Citi Global Technology Conference

Company Participants

- Scott Guthrie, Executive Vice President, Cloud and Enterprise

Other Participants

- Walter Pritchard, Analyst, Citigroup

Presentation

Walter Pritchard {BIO 4672133 <GO>}

So I'm Walter Pritchard again, the software analyst here at Citi, and super-excited to have Scott Guthrie from Microsoft. I was telling him I saw him there and he wasn't wearing his red shirt, which I think Scott -- I don't know, you've been at Microsoft for longer than I've been alive probably and you've worn a red shirt I presume every day because every time I see him in public he's got the red shirt on.

But Scott used to be the front man for -- at least when I got to know him, he was the front man for the company around developers and developers have been a big part of how Microsoft has gotten to where it is today in terms of the loyalty of millions of .NET and other developers.

So Scott, to kind of roll, I think with Satya Nadella moving into the CEO role, to sort of fill in behind Satya and run the enterprise and cloud business. So a big part of the revenue at Microsoft, all the server products as well as Azure. So Scott's going to spend about 10 minutes giving us some background on the business and where he is focused, and then we'll jump back in to do some Q&A as we've done in the other sessions.

Scott Guthrie {BIO 15931914 <GO>}

Great. Thanks a bunch. Well, good afternoon and thank you for joining us today and we were looking forward to having an opportunity to spend some time with you. As was mentioned, my name is Scott Guthrie and I run the Cloud and Enterprise Group here at Microsoft.

At Microsoft, one of the things that Satya has talked quite a bit about the last six months is the fact that we now live in a mobile-first, cloud-first world. And across Microsoft, we're working hard to deliver a set of solutions that really enable customers to fully take advantage of this new world.

And within the Cloud and Enterprise Group, we deliver a number of our core enterprise and server products that enable this world, specifically Windows Server, System Center, Active Directory, our SQL business and all of our Associated Data Products, Visual Studio and all of our developer products and then also Microsoft Azure in our commercial cloud computing platform.

And we've been hard kind of charging on this cloud first world really for the last two years within the Cloud and Enterprise Group and we're seeing some really nice momentum in the adoption of it. In the last 12 months, we've gained more than five points of market share versus VMware in our on-premises private cloud business and really seeing a nice run rate there. On the public cloud base, we have now more than 57% of the Fortune 500 running solutions deployed on top of Microsoft Azure.

We now just passed the 1 million SQL database deployed in Azure and we're seeing that growth steadily at 10% month-over-month. We have more than 30 trillion objects toward now in our Azure Storage system. We have more than 300 million users inside our Azure Active Directory and we're processing more than 13 billion authentications per week. And we've got more than 1.6 million developers registered with our new Visual Studio Online service, which provides a set of SaaS services for developers in the cloud. That's a service we just launched this past November.

And all of the adoption has been driving some really nice revenue numbers as well. And you can see Cloud and Enterprise FY14 revenue growth was 13% year-over-year. We're particularly pleased with the diversity of the growth. In FY14 we had five separate businesses within Cloud and Enterprise that were each over $1 billion of revenue. Our SQL business in particular has been on fire the last couple of years. We just passed the $6 billion a year mark with it and last year grew it at 19% year-over-year.

Even looking at some of our more mature server products in the on-premise space, like Windows Server and Systems Center, we're seeing some really nice mix shift up from our standard to our premium editions of our products and we're able to grow the premium revenue in that space by more than 40% year-over-year.

And with our commercial cloud, we announced as part of our fourth quarter earnings that we now passed the $4.4 billion a year annualized run rate for commercial cloud, which is basically Office 365 and Azure. And Azure itself is growing at more than 150% year-over-year. So overall good market [ph] momentum.

In terms of one of the questions that people often ask me at events like this is, well, how do you differentiate your cloud offering versus the others in the market. And one of the things I often talked about with customers is these three like circles of capabilities that we think the combination makes us unique. And really basically they are hyper-scale, enterprise grades and hybrid and the Microsoft Cloud is the only cloud that have all three, and combined, we think it really provides a truly unique cloud offering that enables differentiated solutions for our customers. What I want to do is to spend the rest of the time drilling into each of these and kind of giving a sense of flavor in terms of what each one is and why the combination of them is really unique in the enterprise space.

