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David Wong – Senior Vice President-Product Leadership, Nielsen Holdings Plc

Other Participants

Kip Paulson – Analyst, Cantor Fitzgerald Securities

— MANAGEMENT DISCUSSION SECTION**Kip Paulson, Analyst, Cantor Fitzgerald Securities**

All right. Mic check. Am I good? All right. Good morning, everyone. I'm Kip Paulson and I'm on the Internet and Media team here at Cantor and covering analyst for Nielsen. Next up, it's my pleasure to introduce David Wong, Nielsen's SVP of Product Leadership in the Watch business. David oversees product management for Nielsen's digital measurement products including Total Audience, Digital Ad Ratings and Digital Content Ratings, so he's really at the epicenter of a lot of exciting trends taking place at Nielsen.

Prior to joining Nielsen, he was an Engagement Manager at McKinsey, where he led teams to advise clients on strategy, new business development and investment decisions primarily in the media and technology industries.

So, David, thank you very much for being here with us today.

David Wong, Senior Vice President-Product Leadership, Nielsen Holdings Plc

Thanks for having me.

QUESTION AND ANSWER SECTION

<Q – Kip Paulson – Cantor Fitzgerald Securities>: All right. So, as far as format, I have a long list of questions and we'll open it up for Q&A in the last 10 minutes or so. But, first, let's start off with Total Audience. This is really the topic as you are here. And for those in the audience who are not fully familiar with Nielsen's Total Audience offering or those that could use a refresh, could you share with us the vision and motivation behind Total Audience? What is it all about and really where does it stand today?

<A – David Wong – Nielsen Holdings Plc>: Sure, I'm happy to.

So Total Audience came about probably two and a half years ago or so when we were working with our media clients and they asked us to create a new measurement system and to break down some of the previous kind of rigid business rules that Nielsen had around our traditional TV measurement services.

And what we took away from that conversation was we needed to create a new measurement framework which applied a number of principles. It was four principles that has carried through in the Total Audience measurement framework in the system is that, one, we should be measuring all platforms regardless of how they're monetized, what the business model is, just wherever the content or advertising is being consumed.

Two that we needed to provide a system, which provide the comparable measurements between all those platforms. So to creates a set of metrics which would be able to compare computer platforms with television, with mobile and over-the-top, a measurement system which separated advertising measurement from content measurement, and that's actually a really critical point. One of the big differences of how we're approaching Total Audience, which is to have distinct measurement for content and advertising to prepare for further addressable advertising where the audiences can be completely different between the ads you buy and the content that you see actually.

And then, finally, to have a consistent system which could be used across not only video, but also audio, text and any other kind of media that will come about on the market.

And so, that was some of the underlying vision in the motivation. And now, today, where we are is we're in a great spot because we have launched all of the underlying services to measure across platforms and to fulfill both the advertising and the content by the measurement.

Last year was a year where we were growing out a lot of these services where we announced and we delivered Digital Content Ratings and Total Content Ratings. And this year is now a year where we're seeing that adoption of the services.

To gives just a little refresher of what's underneath the – what services are actually part of Total Audience as a measurement framework. One thing which I like to always mention is that Total Audience itself is not a product; it is a framework, it's a suite, which defines all of the products which are fitting together to fulfill that broader vision. And on the content side, the underlying products are really building off of the television foundations that Nielsen has. It's built on a foundation of television program ratings and is added in extensions, which are taking into account all this additional viewing.

So Digital Content Ratings to cover our computer and mobile viewing. Our VOD measurement services, which are covering new forms of on-demand video viewing and our new streaming services like Digital in TV Ratings, which are taking into account a lot of new MVPD offerings. And those together are being brought into Total Content Ratings, which again create that single,

comparable, consistent view across all these disparate parts of the ecosystem and really kind of bringing it together. That's on the content side.

On advertising side, we have again similar approach where we have our traditional C3, C7 TV commercial ratings measurement which again are used as the currency for national TV advertising. And we've extended it with Digital Ad Ratings, which has been now in the market for – now actually going to be six years this year and it's the strongly preferred audience-based demographic measurement service in digital, which covers off again computer and mobile. And the other services which we have around VOD and over-the-top altogether – coming together in Total Ad Rating. So, those are some of the underlying products.

