Twitter Q3 2019 Earnings Report
SAN FRANCISCO, CALIFORNIA
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PRESENTATION

Operator
Good day, ladies and gentlemen, and welcome to the Twitter Third Quarter 2019 Earnings Conference Call. (Operator Instructions)

I would now like to turn the call over to your host, Krista Bessinger, Vice President, Investor Relations. Please go ahead.

Krista Bessinger *Twitter, Inc. - VP, IR*
Great. Thank you. Hi, everyone, and thanks for joining our Q3 earnings conference call. We have Jack and Ned with us today. Before they start, I wanted to remind everyone of the format of our call. We published a shareholder letter on our Investor Relations website and with the SEC about an hour ago and hope everyone had a chance to read it. Because the letter has a lot of detail, we'll keep our opening remarks brief and then dive right into your questions.

We'll also take questions asked on Twitter, so please Tweet us at @TwitterIR using the #TWTR.

Also during this call, we will make forward-looking statements. Those are things like our outlook for Q4 and the full year of 2019 and our operational plans and strategies. Our actual results could differ materially from those contemplated by our forward-looking statements, and you should not consider our reported results as an indication of future performance. We're making these forward-looking statements based on information available to us as of today, and we disclaim any duty to update them later unless required by law. Please take a look at our filings with the SEC, especially in the Risk Factors section in our most recent 10-K and in our 10-Qs for a discussion of the factors that could cause our results to differ.

Also during this call, we will discuss certain non-GAAP financial measures. We have reconciled those to the most directly comparable GAAP financial measures 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, and an audio replay will be available on Twitter and on our website in a few hours.

And with that, I'd like to turn it over to Jack.

Jack Dorsey *Twitter, Inc. - CEO*

Good morning. Thanks for joining our third quarter call. A few highlights from me and Ned before we get to your questions.

We've talked for quite some time about how our focus on increasing relevance and ease-of-use will compound into sustainable growth. Today, we're proud to share that nearly half of the 19 million daily customers we've added since the fourth quarter of 2018 can be attributed to the steady refinement of Twitter. This also fueled our results this quarter, a 17% year-over-year increase of daily usage, to bring us to 145 million mDAU. This is an incredibly strong foundation to build upon.

The steady refinement is just one part of our development portfolio. In parallel, we are rethinking the fundamentals of how Twitter works in order to better address the problems we're seeing. One example of this is our work on public conversation health. At the beginning of this year, we resolved to break from only acting on reports of abuse and harassment to proactively identifying Tweets and conduct that violates our terms of service. Today, we've crossed another threshold. Over half of the enforcement actions we'd take in any given week for violating our abuse rules is now proactively identified and verified by our agents before a victim or bystander has to report the violation. We will continue to refine this work to steadily increase that percentage. This is important because it removes the burden of reporting from victims, and paired with a much more robust appeals process, increases our correctness of enforcement.

Another example of rethinking the fundamentals is where we have taken on some notable experiments this quarter, which might lead to far greater outcomes. In health, we launched the ability for folks to moderate replies to their Tweets by hiding them from their main conversation view while still allowing moderated Tweets to be seen behind a button press. This is now live in the U.S., Japan and Canada. A global rollout is forthcoming.

More broadly, we have evidence to show that people see Twitter as an interest network and spend a bunch of time focused on finding and following accounts that match their interests. From onboarding to daily use, we have opportunity to make this much easier. To address this, we went back to a feature only Twitter experts make use of: lists. This quarter, we made lists easier to create, and most importantly, easier to consume. We've added the ability to pin lists directly to your Home timeline, enabling a fast switch between your Home timeline and list of accounts you want to keep on -- keep up with but don't directly follow. Expect lists creation to get more powerful capabilities over time.