One of the elements of having a hyper-scale cloud is having a cloud that really truly provides global reach. And we've been hard at work on the Azure side, over the last 12 months in particular, building out our Azure footprint to run all over the world. As of today, we now have more than 17 regions around the world where customers can go ahead and deploy their code and this kind of global footprint enables customers to deploy their solutions closer to their own customers as well as employees than ever before.

To put this in perspective, this is actually more than two times the number of regions that AWS has opened around the world today and it's more than five times the number of regions that the Google Cloud has. And so it kind of is a fairly unique scale and opportunity.

What makes each of these regions truly impressive though is the size of them. And it's really kind of differentiate, I'd call, a hyper-scale cloud provider from sort of a more traditional hosting or co-lo environment. Each of the regions basically consists the data centers where each data center is approximately the size of one football field in length. And what's impressive is the fact that each region (inaudible) you can park up to two planes inside them, it's a feature we don't use much, but gives you kind of a sense of just the size of each of these buildings.

What makes them unique though is the fact that each region is not one data center, but up to 16, which really is a huge amount of capacity, enough to run about 600,000 servers in that each region in one of those regions. Remember we have 17 of these open up now around the world.

And this kind of hyper-scale footprint really enables immense scale economics, the point where we can basically continually cut our prices for customers and we can basically run an operation that is cheaper than pretty much everyone else on the planet. It also gives our customers the ability to instantly scale up and down capacity pretty much anywhere around the world with full confidence.

So we ultimately think there is going to be basically three hyper-scale providers in the world, us, Amazon and Google. We then basically differentiate with these other two circles of capabilities, which is enterprise grades, and providing a truly differentiated enterprise offering in terms of service levels as well as the ability to do hybrid and take advantage of hybrid computing.

We're the only hyper-scale provider out there that actually has software that runs both in the cloud as well as in on-premise customer environments as well as other service provider environments. And this kind of enables customers to basically maximize their existing investments and easily bridge to the cloud and kind of enable truly unique solutions.

And we kind now provide a pretty wide range of solutions out there whether ranging from backup to DR to database replication to identity management in the cloud, and you're going to see us build out these kind of capabilities more and more over time. And we think having the fact that we have that large on-premise footprint provides us a very natural attach to the cloud, and again, enables us to take those scale economics and drive the costs down cheaper than anyone else can in the market.

So hyper-scale, enterprise grade, hybrid, Azure is the only cloud and Microsoft is the only vendor out there that delivers on all three, and combined, we really think they provide a truly unique offering that enables us to provide services to enterprises and to businesses that really no one else can in the market and allows us to compete hard.

This -- one of the things we focus on within C&E is notion we call kind of pillars or solutions that we focus on. And I'll kind of walk through a little bit of some of the trends from data center pillar capabilities that we provide in terms of core infrastructure. This slide also talks about some of the other end-to-end scenarios that we're focusing on, the combination of which we think provides kind of a really compelling offering to enterprises where they can actually leverage our solutions, even. If they don't use us as an infrastructure cloud, these other categories allow us to provide really good value to them as well.

And to give you kind of a sense of this, I'm just going to quickly walk through two other ones, which is the enterprise mobility and then the unlock insight from any data. On the enterprise mobility front, one of the things we're looking to enable is employees to basically use the devices they love while keeping their companies secure. And we launched in May a new suite we call the Enterprise Mobility Suite, which basically combines a number of different capabilities into kind of one nice bundle for customers that enables them to basically enable their employees to be productive on any device they want to use and to connect any SaaS-based solution they want to use as well.

As part of this, we include our Intune offering, which provides mobile device management. This works including with iOS as well as Android-based devices and provides IT a way to basically enforce policies on top of all their employees in a fairly non-intrusive way and take advantage of the bring-your-own-device trend that we're seeing in the enterprise.