So, I know I just said a mouthful, but again, the purpose of launching new services to extend our measurement was to fill that ultimate goal, which is to have consistent comparable measurement across all screens regardless of what the monetization or the distribution model was and to deliver it in a comparable way for any type of media that Nielsen measures.

<Q – Kip Paulson – Cantor Fitzgerald Securities>: Okay. So, interesting. You mentioned that Total Audience itself is not a product. So, how do you charge your clients for ad versus content and TV versus digital in those quadrants that you more or less line – laid out?

<A – David Wong – Nielsen Holdings Plc>: So, as you're aware, most of our television clients, we have long-term contracts, long-term MSAs, which we saw a whole bundle of services. Often, we focus on one service like C3 or C7, but the reality is that our clients purchase research across all their forms of distribution.

And so, really what we're offering is new extensions, which allows to deliver more value where their audiences are going and that we have a few new services which are adding additional incremental value like Total Content Ratings, which brings together many of the different services that we have. And so these end up getting rolled into our long-term contracts, just like every time that we renew with our clients.

<Q – Kip Paulson – Cantor Fitzgerald Securities>: Okay, great. And what's the hardest part of Total Audience? Is it de-duplication of users across devices? And maybe you can walk us through how your TV panels and the relationship with Facebook really come into play there.

<A – David Wong – Nielsen Holdings Plc>: Sure. So de-duplication is definitely one of the hardest parts of creating a comparable measurement system. So, I'd like to think of kind of two different classes of metrics, which all [ph] richest (07:34) companies come up with. There's the kind which are sort of additive. They're just quantities which can be neatly added up, things like time or video views or impressions, right? You don't need to do any fancy math to be able add together those metrics as long as they're calculated on a similar basis.

But reach is the hardest metric to come up with because you need to be able to track uniquely people across different platforms. You need to know whether or not somebody who is viewed on a television is also viewed on a computer or a mobile device uniquely and with panels that's relatively easy because you track everything that a person is doing in the panel. On digital, it's very hard because either panels are more – generally panels need to be very large to be able to catch that behavior and also, you need to track across all their different devices.

And so, the solution that we've developed, which I think is very unique, is to use the Facebook, the big data source that we have to be able to track that de-duplication, to be able track that unique viewing across all platforms. And so, in a nutshell, the way that we do it is that.

For all the television viewing, we track across our television panel. So, if a panelist is viewing on multiple devices in their home at different points in time, we're able to bring it all back to that single person. So, whoever that is John Smith.

What we do on digital is through our relationship with Facebook, we're able to connect all the digital viewing back to the unique Facebook IDs. And what we've done is we've been able to create a match, a linkage between our TV panel and the Facebook user database, where we can then see that duplication. We can see that unique user viewing across digital and TV, and this is something which – that no other measurement system out there is able to do.

That duplication information is then used to be able to create factors which then wait and are able to project to the overall data we have so we can have an accurate reach estimate for the entire marketplace across digital and television platform.

<Q – Kip Paulson – Cantor Fitzgerald Securities>: Okay. Excellent. That's great overview of how Total Audience works.

One thing that's been in the news recently is Total Content Ratings. Could you talk a little bit about the shift to limited commercial release for Total Content Ratings? Management has said that some clients are requesting delays or pushing back on the full launch of syndicated data. What are certain clients having trouble with or where are they getting the hung up as far as implementation on their side?

<A – David Wong – Nielsen Holdings Plc>: Sure. So the move to a limited commercial release to make a -just kind of underline some of the motivation, the – our clients who have been engaged with the implementation of Total Content Ratings and all those underlying services, they've been using this data all throughout 2016 and now into 2017. And different clients have different distribution, strategies, different ownership of the way that they have to implement measurement. And because of that wide variation, certain clients who are ready today to have complete measurement, right, when they take a look at some of the data, they look – they're at a different place.

They maybe, because of their priorities, have decided to implement measurement to have a different pace or because of their priorities, they've decided to not necessarily want to shine a light on their audiences.

