Goldman Sachs Technology Conference

Company Participants

• Bill Duff, CVP, CFO Windows and Devices

Other Participants

Heather Bellini, Analyst, Goldman Sachs

Presentation

Heather Bellini (BIO 2268229 <GO>)

Thank you, everybody, for sticking with us this afternoon. We are honored to have Microsoft with us today. We've got Bill Duff, Corporate VP and CFO of the Windows and Devices Group. He's held multiple positions at Microsoft since he joined in 2004. He was the CFO of the Operating Systems Group, CFO of the Phone Division. He led Strategy and M&A for the Mobile Communications Business and, prior to that, he was in investment banking at H&Q which was acquired by JP Morgan, as we all know.

So with that, thank you for making the time for us today.

Bill Duff {BIO 18415528 <GO>}

Thanks for having me. This is (inaudible).

Heather Bellini {BIO 2268229 <GO>}

So this is a conference where we have specialists and generalists. Obviously everybody knows what Microsoft does. But can you help give us just level-set people on what comprises the group that you're responsible for. So what's in the Windows and Devices Group?

Bill Duff {BIO 18415528 <GO>}

Yes. So Windows and Devices -- probably the best way to think about the Windows and Devices Group is when you look at our reporting segments, Microsoft reports its results along three segments. One of those segments is called More Personal Computing. And More Personal Computing is comprised of Windows -- our core Windows licensing business; Devices -- so that's both Surface phones and all of our incubation devices; Gaming, which is really our Xbox business; and Search. And those four areas comprise More Personal Computing. And the way to think about my role is I'm the CFO for that segment.

Great. Thank you. So again, you've been at the company for 12 years. Satya took over a few years ago. What are the biggest changes you've noticed in -- we've read a lot of stuff about it being external parties -- but what are the changes you've seen put in place firsthand?

Bill Duff {BIO 18415528 <GO>}

Yes. I think -- it's been an interesting time at Microsoft over the last couple of years. I would say during my entire 12 years, it's been interesting -- a lot of change. But if I look back over the last couple of years and sort of what's happened at Microsoft, I think there were a few big things that really changed the direction. And what you're seeing at Microsoft today is a direct result of these. And actually, one of them happened right before Satya became CEO. We did a very large reorganization under Steve Ballmer. And it was really one of the things that he did prior to leaving the CEO role. And he did a reorganization of the company into four big product groups and really organized the company around engineering. And so we had an Operating Systems Group, a Devices Group, a Productivity Group and a Cloud Group. And a lot of the innovation and product development that you're seeing today is a direct result of that. On the Operating Systems side, we brought together Windows, Windows Phone and Xbox. And we started to leverage the technology in a much more direct way and think about a more unifying product vision from that. And Windows 10 and some of the products that we've delivered recently came out of that organization a couple years ago. Then when Satya came on board, he really embraced that reorganization. And I think he did two main things that got us on, I think, a better path from Microsoft perspective. First, he very clearly laid out the strategy and the aspirations for us as a company. So we talked about a mobile first, cloud first world to reset. Like this wasn't the PC business. This wasn't sort of the legacy Microsoft business. This is the new world in which we're competing. And we need to be relevant in that new world and we need to move directly into that new world. I think he laid out a couple of clear aspirations for us as a company. He talked about \$20 billion in cloud revenue and really focusing on investing in that area. And we think that's an enormous opportunity for us at Microsoft. And he also talked about -- more relevant to my area -- a billion monthly active devices. And this is really about reigniting the Windows ecosystem and the Windows client platform and thinking about the business as not only a transactional business where we sell a PC. But thinking about it as an ecosystem and a long-term relationship with our customer and thinking about our business model in a different way from a Windows standpoint. So I think he clearly laid out the strategy and the aspirations. Then, married with that, he's really focused a lot on culture. And I know this permeates the media a little bit. But there's a huge change within Microsoft. I think he talks about the growth mindset. He talks about leaning into issues, not getting locked in to old paradigms, rethinking opportunities and how we compete and just upping the pace of change and innovation at the company. And it's really permeated throughout -particularly in the product groups. But I think all across Microsoft. So the pace of change, leaning into the opportunity, having the clarity about the long-term goal has really worked well over the last couple years. And I think internally, from an organizational standpoint, people feel pretty good about where we are.

With Windows 10 -- and you somewhat alluded to this so now you've got Windows kind of all merged -- one code base. Now that you've kind of changed your go-to-market strategy a little bit with Windows 10 in terms of how you're doing the upgrade, how do we -- can you help people think about the -- you're just thinking about Windows monetization entirely differently than you did in the past. Can you share with us how you think about it?

