Goldman Sachs Technology and Internet Conference

Company Participants

- Julia White, Corporate Vice President, Cloud Marketing

Other Participants

- Unidentified Participant, Analyst, Unknown

Presentation

Unidentified Participant

We were just saying, it's very rare to have two women on stage at the same time. So thank you. We're very pleased to have Julia White with us, today, from Microsoft. Her bio is very long and distinguished. And some of you might have seen her do the big -- I think it was Satya's first public appearance, where you demoed Office for iPad, right? And you were the one in control of that session, I remember it well.

But anyhow, like I mentioned, she has a very long and distinguished career. She's Corporate Vice President at Microsoft. She heads up Marketing and Product Management for Azure and the security portfolio. She's doing double time between here and RSA. So if you've got security questions, she can probably field some of those as well.

But before we get started, also, I'm going to read the disclosure statement from an exact copy. Before we begin, Microsoft may make some forward-looking comments during this presentation. And you should refer to their SEC filings for the risk factors relating to their business and this was interesting. And that depends on whether you are here in person or listening on the web. So that was a mutual disclosure.

So thank you. It's great to see so many familiar faces in the audience. Again, we're happy to have Julia with us today. We're going to try and make this as interactive as possible. So feel free to raise your hand if you have a question. But to start out, just for level-set people in the room, how do you define cloud for the audience?

Julia White {BIO 20496259 <GO>}

Right, cloud is a big thing. So for Microsoft, specifically, we have a very broad definition of cloud and cloud assets, frankly. So just to kind of give you a preview of that, starting with our productivity cloud with Office 365, it's everything from the actual Office applications being delivered as a live service, as well as e-mail, collaboration, Skype, Team, anything that do communication, collaboration and productivity in our Office 365 cloud went into our business applications with our

dynamic 365, the Line of Business, CRM, field service, those type of technologies. And then, of course, our core platform and infrastructure with Azure, we're able to do app innovation, other things like that and then, our data.

So we have Cortana intelligence, as well as our deep data artificial intelligence capabilities. Then, last but not least of course is we actually have a whole cloud security and management portfolio as well. So for us, cloud is a comprehensive from productivity, line of business, infrastructure, security and data, all-in-all.

Unidentified Participant

Okay, helpful, thank you. If you look back over, you guys have a different fiscal, then calendar. But however you want to think about it, over the last 12 months, what had been the biggest surprise? What surprised you about your cloud business?

Julia White {BIO 20496259 <GO>}

I think the cloud are technology advancements, as well as the market -- honestly, have been developing about as expected. So like from a tax disruption, I can't think about big surprise there. The interesting thing, the biggest I think surprise for all of us is the political situations going on across the globe. And maybe it's UK, in US, or pending in Italy and Germany. But it actually had a very material impact on the cloud conversations we're having with customers in terms of where is data residing or where are your data centers, how do we think about that, who has access to privacy, data handling, those conversations are coming up more and more based on, I think, some of us can consider it as somewhat surprising political situation.

Unidentified Participant

So is that a sign -- if you take away, take a step back in political situation, is that a sign? Do you think that people -- that cloud has become more mainstream, is that you're starting to get these questions from more of your customers that might be removing beyond say, custom dev and that we're actually starting to hear people think about and plan for these bigger migrations? Is that also potentially what's behind those types of questions?

Julia White {BIO 20496259 <GO>}

For sure. People are -- I think we're in the phase of -- we're in early cycles of dev/test and kind of finding new mobile apps in the cloud. So you're now really thinking about that holistic data center migration to the cloud where you're looking at mission-critical application, very sensitive Line of Business data, those core things, where the topics become more and more central. What's interesting is, Office 365 is our most mature commercial cloud offering and in the early days, people like, obviously, did for archiving and different things? And then they started saying, I'm going to run my entire productivity stack in the cloud. So those questions matured as well. So I think we're seeing a similar cycle from the infrastructure and then holistic data center side of it at this point.