And so, the shift to a limited commercial release is providing all of our clients the opportunity to use their data publicly externally and so to get value from it, so they can demonstrate the value of their content and to be able to use it in preparation for the upfront to be able to sell to agencies frankly. But it also is a compromise that we've made to make sure that those clients that may not be as far along or that may not be as comfortable to be able to fully share their data and still engage with the information and still find use of it.

No part of the shift to the limited commercial release is because of a methodology problem. It's mostly driven by that hesitation to share their data as widely as they do currently on TV.

<Q – Kip Paulson – Cantor Fitzgerald Securities>: Right. Okay. And then, roughly what percentage of your clients are ready to more or less share that data versus not share? Have you guys seen anything on that?

<A – David Wong – Nielsen Holdings Plc>: Well, I don't think that I can say a specific number, right? I would say that every single one of our major clients is engaged with our data and is implemented to Total Audience measurement in some form. And so, every client is evaluating the data and using it.

I would encourage you to speak to the different networks and publishers to see where they are with the deployments. We've certainly had continuous integration and continuous discussions with those clients to continue to push them along as they use the data in 2017.

<Q – Kip Paulson – Cantor Fitzgerald Securities>: All right. And are you still on track for the March 1 release?

<A – David Wong – Nielsen Holdings Plc>: We are. So, Total Content Ratings, we just actually recently had an internal technical release and we're on track for opening up the doors for all of our clients. So, they have seen that data. In fact, this is really much more just waving a flag to allow them to start to share that data externally.

<Q – Kip Paulson – Cantor Fitzgerald Securities>: Okay. Excellent. And then, one thing management mentioned was that Total Content Ratings are not directly involved in ad deals, so this limited release or delay would basically have no impact on the readiness of Total Audience for the upfront in May. Could you talk a bit about how you expect your clients to leverage Total Ad Ratings and Total Content Ratings? Maybe some specific use cases, particularly for Total Content Ratings as we head into May.

<A – David Wong – Nielsen Holdings Plc>: I think you're highlighting a really important point, which is that when you separate out ad measurements and content measurements, the metrics we use for those transactions for the upfront are typically the advertising metrics, right? And last year, the year before and this year, we anticipate that the core metrics for transactions within the upfront are going to be C3 and C7 for national TV and then digital ad ratings.

Again, digital ad ratings, which has been out for six years, has been used within the upfront since 2012 and 2013, will be a foundation of the digital computer and mobile and over-the-top transactions which are happening during the upfront. So, Nielsen's Total Audience data in that respect that is being used as part of upfront transactions and it's front and center in the way that our clients are planning.

Total Content Ratings is not directly used in transaction, but it is important when planning and pricing inventory, as well as for our clients and market. And so, as an example, in upfront presentations, every network wants to be able to show how big their audience is. This is actually one of the initial motivators for building Total Content Ratings, which is that without Nielsen data to be able to demonstrate how large their audience is, they can always kind of pick and choose pieces of data or they might not have a complete picture.

And so, if a network is selling a new series or trying to resell a series which ran last year, which has seen audience growth, the numbers they put up in their upfront [ph] expectations (15:46) are typically content-oriented metrics. They are the ones which say my audience is this big. I've been able to get 20 million Americans to watch my show that in a month – that when I consider all my distribution options, the wares that I have to sell basically, how big my audience is, is this big.

And in the past, focusing on live or time-shifted TV was probably wasn't good enough because it gave 90-odd percent of the picture. Total Content Ratings is important because it's giving 100% of the picture as that traditional TV's place starts to shrink and the digital component starts to grow.

So the use case which we see and we anticipate this year is much more about that marketing, that sales purpose. And the reason why our clients want to use Total Content Ratings is because it is a consistent measure with the advertising measure. So that you're not selling based on apples or marketing versus than apples and then ultimately transacting versus oranges. This means that the

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Ticker▲Cantor Fitzgerald Internet &
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Conference
Event Type▲Feb. 23, 2017
Date▲

data will be consistent so that they won't make an unrealistic pronouncement about how big their audiences are.