Bill Duff {BIO 18415528 <GO>}

Yes. Yes and no, we're thinking about it differently. Certainly when we thought about Windows 7 and our operating system business with Windows in prior generations, we really thought about a multi-year development cycle. We would launch our Windows version and then we would sell a lot of devices and then we would go back and work on the next version of the operating system. And really with Windows 10, we're thinking about it completely differently. From a product perspective, we're thinking about it and we call it Windows as a Service where we're continuously improving and bringing new functionality to Windows on a much more rapid cadence. And so somebody who chooses a Windows 10 device is going to get this enhanced functionality and improved functionality over time. From a business model perspective, we're also thinking about that engagement and how do we deliver value to our end customers and how do we capture some of that value in our business model. We think there are big opportunities for us, both on the enterprise side as well as the consumer side. Some of this is showing up in our results right now where you see us talking about our attached businesses -- or our post-sale monetization businesses. You hear us talking about the opportunities in search, the opportunities in gaming. So fundamentally we're thinking about a customer lifetime value for a Windows customer. We're thinking about the installed base more versus the upfront transaction. And this has really changed how we develop the product, how we market the product and then how we engage with our customers after they buy Windows PCs.

Heather Bellini (BIO 2268229 <GO>)

So with over 200 million Windows 10 users today -- and Satya put out a goal of a billion devices in 2 to three years -- I should say there's 200 million Windows devices today. And he (inaudible) out a billion in 2 to three years. How do you get from here to there?

Bill Duff {BIO 18415528 <GO>}

Yes. I think if you look at -- one of our biggest strengths as a company is our installed base of PCs. And there's a massive installed base with PCs. Estimates are over 1.5 billion active out in the world today across both commercial and consumer. So we think that's a massive opportunity to upgrade our current installed base, or users that are already using Windows PCs -- it's a fragmented base. So we still have users using XP machines. We still have a lot of users on Windows 7. We have a lot of users on Windows 8. So part of it is just upgrading this installed base and making sure that

we're delivering the value in Windows 10 such that it makes sense for customers to upgrade. We're seeing a lot of early success on this. And we're seeing -- we talked about the 200 million unit figure. The vast majority of that is upgrades. But we also have new device sales and we're bringing innovation to Windows for new use cases, new form factors, new price points of devices. And so also we'll get there through selling new devices and continuing to satisfy both the commercial PC environment -- which we're starting to see the upgrade to Windows 10 -- and also the consumer side where the consumer side still has a large vibrant PC opportunity)

Heather Bellini (BIO 2268229 <GO>)

How do you get -- so fast-forward a couple years.

Bill Duff {BIO 18415528 <GO>}

Yes.

Heather Bellini (BIO 2268229 <GO>)

You get to that I billion users. How do you think about reaching that next billion? I know these are big chunks we're talking about. But whether it's Office users or Windows users. How do you think about getting this -- a new base of customers, a lot of which might be in emerging markets at this point?

Bill Duff {BIO 18415528 <GO>}

Yes. In my last answer, I talked a lot about --

Heather Bellini {BIO 2268229 <GO>}

Yes.

Bill Duff {BIO 18415528 <GO>}

Sort of prior installed base.

Heather Bellini {BIO 2268229 <GO>}

Yes.

Bill Duff {BIO 18415528 <GO>}

These are Windows users today. How do we bring them on to our latest and greatest

Heather Bellini {BIO 2268229 <GO>}

Right.

Bill Duff {BIO 18415528 <GO>}

Technology? Then we have investments across the company in a bunch of different areas. So if you think about outside of Windows, we have services that we're delivering much more to customer bases on other platforms -- so on Apple devices or Android devices -- today. That's been another shift that Satya has really --

Heather Bellini {BIO 2268229 <GO>}

Right.

Bill Duff {BIO 18415528 <GO>}

Overseen over the last couple of years. If you think about our mobile strategy, not only are we continuing to ship Windows phones. But we're also getting much more focused on delivering Microsoft first-party services across all of these different platforms, whether that be Office, whether it be Skype -- Skype's always been there. And so one of the opportunities is to engage these users on Microsoft first-party services and then make sure that we deliver better value with Windows and bring them back to Windows. Then there's just new device categories. And in one of these areas that we're really focused in the Windows and Devices Group is what are those new device categories and what new incubation opportunities do we have because the world just doesn't stand still. It's -- we've seen the rise of mobile over the last couple of years. There's going to be new platforms that come along. We're investing in those new platforms on a software -- from a software perspective and from a hardware perspective. And so we're continuing to lean outside of the PC ecosystem to look at what are those next opportunities and to make sure we catch them at the point in time where we can be successful in expanding our market opportunity there.