We also then add in identity integration as part of the suite which is more about core differentiators. This enables more than single sign-on against more than 2,000 different SaaS applications out there, including ones not running inside our cloud environment. And as part of this suite, we actually provide what's called SaaS Discovery Capabilities so that an enterprise, IT or CIO, could actually look at their network logs and actually determine not just which of the SaaS apps that they've approved that their enterprise is using, but which are the hundreds of other SaaS apps that their employees are taking advantage of, but IT doesn't know about.

And once they discover them, you can basically go into Azure and very quickly wire up and adapt it, which allows you to enforce single sign-on with your corporate company credentials against that solution. This is basically two steps and you can enable it for Salesforce.com, we support Workday, Concur, Google Apps, just for kicks, we even let you manage AWS this way and it provides a really nice solution that allows enterprises to keep their identity secure.

You might have heard in the news, a little bit of hacking going on with some celebrities earlier this week. One of the things that's built into this solution that is kind of compelling to you is built-in machine learning so that as employees are logging in, if we detect suspicious behavior like loss of password, reset attempts or loss of incorrect passwords or someone that's supposed to be in New York logging in from Romania, we basically -- it will automatically file an alert to that security officers and we can automatically enforce two factor authentication on top of that device. So the next time they log in, they actually have to also answer say an SMS challenge in addition to knowing the password.

The combination kind of again provides a much more secure solution. We're also as part of this enabling remote desktop support running in the cloud. This basically allows organizations to run any Windows Client application they want in our cloud and expose it to all different types of devices. So we have an iOS, Android as well as Windows Client. And so user to basically click and sign in using that same security mechanism and immediately be productive on any existing Windows application regardless of what device they're using, all running safely in our cloud, optionally bridged in a hybrid way through an on-premises environment.

This basically is kind of a huge opportunity for us in FY15. Again, it was on the price list literally only for a few weeks in FY14 and we've seen really, really strong demand for it.

What's nice about it is it's not only kind of a solution that we think is really tailored for this mobile-first, cloud-first world, but it's also one that allows that we're uniquely positioned from a sales motion perspective and that it clearly attaches to a lot of our other existing motions out there and you're going to see us very aggressively go after this solution for every Office 365 customer that (inaudible) and every time a customer renews one of the Client Access licenses with us, which they do every two to three years. This is kind of an obvious attach that we're going to be able to do as part of that motion. And what's great, again, it works regardless of what infrastructure cloud you are using and it's kind of an easy attach to any SaaS-based solution they are doing as well.

The last thing I will just walk through really quickly is our unlock insight on any data pillar. Core part of our value proposition here is to really deliver a set of data solutions that enable customers to get more insight as well as to run their businesses better. I mentioned earlier, our SQL business is now at $6 billion a year run rate, growing at 19%.

In addition to kind of our core SQL work, we also have a whole bunch of additional data services that we're now providing, and increasingly going forward, you'll see us move up into the data analytics space, which is a category we don't really compete in today and which we think is right for disruption and a really nice adjacent business for us to add into.

You'll also see us continue to add on additional SaaS capabilities to our data space, one of which here I'll do a quick demo of is Power BI. This basically is a SaaS-based solution that enables organizations to create operational dashboards for their enterprises. What's nice is it seamlessly integrates with any on-premise data both with our SQL business, but also with other people's data on-prem, so including Oracle, IBM, SAP et cetera, but it also is designed to kind of embrace this mobile-first, cloud-first world with SaaS, so you can also pull data from any SaaS provider as well. And so for example, we have sales force integrations we'll demo here in just a second, and in fact we'll just roll the video, we can kind of see a quick view of this in action.

(Video Playing)

That's just one sort of simple example in terms of the data product that we're coming out to market with later on this year, that we think, again, is a nice adjacent business to kind of our core business that we provide today. That again is an example where we can actually leverage and take advantage of it both in our on-prem world and the cloud world both with Azure as well as any other SaaS-based or other infrastructure cloud provider out there.