Unidentified Participant

So would you say that -- and this is going to sound crazy, because there is specific technology that's been around cloud, that's has been around -- AWS started a little over a decade ago, are we beyond -- I mean, most people's tech companies have moved today or sheer start-up have started in the cloud. But again, still mainstream corporations, when we talk to them, there are still people that have a very limited cloud strategy. Are we at the point now where this is mainstream for everyone, not just kind of staff basis. But thinking of those production workloads that might be custom built starting to move?

Julia White {BIO 20496259 <GO>}

I would say, mainstream in the conversation and in the planning. And more and more average or even the laggard technology organizations are now having a cloud-first IT strategy. But I don't think when you look at mainstream, it's actual cloud adoption from an infrastructure and platform perspective.

Unidentified Participant

Do you have a sense of how long it takes to move from like being a conversation -- a mainstream conversation to mainstream deployment?

Julia White {BIO 20496259 <GO>}

Yes, I -- as a technologist, I would want to go a lot faster and I live in my own little bubble where everything is -- quickly in technology. Having done commercial enterprise technology for 20 years, it always does slower than the technologists want. And so, I mean I think we're in the -- I think about this year was the year -- actually, end of 2016 was the year that 50% percentage of mainstream organizations felt that cloud security was superior to what they are getting on-premises and 50%thought it was inferior.

So we've hit that conversation. So I think if we think five years forward, then I think you'll start seeing good mainstream core line of this applications in kind of a broad adoption, having begun in a real way. But I was trying to temper it too. I mean people used to tell me EDI was going away. And we know mainframe is still a $2 million business. So let's be practical about this too, in terms of how it's going to go, how the curve is going to shape.

Unidentified Participant

What's on your customers' wish list, is securities at the top priority on your customers' wish list and what else would be on their -- if that's not --?

Julia White {BIO 20496259 <GO>}

Yes, security is always -- when you look at things that people care about -- the cloud -- security then is still number one. It's become less. So we've seen privacy rising on that one. But I think the thing that I talk to customers most about is, as again, as the mainstream companies who don't do technology for a living or don't knowhow to use a cloud with digital transformation, it's how do you make the cloud easier. We're innovating so quickly. All of us are, not just Microsoft, thousand new capabilities coming out. And so, if you're just -- if you're GE, if you're a manufacturing company or you're an auto manufacturer, trying to keep up with that is hard and knowing how to take advantage of that.

So things like, make my transition from data center to cloud will be much smoother. Don't just assume everything is going to go to the cloud overnight. So there are deep investments in hybrid. The way we do hybrid very uniquely in having that continuity between the two, because we deeply understand the data center, as well as the cloud that is uniquely able to make that something that customers can do in a way that make sense for them. So I think that migration is certainly top of mind.

Then again, I think it was already a conversation that -- even more so, in a political domain and really focusing on what we call trust. And under trust we have the principles of privacy, security, compliance and transparency. We're making sure we're kind of on an cutting edge in those areas. So they know that even if business policy or political situations change, they can trust that their cloud is ready for the full-time business use.

Unidentified Participant

So it's a good segue, given what you said about helping to make the transitions smoother. But how do you think about the competitive environment for cloud today. And how you've differentiated yourself, if you could go a little bit deeper?

Julia White {BIO 20496259 <GO>}

Yes, I think the past couple years have been a bit of a feature war if I look at the cloud. Those features actually -- they're closing the gap on features. And I think now we're at a point where we have a feature aided with a feature, whatever. So it's like feature war. Now, it's about how do people actually get business outcomes from the cloud. And I think that's the real pivot and talking about -- I mean, our massive sales force is out every day, talking about digital transformation. That's the conversation our customers want to have with us, is that digital transformation, not just how do I use texts [ph]. But how do I get new business outcomes that I can get. So if I think about holistically, it's the differentiation question, one, of having a holistic cloud. We all have Microsoft Cloud, it's not just Azure, not just Office 365, it is not just our Dynamics 365, it's all of those things. And so you get coherence of them, a lot of Office 365 customers want e-mail running their collaboration stack. I think we've already done the identity system for you to use [ph] Azure, because we have already set that up. We've already gone through all the security, audits and type of things at that front.