We're also experimenting with following topics right from your timeline. An option to follow a topic will be appended to relevant Tweets. A Tweet about the Golden State Warriors, for instance, would now have a prompt to follow the topic, which allows us to include all relevant Tweets matching the topic without having to follow the various accounts that produce them. Of course, you can unfollow anytime. And this is an area we will continue to add more capabilities around.
Finally, and Ned will expand more on this, revenue. Unfortunately, we had some missteps and bugs in our MAP ads amidst greater-than-expected seasonality in July and August. Despite that, we saw strong September results and good advertiser momentum. Our goal in rebuilding our core

ad and MAP technology stacks was to address exactly these source of issues and increase engineering agility. Because of this work, we are much better equipped to identify and fix issues we come across today than we were just 1 to 2 years ago, still painful but no longer existential as it was in our past.

I believe our company is in its strongest position ever. We are learning faster, prioritizing better, shipping more and hiring people who are out of reach before. All of this has increased our confidence that we can meet the larger challenges facing us in our industry, including misleading information in an ever-evolving regulatory environment.

We're approaching all these problems in a deeply principled way and commit to addressing them openly in a way that benefits all, not just Twitter.

Thank you. And with that, I'll pass it over to Ned.

Ned D. Segal ***Twitter, Inc. - CFO***
Thanks, Jack. Before we get into Q&A, I want to highlight a few things which are in the letter but merit mentioning at the outset of the call. In aggregate, issues relating to our revenue products reduced year-over-year growth by 3 or more points in Q3. We discovered and took steps to remediate bugs that largely affected our legacy MAP product. These bugs affected our ability to target ads and share data with measurement and ad partners. We also discovered that certain personalization and data settings were not operating as expected. These issues were in our control, and we will work to do better.

We also experienced greater-than-expected ad seasonality that began in July and continued into August. We believe our core value propositions of launching something new and connecting with what's happening on Twitter continue to resonate with advertisers and that slower business over the summer was in part due to a relatively lighter slate of big events and launches in July and August compared to 2018. One example of this is comparing the Men's World Cup in 2018 with the Women's World Cup in 2019.

We were pleased ad revenue growth rebounded to double-digits globally in September, with the most pronounced recovery in the United States. Advertiser sentiment remains strong.

Looking ahead, while we're taking steps to remediate the product issues we've described, we expect them to continue to weigh on the overall performance of our ads business in the near term. Specifically, we expect a moderated performance in MAP and the issues discussed in our personalization and data settings will likely result in 4 or more points of reduced year-over-year growth for total revenue in Q4, from 3 or more points of impact in Q3, reflecting a full quarter impact in Q4 versus only a partial quarter impact in Q3. This is incorporated into our guidance.

As in prior quarters, our guidance reflects the most likely range of outcomes based on our current visibility. We've considered the rebound in our ads business in September, the strength of our bookings and the organic events and product and service launches that have already happened or that are expected in Q4, along with the lingering headwinds we expect from previously discussed product issues.

We remain confident in the fundamental strength of Twitter and believe we are focused on the right priorities across the company. In fact, the issues we saw this quarter reinforce our confidence in our strategy, both in consumer and ads. We're especially excited to see such strong product-driven mDAU growth year-to-date and continue to see a tremendous opportunity in front of us to deliver increasing value for advertisers and to get the whole world to use Twitter.

With that, we're ready to take your questions. Operator?

QUESTIONS AND ANSWERS

Doug Anmuth - *JP Morgan Chase & Co*

I have two. First, just Ned, on MAP. Can you just help us understand a little bit more about kind of when you learned of the issues around MAP around targeting and then sharing data and then the degree to which they have been fixed at this point and how that kind of informs the 4 points of impact that you're talking about for 4Q?

And then secondly, it looks like you're on track to do nearly the 20% OpEx outlook that you've discussed for this year. And I know it's early, but do you expect the same big 4 investment priorities next year? And how do you think about OpEx growth for 2020?

Ned D. Segal *Twitter, Inc. - CFO*

Okay. Thanks, Doug. I'll take both. Jack can add anything afterwards, if it make sense. First, on the question on the product-related issues, so these came up over the course of the quarter. And it wasn't one particular day. There were more than one of these things. Let me give you a couple of examples which can help them come to life.