So in terms of providing kind of a quick overview that's a little bit of our business, these are some of the other solutions. I am not going to go into detail in any of the other ones, but we think combined, they really provide a set of offerings where regardless of where the customer is looking to transform their data centers, store and analyze data, manage their mobile workforce, create an Internet of Things or enable next generation of applications, we have a great solution for you. They compose incredibly well and we think they go after the enterprise markets where there is an awful lot of money we've made and a very healthy business for us to drive for the long-term.

So with that, I'm going to open it up to questions.

Questions And Answers

Q - Walter Pritchard {BIO 4672133 <GO>}

(Technical Difficulty) Can you give us some sense as to what they are using it for? You've outlined a number of business cases. Typically people get going though with pretty simple things. Can you just talk to us about what the demographics are of that 57% that they are using?

A - Scott Guthrie {BIO 15931914 <GO>}

It's interesting. I mean, so I think a lot of people, when they think of cloud, think of it in terms of from an existing IT perspective of, hey, I don't want your service on-prem. I can move into the cloud. And I think there is certainly an element of that that organizations are looking for as a way to kind of reduce infrastructure costs and things like that.

I would say the majority of use cases that we're seeing right now in the cloud though are much more additive to what a traditional IT department would do. In particular, I would say customer-facing solutions are the things that seem to be migrating to the cloud the fastest. And if you look at a lot of our customers today, it's often their departments or the businesses within them often outside of IT that are actually making the shift to the cloud fastest.

So an example for one of us would be Tesco in the UK is the largest retailer. And they have a division called Blinkbox, which is kind of the Netflix of the UK in that they provide a premium media streaming service. And that was the first department at Tesco that actually aggressively embraced Azure and basically reinvented all of their streaming and their infrastructure to the cloud base. And seeing that success, then you're starting to see other departments within Tesco also kind of make that shift and including kind of more traditional IT.

And so right now, I would say, a few people had asked me earlier today, is the cloud cannibalizing your on-prem business or is it replacing it. And right now, I would say it's very much additive, and I think that the big opportunity with the cloud is the fact that there is a whole bunch more scenarios that people either don't do today because it's too costly, or for us, selfishly, are doing it with other vendors where the cloud allows us to kind of basically enter those markets in new ways because they end up being much more automation as opposed to service level. Take data analytics as an example. I think there is huge opportunity with machine learning that kind of democratized predictive analytics, which is a very nice profitable business for several people. And we hope it can be a profitable business for us. And this is a real good example of that transition gives us an opportunity to have conversations that we just aren't in today.

Q - Walter Pritchard {BIO 4672133 <GO>}

Do you expect that over time over the next two to three years that this continues to be an additive business? Or do you think you will see migrations as part of the business, say, in that timeframe?

A - Scott Guthrie {BIO 15931914 <GO>}

I think for us, certainly in the near term, I think it's going to continue to be an additive business. And one of the things that we focused on from a business strategy perspective is also, how do we kind of design our business model so that it ends up hopefully being additive from a long-term perspective. So for example, today we make money off of the Windows Server license.

Q - Walter Pritchard {BIO 4672133 <GO>}

Right.

A - Scott Guthrie {BIO 15931914 <GO>}

That's a fairly small percentage of the overall IT spend of Windows Server. And in the Azure world or even in the AWS world, we still will make money from that Windows Server license, but if they want in our world or our cloud, we have that opportunity to certainly make money in the storage layer, in the networking layer, in the compute layer, and in all the additive management services to go around that frankly we don't monetize today. And so I hope even in that type of world, we do see a server shift from on-prem to cloud that there is an opportunity for us to be additive in the net set. [ph]

Q - Walter Pritchard {BIO 4672133 <GO>}

And how do you think about, I guess, maybe some of this gets to how your business -- how you are running it from an economics perspective, but do you expect -- what impact do you expect on revenue and profits as we look at the C&E business over the next, say, two, three years as you undergo this transition? Is it a -- we've seen some companies as they move to a cloud type business model, there is a headwind as maybe you absorb business that was sold upfront on an ongoing basis, other businesses we haven't seen as much of a headwind. What should we expect there in terms of revenue and profit?