Hybrid, definitely a major conversation and a key differentiator Microsoft has. Again, we understand the data center and we understand the cloud. What hybrid today -- people use it in different ways. But this thing that I have, some of my infrastructure are in my data center and some of my infrastructure are in the cloud. Basically as an IT organization you're running two infrastructures, if it's not consistent, right and less expenses. There's security that comes into play and trying to manage two things that's complex but that's the reality. It's not like everything just goes to cloud overnight. And so what we have done very uniquely is, had a consistent hybrid approach. So we have one directory system, one identity system, whether things areon-premises or in the cloud.

We have one management security platform, whether things are in our data center or in the cloud. We're now in the final stages of launching our consistent platform with Azure Stack, which is actually speaking the technology of our public cloud Azure and putting it in a small instantiation and a customer can put it in their data center. It's (inaudible) Azure. But it gives them data center control. So a developer can build our application using the same CPIs, writing application, they can decide to run it on Azure Stack in the data center or in Azure in our cloud. And have that consistent experience.

Unidentified Participant

Now, if they were going to run a SQL Server workload on AWS, they would not -- that feature wouldn't be available for that. And that product wouldn't be available for Azure Stack?

Julia White {BIO 20496259 <GO>}

Azure Stack, correct, I mean Azure Stack is well, I guess, we could use AWS in Azure Stacks. But that would be a little silly to be honest.

Unidentified Participant

Right.

Julia White {BIO 20496259 <GO>}

You're not getting the benefits of having that sheer developer experience. But it is a technology that any customer has access to.

Unidentified Participant

How much of that -- how much of innovations like that, a selling point when you're going in and talking to these customers who, like you said, are just starting their 10-year journey, where you could say, look work with us and our selling process could be 1% encapsulating your on-premise stand. I mean, like -- how do we think about the selling motion and how these types of new products might help ease someone's concerned about making the best move to the cloud.

Julia White {BIO 20496259 <GO>}

Yes, absolutely, I mean acknowledging that, this is not, I'll say technology thing. But actually a major change for organizations. I was recently meeting with all of the CIOs across different government agencies and they asked what's the single reason the cloud adoption is not faster. And I said, you, all of you and your organizations, that's just human. The technology is quite mature at some level. But the change really, understanding in how do we use the cloud versus just doing the exact same thing you've been doing in your data center in the cloud, that's not really taking advantage of the cloud. And there's still deep fear in these organizations over if I go to the cloud, what does that mean for my job? They're humans, jobs keep coming into play. So when we can go in and have a conversation that fully recognizes that this is a change initiative and say, you know what, you can change the way you need or you can go at whatever pace you want, hence that investment in hybrid.

So leveraging and utilizing the best out of those massive existing data center infrastructure investments, don't just walk away from them, don't like pull off the truck (inaudible) use them. And that's an advantage you have. Then, use the cloud intelligently in how you innovate there, how you connect them. And if you do it in a way that we do it, it doesn't mean you're running two different environments that's expensive and creates any security issues. It's a very comfortable process for people in that way.

Unidentified Participant

When we think of the sales force going in and talking to your large customers, are they incented one way or another person to -- are they incented differently to drive cloud for on-premise business or is it a holistic approach and that it doesn't matter kind of which bucket it's falling into?

Julia White {BIO 20496259 <GO>}

A couple of things though, as we've shifted to be a cloud business, we have adjusted the way we incentivize our sales force. It's part of our overall Company change. And so, in the old days, when we only had on-premises technology, all of our sales people were paid on licenses. So licenses we got paid. Whether the customer use it, was their problem and they decided to or not. Our sales people got paid on that.

Now in a cloud though, we have increasingly shifted our sales people about the role we have dedicated to consumption and the amount they are paid on consumption versus just the transaction moving up and up and up. So we now have a very, very significant sales force that focus only on getting paid when the customer actually consumes the cloud service, right, giving value out of it. And you need to. That's the reality of the cloud service. If customers aren't using it, they can look to leave every day and we recognize that.

Unidentified Participant

When we think about the incremental revenue opportunities. So then if someone could take all these acts, if you're running a trading application on SQL Server, you decide to migrate that over to Azure, how do people think about the incremental revenue opportunity that could go to Microsoft from migrating over? I am wondering which way to think about it?