The first is, we asked people a series of questions when we put them -- before we put you into a timeline when you're new to Twitter. Among the questions we ask are if we can use your device settings to figure out the best ads to show you. It turns out there that, that setting wasn't working as expected, and we were using device settings even if people had asked us not to do so. So when we discovered that, one, we Tweeted about it, which we often do to try to be transparent with people when things aren't working as expected. And two, we turned off the setting so that it would work as expected. That has a negative impact to revenue because it's one less input that you've got when you are figuring out which ads to show people. So instead of getting a partial quarter impact, you get a full quarter impact in Q4.

A second example is specific to MAP, where we typically will share data with measurement partners who will then share it with advertisers so that they can see the effectiveness of their campaigns, not just on Twitter but across platforms. And another one of the questions that we ask people before we put them into a timeline is if we can share their data with measurement partners. That setting also was not working as expected, and we were passing on data which we had not intended to. So we stopped doing that. And although we are working on remediation, there isn't remediation yet in place, and so the effects of that will continue into Q4. As you can imagine, the remediation would be sharing aggregated data as opposed to personalized data when people have asked us not to share their data.

So those are 2 good examples, which hopefully help the issues come to life a little bit, that this wasn't one thing. They were things that we found out over the course of the quarter. And that when you get a full quarter's impact of them, even if you're working to remediate, there can be negative impact to revenue.

Secondly, you asked about expenses. And although it's too early to talk about 2020, I'd just point back to some of the comments in the letter and in our opening remarks, where we look at the things that we saw this quarter, both the DAU growth and the issues on the revenue products side, and they really reinforce our strategy. We are really pleased with our hiring this quarter. Retention was better than it has been, and our ability to attract people to Twitter, to come work here, was better than it has been. So we continue to believe we can grow our headcount 20% or more, and that expenses will grow about 20% as we've talked about in the past. So no real changes there.

And as we think about next year, we think about a similar set of priorities from a big picture perspective, but it's too early to lay out our specific plans or think about how that will all play out. But do keep in mind that we hope that all the people we've hired this year will stay with us next year. We hope that we will give merit increases to people who'll get promoted. And cost of living increases and so on, and so there's a natural increase to expenses just based on decisions that have already been made.

Lloyd Walmsley - *Deutsche Bank*
Two, if I can. First, just when we look at the -- I think Ned said nearly half of -- or Jack, sorry, you said nearly half the user growth came from product refinements. Can you just give us a sense for where the other half, if I understood that correctly, came from?

And then when you look at the acceleration in DAU growth, do you have any sense for how much of that is coming from the better onboarding specifically? You've started to talk about that. It's something you're investing it, but I think it was more of a 2020 focus. So do you still feel like it's early innings in your ability to drive product improvement, faster onboarding and DAU growth?

Ned D. Segal *Twitter, Inc. - CFO*
Thanks, Lloyd. Let me start then turn it to Jack on the onboarding question. So we typically talk about 3 levers when we think about ways that we can bring people to Twitter, give them a great experience and help it become part of their daily lives. The first one is product improvements. You mentioned Jack's comments. Well, that was almost half of the improvement over a longer period of time. When we make product improvements, they compound over time. The people who are new to Twitter this quarter benefited from all the product work that we've done over the last many years. And watching that compound, watching the pace of our innovation improve and watching

how we continue to drive better relevance, whether it's around notifications or the Home timeline or onboarding, it's great to see the real impact that, that's having.

The second one are the events that are happening all around the world that drive people to the service. Now if we don't give them a good experience when they get there, they are going to leave and may not come back or may not come back for some time. So these are opportunities or at-bats for us. But events are -- they continue to be a driver when we think about ways that we're adding people to the service.

The third one, which is smaller but is still an important lever, is marketing. Marketing is a great way to bring people to the service. But again, it all comes back to the product because if we don't give people a good experience when they get there, they may not come back as frequently as we'd like. Let me turn it to Jack on onboarding.