<Q – Kip Paulson – Cantor Fitzgerald Securities>: Got it. That's really helpful. So, digging into some of the metrics a bit more, I know you mentioned C3, C7 for TV and Digital Ad Ratings for digital. But as we get closer to these upfronts and looking at it from a Total Audience perspective, are there any metrics that are getting a lot of attention for – to basically inform potentially a new currency or do you see kind of multiple currencies staying in place here?

<A – David Wong – Nielsen Holdings Plc>: Well, I would say that the market – of course, the marketplace decides the currency. And what we've seen is with the public statements of major buying groups like GroupM and even the engagement of the many networks that we've been working with, that there is a desire to continue to produce an Average Minute Audience metric, which is consistent with a C3 or a C7 rating. The question which the marketplace is grappling with is what else do I qualify to add into the C3 and C7 metrics. Right now, C3 and C7 still follow a relatively rigid set of rules, right?

<Q – Kip Paulson – Cantor Fitzgerald Securities>: Right.

<A – David Wong – Nielsen Holdings Plc>: It needs to be, again, it's nationally broadcast. It needs to have the same ads, at least within national ads as original telecast. So, a lot of discussion because some of the new flexibility that we have with some of the Total Audience measurement services to add flexibility.

And so, the metrics I think [ph] markedly (18:36) still very much focused. They see efficiency in using C3 and C7 metrics. The question is, how do – what are the rules going to be? How should they change to add in additional viewing and additional ad inventory into the C3 and C7 metrics? So that's certainly one active line of conversation, which were again helping to facilitate in the marketplace.

<Q – Kip Paulson – Cantor Fitzgerald Securities>: Got it. Okay. And I think you mentioned that almost all of your clients are using Total Audience in some way, shape or form. How many of them are essentially paying for it now, essentially baked into the contract at this point?

<A – David Wong – Nielsen Holdings Plc>: I mean, I don't want to comment on all of our different MSA negotiations. Again, I would focus on the fact that we are delivering value to our clients, so that they continue to renew with the escalators that we have and that we're – with all of our clients, our first objective is to make sure that they are measured and that the data that we're producing is again as valuable as it can be.

<Q – Kip Paulson – Cantor Fitzgerald Securities>: Okay. Great. And then, let's spend a minute on Digital Content Ratings. This was somewhat recently syndicated in September of 2016. What can you tell us about uptake and adoption by your client base? And how are you differentiated here versus, say, comScore's Media Metrix offering given that this is more or less where they got started?

<A – David Wong – Nielsen Holdings Plc>: Sure. So, I'm really excited about Digital Content Ratings. My team is focused on the delivery and the development of the service. And we have focused in the first release on those mutual clients with our other TV services so that we could have that complete coverage of video.

So, we have focused on implementation with video-oriented clients. So that is all the major networks, all the cable [ph] nets (20:34) and again any digital company, which had significant video

footprint. So, we have measurement of YouTube. We have measurement of Facebook. We're actively incorporating Hulu into the measurement system, so focus on video first.

But, at the same time, we've actually had some really interesting and positive traction with what we consider – I really hate the term because we're trying to bucket everybody, but it's really all the other interactive media that's out there.

And as an example, we've done some really interesting case studies with POLITICO in the last election cycle. I don't want to bring up the election cycle, but one of the really interesting differentiators of Digital Content Ratings is that we're providing overnight daily ratings for content, something which no other services provide. comScore Media Metrix is still on monthly syndicated service. We're providing a daily syndicated service, where daily data is produced for the marketplace.

And you can just imagine for a publisher that's working with a new cycle how important it is to have a view into their daily audiences instead of having a late – a month or more to be able to understand what their overall platform range or overall platform metrics and how they changed. And so, they could see day-on-day as the news hit how their eyes have shifted and also how their eyes have shifted to a completely different demographic from their typical audience, which I think is really exciting because it's value which a lot of our news magazine-oriented clients in the traditional interactive space have been excited about.

That's just one of the differentiators. On top of it, Digital Content Ratings is built from the ground up to be comparable with other platforms. The metrics we focus on developing and the way are accrediting them are intended to make the marketplace again more fluid so that there's going to be better comparability even between website presentation and video, and website presentation and television.

And so, we're really excited by the launch of DCR. We anticipate that this year, we're going to have a lot of benefit.