Julia White {BIO 20496259 <GO>}

Wethink about it. If I look at an overall shape of IT investment, you're paying for the physical data center, you're paying for the air conditioning, the energy, very expensive assets, actually, of all of that. When we have our global scale in 38 data center regions, more than anyone else on the planet, we have incredible economies of scale that we can pass on to the customer. So they can say well, we actually get a bigger share of the wallet in terms of running that end to end.

Unidentified Participant

So is there more beyond the heating, cooling in space that's an incremental upsell as people move to the cloud?

Julia White {BIO 20496259 <GO>}

I mean the technology is that frankly it weren't possible -- it was just frankly more pragmatically possible on-premises instantiation, machine learning or artificial intelligence as one example of things that you could do on-premises for the amount of infrastructure it took. You couldn't do double, you couldn't try out an app and experiment with a massive -- you'd be putting a huge upfront cost if you're going to do that.

What Uber did, they in three months, loaded new apps for their drivers that does facial recognitions to make sure that's actually the driver that is. It took them very -- they didn't have any upfront costs, they wrote to our cognitive services with those facial recognition. And that was now part of their app and went out globally in three months. So that type of thing, fundamentally, I mean you could try to do it in on-premises, (multiple speaking).

Unidentified Participant

How does cloud adoption for your customers, typically evolve from their initial used case? I guess, you mentioned Office 365 is the biggest of your enterprise cloud offerings. Is that just software customers typically get their first taste of using Microsoft in the cloud. And then, how does it evolve from there?

Julia White {BIO 20496259 <GO>}

So Office 365, I mean it's in the SAS market (multiple speakers) and more mature and a little bit more -- so, then people kind of conceptually understood hosted e-mail because they have that in their personal life. You'd never -- no one ever hand

their own personal email to refer themselves. So that model was very understandable for companies to go to and e-mail, while mission-critical at some level, it was something like it's all they could go to. So from a market reason, as well as the fact that Office 365, we started many, many years ago, that confluence doesn't play, for most customers tend to begin their cloud journey.

I think as I look -- and then, once you've done that and you set up your directory system. And then, you wake up, I've done that, why don't I just do that. And so, there is definitely that flow, very common. But increasingly, now with the maturity of the cloud and where we are, I think both opportunities supplied as if rivals [ph] in terms of kind of the on-road industry-using [ph] using cloud in a mainstream way.

Unidentified Participant

And how is past adoption evolving, right? People start with IS, how would you say your momentum in the past adoption is?

Julia White {BIO 20496259 <GO>}

Yes, I think that's two-way, most people because it's what they are familiar with, right. Our advanced services in Azure, our ad services are going to (technical difficulty) so we're seeing very strong growth of that. And I think that, that will continue. I mean there are more -- (technical difficulty) growth is faster. But I think that when people see things like I described with Uber of having that facial recognition instantly added to an app. And services are at higher level services or advanced services that create that -- to think you couldn't do on your own data center, you will start to recognize those.

Unidentified Participant

Let me pause for a second and see. I've got a whole host of questions. But I want to see if there's any from the audience.

Julia White {BIO 20496259 <GO>}

I'll get a new mic, while you're at it.

Unidentified Participant

No, I think all mic's are good. All right, I'm going to keep going with these. And if anyone has a question, just feel free to jump in. If you look at five years from now, 10 years from now and when you said your technologists, you want this to happen faster than maybe it could, what percentage of workloads would you get, would be in the cloud, not on Microsoft view, just your view as a technologist?

Julia White {BIO 20496259 <GO>}

In five years out?

Unidentified Participant

Five or ten years, you can fix the timeframe. Those will be different, I hope so.

Julia White {BIO 20496259 <GO>}

Yes, no kidding. We're feeling kind of -- I think depending on which research report you look at, low-single digits getting into double digits today. And I think in five years, we're eclipsing 30% and I think we will double that in the end. But I think it will be actually more of a linear curve versus a steeper, I mean I think -- part of it is as I set back the camera and it's too big, right, at $1.6 trillion as we think about everything that has logged on it. So we have to be a little thoughtful in terms of how big that cam is. But I think it's going to be -- it will be jumped off. But I think it's going to be a massive amount for you on that front.