Jack Dorsey Twitter, Inc. - CEO
So Lloyd, on onboarding, as you know, we've been talking about onboarding for quite some time, and I would say that we've had lot of fits and starts in the approach there. One of the things that gives us a lot of confidence is, again, going back to my opening remarks, we do believe Twitter works best when people see it more as an interest network. They're able to quickly find and follow their interests. And right now they have to do a lot of work to find and follow related accounts. So we have been both testing and also deploying tools around topics and interests to make it much easier to get into your interests faster without having to do all the work to find and follow those related accounts.

So right now they're in-app, a lot of those experiments, but the intention is that we bring that right to onboarding. So if you do show up into the app or into the website, expressing a particular interest like basketball or deep learning or cryptocurrency, you'll be able to find, say, immediately, a list or be able to pick from a topic that will give you a rich set of accounts and also Tweets immediately into your timeline, which we think will help pretty dramatically. So we're still in the phase of testing and experimenting a lot with interests and topics. And then as we get confident around that, we'll bring it to every surface area of the app and in the surface.

Heath Terry - *Goldman Sachs*
Jack, I'm curious, maybe more from a big picture level, how you're thinking about Twitter's access to data. I mean to the extent that the access to these 2 pieces of data had such a major impact on your ability to monetize inventory this quarter, does -- I know data and privacy is a bit of a toxic topic at this point, but does Twitter have the access to the data that it needs to be able to do the kind of targeting and measurement that advertisers, particularly direct response advertisers and the kind of longer tail advertisers that you need for monetization, expect for you to be able to grow revenue in pace with the kind of 17% user growth that you've got and 23% engagement growth that you've got?

Jack Dorsey *Twitter, Inc. - CEO*
Yes, Heath. So first and foremost, we have led a lot of our work on the consumer side and how we think about our revenue products with, number one, making sure that people have visibility into what data we're using and also control over it. So that's step one. And all of that is easily

accessible within settings. And we continue to work to refine our controls and our visibility and transparency to make clear the value exchange people are giving us as we utilize their data.

This doesn't represent a lack of access to data. This represents bugs. And these are issues that we identified quickly and are working quick to fix. And I will say that I have a lot more confidence in our abilities in our team today than looking back just 2 years ago. We have a lot more agility because of all the hard work we've done to rebuild our core ad stack. Our focus on MAP is much more intense and something that we intend to get right. A lot of -- we have seen bugs in the past, dealing with the tech that we've had and the ad stack in particular, and the most important thing is we build agility and we can move fast to fix them. So that's what I'm looking for. And this is not access to data problem. This is bugs that we discovered and are remediating.

Ross Sandler - *Barclays*
Just a question on -- going back to the 4-point headwind in the fourth quarter. So I know we're not going to talk about specific guidance for 2020 here. But would it be fair to assume that some of these technical issues that are causing headwinds are going to persist in the next year? And you mentioned in the letter that the U.S. had recovered in September. So is that from sorting out some of the issues? Or is that just a better event month and hence the recovery? That's my first question.

And then the second question is, you're seeing a very strong international DAU growth. So can you talk about like which regions of the world that upside is coming from? And along those lines, your international ad revenue is trailing in the U.S. a little bit. So is this because the bugs are causing deceleration in places like Japan? Or is it that the users are coming in, in countries that may not offer as high as a monetization potential. Any color there on international would be helpful.

Ned D. Segal *Twitter, Inc. - CFO*
Thanks, Ross. I counted 4 questions but we can call it 2, and I'll take a crack at them. So on the 4 points of impact to Q4, the 4 or more points that we talked about, there will be some bleed over from those into future periods. It's too early to quantify it, both because we're working harder on remediation and also because we're not giving guidance for 2020 yet. But there will be some continued impact from these things.