<Q – Kip Paulson – Cantor Fitzgerald Securities>: Okay. And then, the flipside of that, Digital Ad Ratings, is that still one of your fastest-growing offerings? I know that you mentioned it's basically been in the market for more than five or six years.

<A – David Wong – Nielsen Holdings Plc>: This will be the sixth year.

<Q – Kip Paulson – Cantor Fitzgerald Securities>: The sixth year. Is that still one of the fastest-growing offerings? Anything you can share there?

<A – David Wong – Nielsen Holdings Plc>: I mean, Digital Ad Ratings is a great business because it grows with the marketplace. And so, as digital ads [ph] have done (23:32) particularly premium advertising spending, which means that validation grows, the Digital Ad Ratings business grows.

And so, I know that we shared selected statistics on Digital Ad Ratings. The one which I think is really interesting is that last year, our growth in mobile measurement, so mobile ad as part of Digital Ad Ratings grew by almost 200%. And so, we're seeing substantial growth from Digital Ad Ratings where the ad dollars are going.

So as investment is pouring into new digital platforms and advertisers are demanding high-quality validation of those audiences, DAR continues to grow. And I think on top of that, winning P&G's business last year and having them as one of our anchor clients on the advertiser and agency side has really helped to cement the role of DAR in the marketplace.

<Q – Kip Paulson – Cantor Fitzgerald Securities>: That's great. All right. And while we're still talking about Total Audience here, do you have any perspective on what you're seeing as part of the average CPMs on digital platforms versus broadcast or cable? Do you have any kind of broad numbers there?

<A – David Wong – Nielsen Holdings Plc>: I haven't prepared any stats on CPM trend. So, now, what I can say is that some of the broader trends that we do observe is that there is an increasing number of deals which are done across platform with consistent CPMs across television and digital, and particularly on video. I think there is, I think, in further differentiation within the programmatic space between premium and non-premium, and certainly the effect of incorporating fraud filtering and the viewability standards has – may not have changed CPMs. But the effect of CPMs on the base that marketers were buying before has declined in some of those spaces just by the effect that you're not paying for certain impressions anymore, right?

<Q – Kip Paulson – Cantor Fitzgerald Securities>: Right.

<A – David Wong – Nielsen Holdings Plc>: You previously were and now you're not because just the requirements are now higher on what you actually pay for.

<Q – Kip Paulson – Cantor Fitzgerald Securities>: All right. Great. So, at this point, I'm going to turn over to the broader Watch business. And actually, before I do that, we have one question right over here.

<Q>: Thank you. Can you discuss how your products are different than comScore's new cross-platform products? And then can you also talk about whether or not you're gaining customers from comScore given the disarray at that company right now?

<A – David Wong – Nielsen Holdings Plc>: So, I think one of the most notable differences is that the Total Audience measurement is active and operating in the marketplace today. And so, that's one of the biggest differences between what comScore is offering versus what Nielsen is.

The other points I would highlight are, one, the core television measurement service we have is based on Nielsen's highest quality measurement panel in the world, the 40,000 households and the 100,000 people, which we have, fully MRC-accredited. It's a gold standard for media measurement. And we often – because the focus is always in chasing those additional eyeballs, which are on digital platforms, we often forget how difficult it is to measure TV, to measure every step in the house, every person to make sure they're actually viewing the television.

And there's – and I'm not shy about this that Nielsen – this is one of our biggest differentiators, where [ph] consumers (27:13) are building up a television panel from scratch over time and there is – it would be hard to believe that that measurement service would be able to provide the level of detail and the level of granularity that TV clients expect that that's become just part of the status quo for the TV measurement business in the U.S. That's one.

The second is the digital measurement services which we have are robust and that we've actually had more success in the marketplace with deploying our SDKs and our mobile measurements versus comScore. We get a lot of scrutiny about the mobile SDK, but we have pushed our clients to deploy. And over the years, we've worked and slogged through the challenges and the adoption curve with our clients to make sure that our measurement, SDK, is embedded in their apps and their websites and our coverage is extremely good.

