is too early to predict the impact that regulations can have on the business.

Justin Post, BofA Merrill Lynch

Great. Maybe I can follow up. Do you still think there's a lot of room to increase like-for-like pricing around video from here?

Ned Segal, Twitter, Inc. - CFO

So Justin, when we think about pricing and we see like-for-like come down, it is an opportunity to deliver a better ROI to advertisers. But we can counter that with better ad formats and better relevance. We are thrilled to talk to advertisers about pricing coming down as it has and as it may on Twitter. So we don't really think about, in the context of an auction format, driving pricing higher so much as we do delivering a great ROI to advertisers.

Krista Bessinger, Twitter, Inc. - Senior Director, Investor Relations

Thank you. And next guestion comes from Mark Mahaney at RBC.

Mark Mahaney, RBC Capital Markets

Two questions, please. First, the MAU growth sequentially was pretty solid. You want to call out a particular -- any particular markets or countries that drove that MAU growth internationally sequentially? And then, secondly, could you talk about how much you're needing to spend or investing in platform security just given overall data privacy concerns and the concerns over the abuse -- or misuse of the platforms by third-party -- by bad actors out there, how much has that caused you to increase spend on platform security this year or for the next couple of years?

Ned Segal, Twitter, Inc. - CFO

Thanks, Mark. So you asked about MAU. We were pleased with the breadth of audience and engagement improvement that we saw this quarter. I mentioned earlier 5 of our 10 largest markets grew DAU double digits this past quarter and that is probably the best way to indicate the breadth that we saw across markets around audience broadly defined. When we think about platform security, that will continue to be an area of investment for us. We think about 4 areas where we will grow headcount aggressively this year. Improving health of the platform would be one, driving audience and engagement would be another, improving revenue products is the third and then ongoing investments in sales. If you take a step back and think about what we'll do around headcount, we mentioned in the letter that we expect to grow headcount 10% to 15% in 2018. As you can imagine, you don't hire all those people all

at once. You hire them gradually over the course of the year and so we don't expect to have the full burden of all of them for the full year, but we will leave the year with a headcount and a team that's 10% to 15% larger than the one that we started the year with. And that hopefully is indicative to you of both where the priorities are from a hiring perspective and how we're thinking about the opportunities in front of us.

Krista Bessinger, Twitter, Inc. - Senior Director, Investor Relations

Great, thank you. The next question comes from Eric Sheridan at UBS.

Eric Sheridan, UBS

Maybe two. Going back to the pricing, you've called out that shift in pricing to lower CPE formats, but is the gap closing? I know you talked a little bit about trying to earn ROIs for advertisers, but any sense you can give us about the gap between video and other formats on CPE and how that might close over the medium to long term. Second question would be for Jack. With Facebook saying early in the quarter in January that they would be emphasizing more family and friend content and possibly de-emphasizing content from publishers and news sources, was that something you can capitalize on either in the engagement side or partnering with publishers or working on product to sort of develop more referrals? Your comment on that would be appreciated.

Ned Segal, Twitter, Inc. - CFO

Hey, Eric, on the first part of your question around the gap closing, I think that just the framing of the question is different than how we think about it from a strategy perspective. If CPEs are coming down and it's because people are embracing a different ad format, which is more engaging with a larger audience, we're thrilled about that and we're just not going to focus on pricing of an engagement. When we think about the opportunity, we think about delivering a better ROI for advertisers and so you really have to think about the other layers of what drive that in order to consider the opportunity. Let me turn over to Jack on the second part of your question.

Jack Dorsey Twitter, Inc. - Co-Founder and CEO

Yes, so Eric, we -- over the past 2 years, we've really focused on, number one, identifying our core job; and number two, building against it. And that core job is keeping people informed. So the more we lean into that and the more we make sure that we're building products against that and services against that, the better we do. We have always benefited as a service from having journalists on our service, and one of our most important constituents are journalists. They certainly release all their publications and articles, but also carry through the conversation use Twitter as a source. People naturally see Twitter as a place to figure out what's going on and what's happening within the world, again with global news, with local news, with anything newsworthy around a particular topic or an interest and we do believe it is our core job to keep people informed against that. So as we continue to add relevance to the product through our machine learning and deep learning work, as we continue to experiment with biasing more towards interest and topics, particularly around anything new and noteworthy that's going on in the world, we benefit as well. And as we put live video against that as well to make the conversation much stronger and more relevant, we benefit. So yes, we definitely -- as we continue to focus on that core job, we see a lot of the benefits that we've been able to report over the past 2 years.

Krista Bessinger, Twitter, Inc. - Senior Director, Investor Relations

Great, thank you. And it looks like we have time for just 1 last question, so we'll take that question from John Blackledge at Cowen.

John Blackledge, Cowen and Company

Two questions. So would video advertising about half of ad revenue at this point, just wondering if you could provide some color on video engagement on the platform. And then second question would be if you can offer or give us an update on the total number of advertisers on the platform and/or the advertiser growth in 1Q '18.

Ned Segal, Twitter, Inc. - CFO

Thanks, John. So on video engagement, we continue to be pleased with the progress that we're making. They're both on the live content that Jack described, on the user-generated video content and on engagement with video ads on the platform. We see a strong trajectory on all three of those and they continue to be areas of investment for us. In terms of total number of advertisers, nothing new to report there, but I'll just remind you of a couple of things around our strategy and the opportunity. The first is that we started out a year ago really working hard with the largest advertisers to tell them the story about Twitter, to help them think about the ways that they could connect with their customers on the platform and that really resonated as we got to the second half of the year. We've been gradually bringing that to other accounts as well and that's been working really well for us. We also feel like there's an opportunity over time with the millions of small businesses on Twitter. We saw nice growth from our self-serve business this past quarter, but we feel like there's more opportunity there. It will require more investment from us against newer products in order to help them. One that we talked about in the past is the Twitter Promote Mode product, which is the subscription product, and we've seen nice growth off of a very small base. But we think that's indicative of the opportunity and we've got more work to do there in order to get those millions of small businesses to become advertisers on the platform.

Ned Segal, Twitter, Inc. - CFO

Thank you. So to recap, we made significant progress this quarter: revenue growth accelerated, we achieved our second consecutive quarter of GAAP profitability, we drove another quarter of double-digit DAU growth and we made important progress on our health initiatives.

We invite you to join us for our Q2 earnings call, same time, same place, July 27 before the market opened. Thank you for all your time and your support, and we'll see you on Twitter.