The second is the recovery that we saw on September really wasn't from remediation. This was -- there was -- if you think about our -- 2 things that we talk about with advertisers: launching new products and services and connecting with what's happening. Those, along with the always-on advertising that you'll often see when you come to Twitter, they just rebounded nicely to double-digits, led by the United States, but not just in the United States, in September. That's what gives us the comfort that the issues that we saw in July and August were more pronounced seasonality than we had anticipated. Even when we incorporate the ongoing product issues that continued into September, the fact that we saw that double-digit growth, that gave us solace.

Then your next set of questions was around international. So a couple of things to point out there. The first is we saw real breadth in terms of DAU growth. We grew DAU double-digits in all 10 of our top 10 markets. And we were thrilled that the improvements that we're bringing to the service are being felt by people all over the world, people who are new to Twitter, people who have used Twitter in the past but have used it less frequently, both continue to be real opportunities and areas where we've had success.

The last part of your second question was around Japan and the international, more broadly, from a revenue perspective. Just to give you a few numbers there. So international revenue grew 7% year-over-year. But inside of that is our second largest market, Japan, where I think some context would help. So we were down 1% year-over-year in Japan. Remember, last year, we grew 44% year-over-year in the third quarter. We built up a really big business that we're very proud of in Japan, both with lots of people who use the service, great relationships with the largest agencies and having really connected with the advertisers with MAP and with video ads.

Now MAP is a bigger part of our business there than it is in other geographies, so it was more impacted by these MAP issues than other geographies were. So that down 1% is both up against a tough comp and also more pronounced in its impact from MAP.

We continue to be really excited about the opportunity in Japan. I'm actually headed there to see some of our partners this weekend. We have the Olympics coming up in 2020, and we continue to work hard to bring out an improved version of MAP. Although the impact will be felt gradually, we do expect that impact to begin in 2020, and Japan ought to be one of the primary beneficiaries.

Justin Post - *BofA Merrill Lynch*
Great. I'll ask 2. I guess, first, are you seeing improvement in churn with your user base? Is that one of the metrics that is helping drive your DAU growth?

And then second, we hear from advertisers that their spend bounces around month-to-month, and I know it's event-driven. But what can the company do to get more always-on advertisers on the platform and be more consistent on your monthly growth and kind of make that more consistent each quarter?

Ned D. Segal *Twitter, Inc. - CFO*
Okay. Thanks, Justin. We haven't really talked about churn, but when we look at what drove DAU, it was lots of things, including that people who have used the service in the past are -- but maybe they hadn't made it a part of their daily lives, are using it even more, number one. And two, that people who are new to the service are finding benefit from it faster because we are surfacing accounts or topics to them faster, because the Home timeline has increased relevance, because we're giving them better notifications and making it easier to follow conversations. These things are all driving benefit, but I wouldn't point to any one particular underlying metric when we think of what's driving DAU growth because we're seeing benefit from many of them.

Secondly, we are seeing lots of always-on advertising. When you open your timeline, you will see ads from companies who are there are all the time, connecting with the events of that day, connecting with the people who are on Twitter, who they believe could benefit from their services or products or already do. But you also see that when they want to launch a new product or service or when they want to connect with the big event, whether it's the Women's World Cup or the end of the baseball season, that we are a terrific place for them to do that. And we've been a big beneficiary, that is, those messages have really resonated. When you add up all of those product launches, when you add up all of those events across different types of topics, across geographies, you end up with what's happening on Twitter every day that are opportunities for advertisers to connect with their customers on the service.

Krista Bessinger ***Twitter, Inc. - VP, IR***
Great. Thank you. And we'll take the next question from Twitter. The question comes from the account of @BitcoinMunger. And the question is, "When will you enable topic following? It would not only improve the user experience but also improve onboarding and retaining of new users."