A - Scott Guthrie {BIO 15931914 <GO>}

Well, I think in terms of -- I kind of talked a little bit about some of the finances in the beginning. In terms -- right now we are kind of in a unique position where we have a whole bunch of different businesses that are really on fire in a good way. And so each business is in a slightly different space in terms of as you think about transition to the cloud. But I would say for a lot of these scenarios that even the ones I walked through, take Power BI, the Enterprise Mobility suite, those are net additives to our existing client access license business as well as to our existing SQL business.

And so that's the case where the migration to the cloud, those types of cloud services, don't replace any existing revenue and there is a less of a shift from license to annuity than you might expect. A lot of our business inside C&E today, just from an infrastructure perspective, beyond those additive scenarios, is also annuity-based. And so a large part -- majority of our revenue is based on enterprise agreements, which are kind of three-year, two, three-year renewals. And so that also kind of changes the dynamic a little bit from other business -- other competitors that are probably more transactional-based, gives us a little bit more of a smoother on ramp [ph] as well I think.

Q - Walter Pritchard {BIO 4672133 <GO>}

Okay. Got it. And then another sort of economic question here on, Amazon and Google have been pretty ruthless. Amazon before and now Google has kind of entered the fray in terms of leaning down price and pushing pricing down. You've largely matched or roughly matched the price decreases that they pushed through. Do we get to a point here where it starts to become an impactor on profitability in terms of from your business? Amazon has profits as a company, give or take. Is that a concern and how do you manage that concern in terms of the relentless push on price?

A - Scott Guthrie {BIO 15931914 <GO>}

Well, I think in terms of -- I think the way we thought about our business, couple fold. One is, if you want to go after enterprises and provide kind of a total package solution for an enterprise, you need to be in the infrastructure business and be able to offer those types of services and those prices will not always, but I think in many cases will be commodity-driven. That doesn't mean they are not sophisticated or important, but the price will be set by the market. And we've made a decision with Azure, which is -- we will match commodity prices with Amazon. And so if they cut price, usually within 48 hours we cut it.

And that's basically I think combined together. We need to kind of to cut price and we need to match. It has, I think, accelerated our overall adoption in a pretty nice way and it's gotten us to a position where, for some things like storage in particular, we are probably under the price of what anyone else in the market can offer, this is three of us, which has kind of put us in a nice structural position. And yet, we have the cost economics that we can actually continue to do that and still have a long-term profitable business.

From a portfolio perspective, I think having those types of infrastructure is going to be key. The thing we want to balance it out with though is also higher value services, take analytics, take device management and the Enterprise Mobility suite, take machine learning, take data-as-a-service and those will be kind of much higher margins offerings, and being able to have kind of an overall package of all of them, I think ends up being unique.

I would say, also versus Amazon and Google, just on the infrastructure side, we're also in a slightly unique position in that we don't just monetize while compute and storage. We also monetize the license software running in that VM. And so whenever an Amazon sells a Windows VM, we make a decent amount of money from it. And likewise on Azure, when you sell a VM running Windows, we make also decent amount of money on it. So as you think about what is our gross margin for core compute, it's not as bad as you might think because we actually make a fairly decent chunk off of the software running inside that VM as well. And so that changes the overall dynamics probably of our margin business in a way that's probably different than taking the other competitors out there.

Q - Walter Pritchard {BIO 4672133 <GO>}

Okay, got it. I was actually going to kind of go there next and talk a bit about platform versus infrastructure. So my sense is the disclosure around your business has become very transparent in the last year or so, so we really get a sense of what's going on.

I think before it was a little bit more difficult to tell, but it appears as though the Azure business really took off when you added the infrastructure option and sort of came into that mainstream market. And you highlighted there that when you attach your IP in, your intellectual property with Windows or sort of people are building through APIs, it's a unique offer and you can charge more versus the commodity product. Can you talk about sort of adoption at this point of the platform level services, things that ultimately will have that higher margin and where we are today and how we should think about that in the future versus the commodity piece?