Unidentified Participant

So you mentioned you have more availabilities on data center space, maybe not space -- but regions that you're covering, it's been yours than anybody else. How do we think about -- given these data centers also serve Office 365 right where you are serving the globe with this product, how do you think about utilization versus your competitors? What's your utilization then given all the regions that you have to cover just given the breadth of the products that you're offering? Are you -- is it taking you longer to get to the utilization levels that you would like to see inside the data centers or how should we think about it?

Julia White {BIO 20496259 <GO>}

We do have more reasons than anyone else and we've done that, put data sensors in countries where people have data. You need to have handling and things that matter. From a supply chain perspective, we've got incredibly tight on from where we get signal to the point where we're actually in production on that center or expansion of one. One of the Microsoft has is, we're one of the largest sales force on the planet. And so we have a vast number of last-mile signals knowing exactly what the pipeline looks like, what kind of capacity we need to build from a pretty early part of the pipeline. So we can get a pretty good sense of that. And we've done a massive amount of work and we've not given up for a decade. But with our consumer services and other things, the number of weeks between signal and production is pretty high. So I don't think that there is (multiple speakers).

Unidentified Participant

So that brings up another question that (inaudible) it's just there are people that believe that Microsoft can't operate at the scale of AWS because of the way your IS and casts were designed. So I don't know whether that's myth, or whether it's reality, because that's certainly something that gets discussed in the investment community. I was just wondering if you could share any high-level thoughts with that belief?

Julia White {BIO 20496259 <GO>}

The idea that myself, Satya and Phil had, we had this absoluteness, 100% in terms of -- I think about Skype, Office 365, our consumer services and the scale that we have there from a global but also just an overall capacity perspective. And the ads are powering a vast majority of that underneath. And this year we have with -- I don't think there is -- I know nothing from a technology perspective that would suggest that we can scale in. I think many places that I believe will cost to Microsoft have had much more scalable than EWS does.

Unidentified Participant

Oka, any questions, before I keep going on? Quiet, shy group today, which is unusual, that's because you're doing a great job. It used to be that CIOs sort of AWS have still place to take existing Windows deployments and run them. Have seen that -- given the tremendous growth you've seen in Azure, have you seen that shift where what used to be, hey, I'm going to take Windows and run it on AWS, has that started to shift where you would always start with your cloud, if it was an existing Windows workload versus maybe three or four years ago?

Julia White {BIO 20496259 <GO>}

Yes, I think if I look at our run rate, we get a disproportionate share of the Windows-based technologies, which shouldn't --

Unidentified Participant

But has that share been increasing over the last few years?

Julia White {BIO 20496259 <GO>}

It has been strong and consistently strong, I would say. And I've just mapped on whether it's gotten better, I don't know. But it's definitely strong and continuing. Then. But at the same time, see I want to clear, I think there is a myth around Azure doesn't solve Linux workloads and Open Source workloads. Right now, sort of RBMs are Linux-based. And that is growing. And so, I think people have really started to hear and take heed and really believe our investments in Open Source. And with the technology truth in terms of how well we run Open Source, the partnerships we struck with Red Hat, as an example, we uniquely have a partnership of Red Hat to do Tier 1 support for our joint customers, no one else has that, different things like our investments in containers, which is kind of the next generation application model with many Open Source leaders in that world.

And actually, Microsoft is now, I mean, recent reports on GitHub, the number one contributor to Open Source projects ahead of Google, ahead of Facebook. And so, not just in an Azure support around Open Source. But also Microsoft overall commitment and contribution to Open Source is helping set people's minds around a place of Open Source support as well.

Unidentified Participant

How about -- so the start-up committee has typically been bought up as building first on AWS. Over the last few years, even the last 12 months. But this do not change when you see companies building their business on Azure. Do you think that's an area where there needs to be a bigger focus for the Company? So is there anything you can share with us there?

Julia White {BIO 20496259 <GO>}

Yes, I mean from Microsoft Investment, we've done a lot around working with incubators like -- commentator across the globe. And coming out of commentator in the blast cohorts, we're seeing half of those start-ups using Azure. And half of those using AWS, which is an increase from past before we understand those programs and get.com, a great example with the Step Up My Walmart, startup your cloud 100% based on Azure. And so, we are seeing some nice start-up wins on that front. I think that's always been the place where AWS has started. AWS is technology-oriented and sort of -- technology-oriented thing. So it makes sense that early on, that was where got first on base run. But I think we're seeing and we're making a good sense on that.