Jack Dorsey ***Twitter, Inc. - CEO***
Thanks for the question, @BitcoinMunger. As I mentioned in my opening remarks, we've been experimenting with both interests and topics more broadly. One example of this is making better use of lists. A lot of people construct lists around a topical area, so it includes a number of accounts that might fit a particular topic. So for instance, I follow a crypto list that has all the folks within crypto. And I can pin that right to the top of my Home timeline so I can quickly swipe to it to see it.
The other thing that we're doing and experimenting with right now on iOS, it's a small rollout so far but we intend to expand it soon, is whenever we see a Tweet that might match a particular topic, we'll put a prompt in that appended to it, and you'll be able to hit a button and follow that topic. So in this case, you'd be able to follow Bitcoin if you saw a Bitcoin-related Tweet and then more Tweets around the Bitcoin topic will appear in your timeline. And you can go to your dash and unfollow that topic at any point. So we're in our early test right now, but we do think this is a very strong feature and approach for us and I think will add a ton of capability and strength to the service.

Eric Sheridan - *UBS*
Maybe 2 with respect to the advertising metrics. As you discovered some of the product issues through the quarter, did you reduce the amount of inventory in the auction that could go against MAP as an ad product? Or did you see people adjust their bidding and the prices dropped on MAP ads as people became aware of the problem?

And then you highlighted the dynamic between MAP pricing and video pricing. But as video becomes the bigger push in the mix and people get more familiarity with it, is video pricing also increasing on a sequential or year-on-year basis? What are some of the dynamics around video pricing in the auction?

Ned D. Segal ***Twitter, Inc. - CFO***
Thanks, Eric. I'll take those. So we didn't make any changes. One of the great things about having an auction-based service is that things adjust naturally. And so if there's less demand from one type of ad format or fewer inputs for advertisers across different formats, they'll use other inputs. They'll bid the right -- the price that makes sense for them. And sometimes, things move from one format to another. And other times, advertisers pause and wait for things to change before they come back or they take their campaign elsewhere. If you step back and look at the metrics that we shared, you see ad engagements increased about 23%. That continues to grow greater than DAU, which tells you that we're selling better formats, that we're selling more relevant ads or putting more relevant ads in front of people. So pleased about that.

And then cost per ad engagement was down 12%. That largely reflects a mix shift from MAP to video. I really would think more about that than I would about changes around like-for-like pricing.

When you think about ad formats and opportunities around these just generally, there's still lots of opportunity for us to continue to improve relevance, to continue to come out with better ad formats and improve versions of our existing ad formats like MAP. But there's also opportunity without selling 1 more ad, to just put better copy in the ads that exist today. We still have more than half of our video ads being served at longer than 15 seconds. As you'd imagine, on a service like Twitter, the completion rates for video ads that are 6 seconds are much better. They're much more effective for the advertiser. They're much more compelling for the person watching them than those that are 15 seconds or longer. That's a great example of something we can do that doesn't require selling 1 more ad but can help everybody and certainly would improve ad engagements and all the associated metrics.

And since you're probably wondering, and we talked about it a bit, CPMs had been up for the last period of time here. Because of the product-related issues that we talked about, it should be no surprise that CPMs were actually down this quarter.

Youssef Squali, ***Suntrust***
Two questions for me, please. First, Ned, can you speak to the cost elements from the bug issue? Were there any additional costs incurred in Q3? What kind of guidance is baked into Q4?
And as we look at 2020, what kind of impact do you think we should also bake in?

And maybe, Jack, as we look at 2020 as a big political spend year, can you remind us again, how big was it in 2016? And are you putting any restrictions on kind of political ads as you start getting them, I guess, pretty soon?

Ned D. Segal ***Twitter, Inc. - CFO***
Okay. So the first question, around cost from the bugs, there -- I wouldn't say there were more cost from the bugs. The biggest impact from a resourcing perspective when things like this come up is that we -- people, we end up shifting, or people are spending their time sometimes where we work on remediation when we may have preferred to work on other things. So that can have a different kind of impact. But when we think about these product-related issues that we really

feel were in our control, we look at them as a validation of where we've been investing. And that 20% or so headcount growth that we've talked about, the about 20% expense growth for this year, those are going against things like rebuilding the ad server. They're going against coming up with a new version of MAP, things that should help us address the product-related issues that came up over the course of the quarter.