A - Scott Guthrie {BIO 15931914 <GO>}

Yeah, I think definitely on the infrastructure side, I mean, a lot of -- our Azure business made a pretty substantial change from an interim perspective about two years ago really when we first previewed our infrastructure as a service capabilities and then later GA'ed it. And in fact, our infrastructure-as-a-service is only GA'ed a year ago, April. So it's actually less than 18 months since this has been with an SLA. And we've seen a huge growth from that.

And you know, the analogy I often use with people is, if you're going shopping or like a shopping mall or you're going into a store, there is the premium services that people end up thinking about the store for and want to get when they are purchasing, but then there is also -- they're going to buy stuff [ph], or they are going to buy something that's much more (inaudible) and that often motivates the trip to the mall to begin with. And so we had a gap with Azure in our cloud strategy where we had the premium stuff, but we didn't have the infrastructure capabilities and now once we close that gap, certainly we are a much more complete offering.

From a sales motion perspective as well, the way that increasingly we sell Azure to enterprises is through what's called an enterprise agreement and that basically is someone will buy, say, $1 million of Azure capacity or usage, they can spend it on infrastructure as well as the premium services and we often see kind of a motion of, I'll call it land and expand where people will start with infrastructure for desktops and then they'll very quickly expand out to the premium services. And so I think that's a key part of our kind of overall motion there.

Q - Walter Pritchard {BIO 4672133 <GO>}

So another thing I've been -- we've been watching is you have introduced --

A - Scott Guthrie {BIO 15931914 <GO>}

So the last question you asked about what percentage of our coverage --

Q - Walter Pritchard {BIO 4672133 <GO>}

Yeah, right. Exactly.

A - Scott Guthrie {BIO 15931914 <GO>}

I think what we disclosed in our Q4 numbers were more than half of our Azure customers are now also using the premium services and that that rate is actually increasing. So that kind of land and expand motion I mentioned is definitely one that we're seeing from a usage perspective as well as from a revenue perspective.

Q - Walter Pritchard {BIO 4672133 <GO>}

Okay. And then the other thing we've noticed is you have been very sort of forward-thinking in terms of supporting natively non-Microsoft products on top of Azure. I mean, you had the announcement with Oracle, you're supporting new SQL databases, you have your own, I think, new SQL database, some sort of release the technology to the market. And I just use that as an example of seeing some change in thinking at Microsoft over the last, say, three or four years. How do you ultimately think about monetizing that type of an offering where it is -- it's a premium service, but it's not your IP and it might be something that either others get paid on like Oracle or is an open source, no IP built, sort of technology running on top of Azure?

A - Scott Guthrie {BIO 15931914 <GO>}

Yeah, there is an analogy I use within the teams, which is keep your old friends and make new friends. And I think in the past we've been very focused on keeping our friends, but not necessarily making new friends and especially in the enterprise space, every enterprise has a combination of lots of different technologies, whether it's deliberate, whether it's through acquisitions, but they all have Oracle, they all have SQL, they all have IBM in some shape or form, and whoever, we say our stuff only works with the Microsoft stuff or kind of closing ourselves out to a bunch of opportunity. And frankly it's harder to be the trusted vendor if it only works with your stuff.

And I think that's the shift that we've made the last couple of years and I think that helped drive that in particular and that's made a big difference to the market. So as an example, there are people in the room that might not know we did a partnership last year with Oracle. And in fact, we're the only cloud vendor other than Oracle that is certified for an Oracle Enterprise support. So we call up Oracle for an enterprise support on someone else's cloud, or say, sorry, we don't support it, but they will on their could and they'll support it with our cloud, which is a fairly substantial change in the type of relationship we've had in the past with Oracle.

We've done similar relationships with SAP. We recently announced a partnership with Salesforce. So things like the Analytics suite that I showed or the Power BI where you can integrate the Salesforce data. There is an example where, I am sure Salesforce over time will add more built-in analytics themselves, but by offering the ability, where we can integrate with theirs as well as thousands of other SaaS vendors out there, we're able to have kind of a unique play there that I think ends up appealing to our customer base and gets us into much more conversations where we can ultimately win.