On top of this, the underlying data we're using is unique, where only Nielsen has access to these big data partnerships, which we're able to enrich the datasets so that you can have that

unduplicated reach and then high-quality demographic validation. So, those are three items which I'd highlight. There's many more, if I had more time, but I would highlight those three.

<Q – Kip Paulson – Cantor Fitzgerald Securities>: All right. So, yeah, at this point, I'm going to turn over to the broader Watch business real quick. Management has mentioned that the national TV business remains strong as ever bolstered by Total Audience. What gives you so much confidence in the linear TV business given the rapid growth in digital?

<A – David Wong – Nielsen Holdings Plc>: Well, there's a couple of things. When we take a look at our national clients, they're looking for services across all the different distribution mode they have. So, as long as more people are watching video, our business is strong and grows.

A couple of points. The first is, a lot of the focus in the marketplace on television declines has been on live television viewing and live TV viewing definitely has been the most impacted by the technology shifts as well as consumer preference. But when you bring back in other viewing that's happening on a television screen, in particular time-shifted DVR and VOD and back to the fold that the clients are actually a lot more modest. And so, our TV clients are actually – when you look at how much attention [indiscernible] (29:53) are still relatively healthy.

On top of this, the eyeballs are going to typically non-ad-supported or platforms which have limited ad support. So they have an asset which is actually in greater demand because the market just still want reach, they still want an effective ad product. But instead, it's becoming scarcer because they're seeing alternatives there, which are maybe not as attractive because of their shorter ad lengths or it's not as high engagement as a big screen. So, those factors are certainly helping the TV industry and particularly, our clients continue to be strong in the short term.

In the longer term, content remains critically important and we're seeing that our clients are rolling out new distribution strategies which are gathering back those audiences, which, in the past, we would just take a look and say, well, they're going to SVOD, it must be at the expense of TV. Now, they have their own services. CBS has All Access as an example, and they've constrained their distribution strategy so that their content is available on their platforms and they can monetize.

And so, I think we're seeing right now our – the national video business, as we see it, continue to be strong because the marketplace is finally to react to a lot of the disruption.

<Q – Kip Paulson – Cantor Fitzgerald Securities>: Got it. All right. And I do want to turn now and address costs and margins a little bit here. So EBITDA margins in the Watch business have been strong and getting stronger, mid to high 40s or trending towards the high 40s percent range. Can you talk about some of the specific productivity and efficiency initiatives that you've been working on?

<A – David Wong – Nielsen Holdings Plc>: So, yeah. Nielsen is always taking a look at productivity and efficiency and it can turn out to be this – a relentless strong beat. And so, I guess the luxury of being on the inventive side of the business that supports on our operations side, they have this kind of drumbeat, which they have to always respond to. But I would highlight a couple of things which are exciting and that are driving some efficiencies in the long term, actually.

The first is our migration to cloud-based data processor. And so, when we look at how we develop products even the year or two ago, it was often using our own servers, our own technology and that would be often costly as well as difficult to scale. And we've moved a lot of these platforms to cloud-based providers like AWS, which has given us scalability and efficiency in the long term because it is inevitable that constant computing and storage will decline instead of having assets which we have to continue to maintain. So that's one, and that's primarily at the digital side of the business.

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Conference
Event Type▲Feb. 23, 2017
Date▲

On the TV side, we've been developing new next-generation metering technologies. And we have a new meter, which is going to be deployed to replace our current metering technology called the [ph] G10 Nano (33:10) and we call it the Nano just because it's radically smaller than the previous meter. This meter is cheaper to produce, is much more self-service and requires far less field and panelist kind of burden to install and to use. And so, that's just an example of one of the long-term kind of efficiencies that we're building in where with this new meter, we'll be able to either expand our panels at the same cost or maintain the panels and lower the amount of service as well as field cost to maintain it.

<Q – Kip Paulson – Cantor Fitzgerald Securities>: Okay, great. So, I think that we're getting pretty close to the time limit here. But if there are any other questions, now's the time.

Kip Paulson, Analyst, Cantor Fitzgerald Securities

All right. I think we'll stop it there. Thank you very much, David. Appreciate it.

David Wong, Senior Vice President-Product Leadership, Nielsen Holdings Plc

All right. Thanks so much.

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