Jack Dorsey ***Twitter, Inc. - CEO***
So 2020 elections and the integrity of the conversations around them is our first priority within health and how we think about conversational health. So we are paying a lot of attention to all the dynamics at play, specifically looking at misinformation and misleading information and how that affects. I haven't broken out what we did with 2016, but we do -- we have put a lot of focus on our transparency center, making sure that people have visibility into how people and who is spending for political, both candidate and also issue ads on the service. We intend to continue look for opportunities to increase that transparency and then look broadly at the role of political advertising on the service and where we can improve it. We will, of course, update you all with any decisions or findings we make, but this remains our top priority.

Ned D. Segal ***Twitter, Inc. - CFO***
Youssef, a couple of things to add, just to give you some financials to go with Jack's comments. When -- we talked already, it's out there, about the 2018 midterms and that political ads were less than $3 million for us. We try to be really principled about the decisions that we make around advertising, whether it's political or otherwise. And those numbers just give you a sense for the impact and how -- from one election. Of course, there are elections happening on Twitter all the time, all over the world. And so we get the opportunity to think through, to improve our policies, to improve how we give a great experience to people, not just in the United States but all over the world all the time.

Mark Mahaney - ***RBC***
A couple of quick questions. Could you quantify the impact in the revenue miss this quarter between the product mishaps and seasonality? What percentage of the shortfall was due to one versus the other?

Secondly, MAP products, like what percentage of ad revenue would you think that they account for?

And third, this seasonality, it doesn't really seem like it's seasonality. It seems like it's more of there's a new term for it or we need to come up with one, like eventuality or something. You just didn't have a large number of, I don't know, traffic-driving or interest-driving events, and therefore, you had a bit of a shortfall. Maybe that's just part of Twitter going forward. So when you -- if you have big events, World Cup or political elections or whatever you have, you're going to have more traffic. Am I thinking about that, right? It seems like you -- that maybe there were some events that you thought were going to happen that didn't happen? Just help us think through the dependency of the business, the ads business -- ad revenue business on having key events. It seems pretty straightforward. That seems like the issue rather than seasonality.

Ned D. Segal ***Twitter, Inc. - CFO***
Thanks, Mark. So a couple of things there. First, on the impact from the couple of things that we pointed out. So that 3 or more points that we mentioned, that was all from the products-related issues that we went through. Seasonality -- more pronounced seasonality then we had anticipated in July and August would be on top of that. We haven't broken out MAP as a percentage of the business. It varies from quarter to quarter, from geography to geography, from year to year. It is not an area where we've seen as much strength in the recent past. As we continue to work to come out with a new version of it, we think that, that will give us not just a better opportunity around mobile application promotion but also around more direct response advertising more broadly. Because the same work in helping people launch campaigns faster, around doing better targeting, around more compelling formats, and ultimately, fewer impressions to realize their objectives are the same things that should help with more down-the-funnel advertising.

Then your second question was around the new term that you came up with. I don't think I think about it as just about the events that happen. This is a combination of things where, sometimes, it's one event that comes against another one, like the Men's World Cup in '18 versus the Women's World Cup in '19. They're terrific examples of great events that bring people to the service, to talk about what's happening, to see the goals right after they're scored. They're great advertising opportunities as well.

But when we just add up the things that happened this July and August and we compare them to last year, when we think about how we expected them to play out and how they ended up playing out, they ended up just not being where we had expected be. So I'm not sure I'd read much more into it than that. And the fact that September rebounded to double-digits with particular strength in the United States, with a similar set of products-related issues, that gives us confidence in that. Hope that helps.

Krista Bessinger ***Twitter, Inc. - VP, IR***
Thank you. And we'll take the next question from Twitter. It comes from the Twitter account of Scott Kessler, and it's about uses of cash. He says, "Can you address uses of cash going forward? I'm noting that your remaining debt matures in 2021 and 2024. So what about other potential uses for your healthy balance sheet, like M&A? There have been no material acquisition since 2015 and/or stock purchases."