Unidentified Participant

The VAR community, what are you -- this is kind of the whole cloud thing has kind of changed their business model a ton, what are you doing to help them continue to have -- I mean they have a lot of influence with customers, what do you do to help them continue to have that same level of influence? What type of investments or changes have you made in terms of how you support them?

Julia White {BIO 20496259 <GO>}

Yes. We made the same conversation with our partner ecosystem. It has been no less and sometimes more than our customers in terms of what it means for them. So eight years ago, we started workshops with our partners, what does it means to become a service provider versus the service implementer. And what does that mean from a P&L perspective. And how do you make money. The thing that we've always been a partner of that company, 90% of our commercial revenue goes for the partners. That's not changing in terms of where we went with a very partner front model with our cloud to be able to call it cloud service provider program.

Essentially, if you are a reseller of licenses. And then, maybe there's an implementation afterwards, you now can do that equivalent thing in the cloud. We do ask them, they have to add value-added services on top of it versus just to be a transactor. This is a cloud services world. And so, the expectations we are having of our ecosystem are different. But we're giving them a very understandable, clear way to make ongoing revenues from our cloud services. And then, build new businesses on top of that.

That's a place we will continue to invest in and making sure that that ecosystem grows with Microsoft. It's kind of our DNA and we've always believed that financially, maybe going back to differentiation question, I think an important one. I have made in the past, even like six months, number of conversations with partners like AWS partner, I think they're going to pat me in the back. And I'm going to be more with you. And so, this is not in their DNA. But it's still core to what Microsoft does and believe.

Unidentified Participant

So Satya talks a lot about AI. How does the Company build sustainable, competitive advantage here?

Julia White {BIO 20496259 <GO>}

Simple thing, we did what was a moonshot at the time and has really paid off with it. We laid a new technology fabric called FPGA, field-programmable gate array. But it's basically a way to get processing speed at -- in the silicon actually. And many years ago, we started this project and we've now fully lined our entire as a cloud with this new technology, let's assume incredible new ultrafast processing capabilities.

And that's a very unique differentiator that will take anyone near, even if they have started the journey with other than they have just talked about, the way we've done it is incredibly unique and differentiated. And so in terms of thinking about massive turnkey power on the wire, video analysis, those type of things and we now have a very unique infrastructure for. They have already put in market. But in just that it's not just that, it's also intelligence graph, we have the Microsoft graph looking at all the different activities and correlations going on and all things, Office 365. We have our of intelligence security graph looking at all the different security signals from all of our different clouds who let us view in different things from that perspective.

So we have a pretty unique position in terms of the insight that we can put and utilize in an artificial intelligence way, which is a different graphs as well as the fundamentals cloud infrastructure that we put in place, that put us in a very strong position, frankly.

Unidentified Participant

Okay. Last question, we were sitting here 12 months from now, what goals would you expect the cloud business to have achieved?

Julia White {BIO 20496259 <GO>}

A year for now, it will be well on our way to hitting our 20 billion cloud metric that we had laid out for. So on top of that for sure. Into AI area, we would be a clear leader in artificial intelligence, capabilities and what customers are actually realizing in production with AI versus just dreaming about.

Unidentified Participant

You think it will be, we'll see production AI workloads next year?

Julia White {BIO 20496259 <GO>}

I do think so.

Unidentified Participant

Okay.

Julia White {BIO 20496259 <GO>}

Yes, in real practical ways, then I think we'll see really good closure of the gap between an IA space between Azure and AWS in the terms of closing that up.

Unidentified Participant

What do you mean by closing that up?

Julia White {BIO 20496259 <GO>}

In terms of the overall market share.

Unidentified Participant

Okay, right, with that, thank you Julia. Thank you very much. Thanks everybody for coming.

Julia White {BIO 20496259 <GO>}

Thank you.

Questions And Answers

Operator

There are no questions.