Q - Walter Pritchard {BIO 4672133 <GO>}

Got it. And then on part of the success story that's in Microsoft for a few decades here has been the ISVs, the software vendors, developers inside companies and then developers inside software companies and then long history of desktop vendors, software vendors and then server-based software vendors who've built their software on top of Windows Server, where are we there with Azure? I know not necessarily the enterprise companies, but a lot of consumer companies, are building on top of EWS as sort of their stack. The ISV territory has sort of been yours historically. Where are we with ISV traction on Azure?

A - Scott Guthrie {BIO 15931914 <GO>}

Yeah, certainly, I would say as we think about the move to the cloud, I think one of the things that is important to kind of keep an eye on is both there has been people that will move to the cloud for infrastructure and for applications and there is obviously people that move to the cloud and adopt stack, so custom infrastructure with custom apps and then also SaaS. And winning the hearts and minds of SaaS vendors is going to play a important part of that. And so that's been one of our core pushes with Azure from the beginning really, has been on the ISV and almost half of our Azure revenue comes from ISVs over there. So it's actually much higher percentage than I think most people might naturally think.

And the way that ultimately I think we need to kind of compete with is going to be both in terms of getting SaaS to run their apps on top of Azure, on top of our infrastructure as well as things like, for example, that mobility suite and the Power BI suite that I showed where we enable ISVs to integrate with the Enterprise Mobility suite for free. And we've got more than 2,000 SaaS vendors, including ones not running on any Microsoft stack on the back-end or cloud, integrated with that.

And then we can also then monetize through the enterprise by selling on that Enterprise Mobility suite and that also is kind of a core part of our (inaudible) motion where we don't have to own the whole stack from the ISV. We can simply integrate with and we can construct interesting business models and monetize as well. And so I definitely think that ecosystem effect is going to be really important for us to go after it.

Q - Walter Pritchard {BIO 4672133 <GO>}

Got it. And then I think maybe the term dog-fooding your own software came from Microsoft. That's the first place I heard it back maybe 15 years ago. Azure is a large football field-sized infrastructure. Do you have other businesses at Microsoft that could leverage Azure Search, Xbox Live, Office 365? Can you talk us through sort of where you are internally with being your own customer so to speak with these businesses leveraging the Azure capacity?

A - Scott Guthrie {BIO 15931914 <GO>}

Yeah. In terms of pretty much every Microsoft property and app runs on top of our common infrastructure, so the football sized data centers basically is all of our solutions are running inside of. There are then part -- there is the software piece of Azure, which is kind of multiple different things and all of their apps are in the process of (inaudible) on top of that. And so anytime you use Office 365, all of the authentication infrastructure goes through Azure Active Directory. You store things in one drive, it's going into Azure Storage. If you use the new Office 365 video app, you're going against our Media Service pack and inside Azure, et cetera. And with Xbox Live, likewise, you run Halo or you run the Titanfall games that came out early this year for Xbox One, that's all 100% on Azure. In fact, Titanfall was a game that came out and it has been one of the premier games on Xbox and they actually spent up 250,000 virtual machines inside Azure for the launch day, which is kind of an example of sort of just extreme levels of capacity.

And then I think about a cloud, it enables those types of elastic scale where you can peak on your end of month or holiday season and then you can drop off as needed and only pay for what you use. And so we're certainly looking to use that inside Microsoft, Skype likewise is now running on Azure. And basically we have a plan and it will take probably two or three years before everything is, but we are pretty aggressively moving all new stuff, but also existing stuff kind of moving it over on top of the common software stack as well.

Q - Walter Pritchard {BIO 4672133 <GO>}

Yes. And so you mentioned 57% of the Fortune 500 is using Azure. So 43% is not using Azure. So when you go on sales calls or hear feedback from your field force around what's holding people back, what's the top three there in terms of why people aren't leveraging Azure? It's not going to be 100% today, but I'm more interested in just what those factors are.

A - Scott Guthrie {BIO 15931914 <GO>}

Well, I think, I mean there is -- I think until we had the infrastructure solution released 12 to 18 months ago, there were a bunch of solutions where people would say, well, it sounds cool, but I don't know what I do with it yet, and so if you look at just the adoption in the last quarter or two, we're also seeing that hockey stick of growth and so I do think you'll see even more use cases come out pretty quickly.