Heather Bellini {BIO 2268229 <GO>}

So again, as you mentioned, you've gone from multiple code bases to one code base in Windows. Talk a little bit about how that has helped the speed of innovation for the platform, as well as helped you reduce cost.

Bill Duff {BIO 18415528 <GO>}

Yes. This is one that's been a multi-year journey for us. I mentioned earlier that we had a big product reorganization a couple of years ago. And what we did is we took the Platform groups together and we took Windows, Windows Phone and Xbox and put them together and put them on a unifying platform. At that time, we took a lot of cost out of the system. If you thought about the way Microsoft was structured before is we were structured sort of on a vertical business group basis. And each business group would make their own decisions. And because there were certain market realities, we had a lot of duplication of work. So you had multiple teams working on networking (stacks), you had multiple teams working on store and commerce systems and things like that. And I would say over the last couple of years, we've

Microsoft Corp (MSFT US Equity)

taken a lot of that out of the platform. There's still some left to do. We migrated the Xbox (inaudible) installed base to Windows 10 before the end of the year. So we'll continue to get efficiencies as sort of all of these platforms migrate to Windows 10 and our new platform. But from a platform perspective, a lot of those costs have been taken out. So it's more a matter of us making sure we're investing in the right areas and investing for growth. Where we see the bigger benefit now is on the cadence, as you mentioned. And so we're not in an environment where we'll ship Windows and then three years later we'll ship another big version of Windows. We're on an entirely different cadence. And we haven't quite exactly said what that cadence is and how -- when our next release is coming. But we are on a stepfunction increase in how we're delivering new services to Windows -- new functionality and new services to the Windows platform. And so you'll see that cadence really accelerate.

Heather Bellini {BIO 2268229 <GO>}

Does Windows as a Service help combat piracy at all or are they always one step ahead?

Bill Duff {BIO 18415528 <GO>}

Piracy is a -- has been a challenge for us historically. We had --

Heather Bellini (BIO 2268229 <GO>)

For all of software. You're not alone. You have good company.

Bill Duff {BIO 18415528 <GO>}

For all of software. Yes. Exactly. We -- it does help in certain instances, I think. We've actually been fairly successful in certain parts of the world through working with our hardware partners, working with innovative pricing programs and changing our pricing structures and strategies, thinking about our customer lifetime value and thinking about the value of the opportunity a little bit differently. And I think all of those factor into sort of making sure that -- there's sort of two elements of piracy. There's the element of we want to provide the best Windows experience --

Heather Bellini {BIO 2268229 <GO>}

Right.

Bill Duff {BIO 18415528 <GO>}

And for us to provide the best Windows experience, we want to make sure it's genuine, that the experience is not hijacked in any way. Then there's the business model aspect. Both are really important to us. And we're working on both of those in tandem.

Okay. I want to switch to the Devices part of the segment for a minute. When you first launched Surface, there was a lot of debate in the market about whether this was the right direction to take the company. But if you fast-forward to today, you guys seem to be out-innovating the people who've been doing this the entire lifespan of the company -- and I'm talking about SKUs such as Surface Pro and Surface Book. So how do you, even today, strike the right balance because you guys continue to -- or at least to most people -- seem to be out-innovating kind of -- a little bit more each year?

Bill Duff {BIO 18415528 <GO>}

Yes. We -- you're absolutely right. When Microsoft entered the Surface business, it was a big change for us. And it was a big change for our partners as well. And I think at the time there were many tough conversations with our partners about what we were doing, why we were doing it. And what we hoped to achieve. And we were pretty consistent, even at that time, to talk about our investment in innovation. So we felt like there were investments that we were uniquely capable of making across the hardware/software layer. And there were investments that we were uniquely capable of making from a -- defining a new category and building market awareness around a new category. And that's what we really did with Surface. And so what I think you will hear now is a lot of our hardware partners understand the investment in Surface. If you look at 2-in-1s as a category within PCs, it's certainly a growing category within PCs -- all of them are leaning into the opportunity and all of them see this as a -strengthening the health of the Windows ecosystem and pushing it in new directions and expanding the opportunity for Windows. And I think we continue to think about hardware in that way. We continue to think about it as a way to drive innovation, a way to expand the market opportunity for Windows. And also as a way for us to also be profitable. We think there's a profit opportunity as well. And it's striking that right balance because we do get tremendous scale from our hardware partners. They're incredibly important to us. I actually think that they're doing great work. If you look at the premium laptops that are in the market today from our hardware partners, they're better than they've ever been. We have amazing lineup, they're leaning in to a lot of the innovation. And it's striking that right balance with our hardware partners.