Ned D. Segal ***Twitter, Inc. - CFO***
Thanks, Scott. So we did generate about $167 million of cash this quarter, but we also repaid a convert. And that was $935 million that we repaid. We repaid it largely or completely from a financing that we did last year to pre-fund this maturity, which is a little more than $1 billion.

When we think about uses of cash, we think about being able to run the business through any environment. We think about and often challenge ourselves around the optimal use in terms of benefiting our shareholders. So we always look at other ways that we should be using our cash. We also think about acquisitions. But when we think about acquisitions, we think about acquiring people and teams. We've done 9 of those this year, just to give you a sense. It's a terrific way for us to add great teams and great people to the company who can further our purpose. We think about adding terrific technology, where we can acquire something faster than we can build it. We've done a few of those in the recent past as well. And we often challenge ourselves around but haven't done as much in terms of acquiring products.

We see so much opportunity to get the rest of the world to use Twitter that we have to carefully balance anything that we see from an acquisition perspective against the opportunities in front of us to continue to improve the service, to drive the DAU growth that we've been delivering, to continue to improve the ad formats and ad products so that we can deliver great outcomes for advertisers. So no changes to our thinking around cash, although the balance has moved around a bit based on the repayment and the cash generation.

Brian Nowak - *Morgan Stanley*
I have two. Just, Ned, to kind of go back to that question on the auction market and sort of the changes that you saw. And given that you talked about how just sort of it naturally adjusted and advertiser demand adjusted, how should we think about the steps you have to take in order to improve the overall auction bidding density, whether it's fixing specific bugs or getting different sets of data as you try to kind of work your way through the headwind into 2020? And how long will that take?

And then the second one, I know in the past you've talked about efforts to bring on more advertisers and DR advertising. Just talk us through some of the 1 or 2 key steps you still have to take to bring on more advertisers and really crack into the DR budgets?

Ned D. Segal *Twitter, Inc. - CFO*
Thanks, Brian. So on the first question around auction dynamics and what we can do. So first, when you step back. We still feel like we're more demand-constrained than supply-constrained when we look across the service, across surface areas, across geographies and across times of year. So continuing to make the case to advertisers, where in a $125 billion, $130 billion digital ads market that grows 20% a year, that they should launch more new products and services and invest more against those launches on Twitter, that they should do more to connect with what's happening on Twitter.

One way to think about it is if you go back to the Super Bowl, we had 30 of the 38 advertisers from the Super Bowl on Twitter at the same time, but there are 8 to whom we still need to make the case that they have to be on Twitter. That, along with continuing to improve relevance, better formats and moving down the funnel in terms of the types of advertising that's available, those are all things that ought to help us from the auction dynamic perspective.

Think about MAP. If we can help people realize their objectives with fewer impressions, that leaves more impressions for other things without changing how many ads we show to somebody or anything like that.

Your next question, I answered a little bit of already. But what can we do around direct response and bringing more advertisers to the service? So our MAP work should lead to more direct response-type opportunities over time. And in terms of bringing more advertisers to the service, we have a nice business where we help smaller advertisers in reaching their customers on Twitter, but that's not an area that we have prioritized improvements around in the recent past. It's a place where we know that there's millions of small businesses throughout the service, where we could help them more in reaching their customers on Twitter. But we've got to do the engineering work and make the case to them better than we are today. And right now we've chosen to prioritize other things first.

Krista Bessinger ***Twitter, Inc. - VP, IR***
Thank you. Operator, I think we are pretty much out of time, so I think that will be our last question. Thank you.

Ned D. Segal ***Twitter, Inc. - CFO***
Okay. Thanks for joining us. We appreciate your interest in Twitter, and we look forward to speaking with you next quarter. We'll report our Q4 earnings and the full year on February 6 before the market opens. We'll see you all on Twitter.