There are still some people that are just -- and I don't differentiate between IT and departments. A lot of the adoption of cloud even in that 57% is still coming from business units and departments, in particular more of a product side or the customer facing side of the organizations. And I think in some cases, IT is now just starting to come to the party, which is a great opportunity for us, but I think that we are seeing for a lot of people, we've moved in the last year with cloud in general from, hey, is this going to be a big thing or hey, will I use it to be more a case of win and how and so I fully expect that to continue to grow.

Q - Walter Pritchard {BIO 4672133 <GO>}

Got it. And so I did note -- I think you can talk generally around this topic. I woke up this morning and checked my (inaudible) reader and saw there was sort of a landmark case right now around data sovereignty. And I guess there was a Microsoft data center in Ireland or something where the U.S. government is saying I want the emails and that data center is in Ireland, and it just sort of brought to the floor some of these recent issues we've heard around the NSA and these sort of outreach by the U.S. government, has that set the industry back at all? I know there's been some sort of concerns highlighted by tech execs that this could actually occur in American companies. And what have you seen in that regard?

A - Scott Guthrie {BIO 15931914 <GO>}

We've not seen any revenue slowdown from it. I mean, I think when some of the NSA stuff first came out, we wondered, this was going to cause people to pause and generally I don't think the people that were worried before that were still paused and the people that weren't worried ended up not being worried at the end. I do think it is something that, from an industry perspective and just from an overall legal perspective, is something that I think all of us need to worry about, not just the industry, but across the world, across the U.S.

And I think Brad Smith has kind of spoken quite a bit publicly in terms of where our position is. And I think it's going to continue to evolve and I think our ask to the government is both to clarify its position as well as make sure that we have good principles in place and I think it's going to be an ongoing dialog that will continue.

Q - Walter Pritchard {BIO 4672133 <GO>}

Got it. Last question and we'll let the crowd run through. We've got some breakout sessions starting, but the session before this had Pat Gelsinger in the hot seat there, we were talking about VMware and that you did put up the stat, we've seen many times on the market share gains certainly in the virtualization space. Could you just highlight for us where do you think you're gaining share? Either what types of customers or what types of workloads within the installed base?

A - Scott Guthrie {BIO 15931914 <GO>}

Well, I think our historic play with Cloud and Enterprise that's worked very well for us is how can we basically provide a great solution for our customers and not charge a huge premium for it. And certainly if you look at our data business today, a lot of that hockey stick of SQL growth is coming from Tier 1 workloads where we do have an enterprise edition with a premium product pricing, but it's still about a third the cost of an Oracle Tier 1 solution.

And your solution being enterprise credibility for being Tier 1 and you are significantly below the competitor, you'll see a hockey stick of revenue growth come from that. And it's not just that you can be cheaper. you have to be Tier 1 quality to get that reputation and we're at that place right now in the data space and it's paying huge dividends.

I think also we've reached that space in the virtualization category as well where people now say, gosh, you are cheaper than VMware and, boy, your offering is pretty darn good. You are in the leader quadrant in Gartner. You do stuff that they can't and it's integrated and it's a part of Windows Data Center. Why wouldn't I just buy one of server data center and get that without having to pay extra. And I think that's where a lot of the growth has happened.

The other thing I think to watch for us is Windows Server 2003 is going end of life next summer and our Hyper-V share of Windows Server 2003 is exactly 0% because we didn't have Hyper-V in Windows Server 2003. And so as all of those Windows

Server 2003 instances get updated, I think that's also going to be an opportunity for us to gain some more significant virtualization shares because there are pure VMware environments that are now up for grabs and pay a little bit more and get Windows Server data center and you get virtualization included as part of it. And I think that's going to give us some nice growth and momentum over the next 12 to 18 months as well.

Q - Walter Pritchard {BIO 4672133 <GO>}

Great. Well, Scott, thanks a lot for coming. I'll get over my red shirt issue, and great to have you here. Thanks.

A - Scott Guthrie {BIO 15931914 <GO>}

Thanks so much for having me.