Heather Bellini (BIO 2268229 <GO>)

How important is it for Microsoft to maintain a presence in the smartphone market?

Bill Duff {BIO 18415528 <GO>}

Phones has obviously been a challenge. I think that mobile is a big opportunity. Mobile is an adjacent opportunity, if you think about it from an overall platform ecosystem perspective. We've retrenched over the past year. We made some announcements over the last -- over last summer where we've restructured our phone investment. Instead of trying to compete in all markets at all price points with all customer segments and being a (of-scale) global provider, we really entrenched and said, "Where do we think we can drive innovation and where do we think we can

get some initial success and grow from there?" And so we're continuing to invest on the software side for mobile scenarios. And that mobile scenario is everything from all screen sizes.

Heather Bellini (BIO 2268229 <GO>)

Right.

Bill Duff {BIO 18415528 <GO>}

So in screen sizes, you can think of Surface as being a mobile scenario. You can think of smaller screen sizes being mobile scenarios. So we'll continue to invest on the software and the hardware side there. But we are where we are and --

Heather Bellini (BIO 2268229 <GO>)

Right.

Bill Duff {BIO 18415528 <GO>}

We'll continue to compete.

Heather Bellini {BIO 2268229 <GO>}

If Android ends up owning the majority of the developing markets even still kind of 5, 10 years down the road, how do you ensure that Windows is something that people in these countries grow up with and know and are familiar with and use as they enter their professional lives?

Bill Duff {BIO 18415528 <GO>}

Yes. I think that whether --

Heather Bellini {BIO 2268229 <GO>}

Does it matter? Maybe it doesn't matter.

Bill Duff {BIO 18415528 <GO>}

Whether it's developing markets or developed markets, I think Windows has to be a differentiated value proposition. We think we have differentiation in a lot of different segments of the market. We certainly think we have differentiation around productivity. We think we have differentiation in the enterprise. A lot of these are developed market scenarios. We have differentiation in gaming. But for us to really compete overall, we have to know what we stand for, we have to continue to drive differentiation. And we have to effectively compete with the right business models in the right (inaudible).

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Heather Bellini (BIO 2268229 <GO>)

Right.

Bill Duff {BIO 18415528 <GO>}

And we're driving down both of those. We have -- on the business model side, we talk a lot of sort of thinking more holistically about our business model, thinking about a customer lifetime value, thinking about what are the different licensing programs and services that we can deliver so that we can compete at different price points in the market. And so it's one of those things where we are going to continue to compete globally and it's up to us to make sure that Windows has a very strong value prop there.

Heather Bellini (BIO 2268229 <GO>)

If we switch over to Xbox for a second, what would you say are some of the key growth catalysts as you look out over the next few years?

Bill Duff {BIO 18415528 <GO>}

Xbox is interesting for us. It's -- when we think about Xbox at a very high level, Xbox is an amazing franchise. It's got a deeply-engaged customer base and it has a great brand with the gamer segment in general. Xbox as a business, historically for Microsoft, has been a very console-led business. So the whole business model was to sell in the console and then the attached services to the console -- or to drive engagement through the console. And really one of the things that we've rethought and that we're changing with Windows 10 is to think about Xbox as really the gaming platform. And if you look at the overall gaming addressable market, console is a big market opportunity and Xbox is a big player there. PC is a bigger market opportunity in the gaming market. And really they're not a significant player there, other than underlying technology. We (inaudible) license fees. We participate in that way. But we don't have -- we've not extended Xbox to the PC. And so we're thinking about Xbox as much more of a community. So we think about -- the key metric for us is the engaged user base and our Xbox Live active users. We've actually shifted the way we've talked about it publicly from how many consoles did we sell to how many Xbox Live active users do we have. And we think there's a lot of power there and we think there's a big market opportunity to bring our Xbox across console and PC and to engage users with content -- our own first-party content. We acquired Minecraft recently. That sort of expands us across form factors and it also expands us out of core gaming. We have a Halo franchise. We have great first-party franchises and we have services that we can deliver to that highly-engaged user base. So we think that's a pretty big opportunity for us.

Heather Bellini {BIO 2268229 <GO>}

I want to pause for a second and see if there's any questions from the audience. Okay. We'll hold them for a second. So another way you've been monetizing Xbox has been transactions -- right? -- and the marketplace. Can you share with us kind of how that business is evolving and kind of what you see for the future?

Bill Duff {BIO 18415528 <GO>}

Yes. We -- Xbox as a console-led business continues to do very well. We've seen some shift from retail to digital. But overall, overall transactions continue to grow. Engagement continues to grow on the console. What I was talking about earlier was really about how do we extent that to the Windows ecosystem and the Windows 10 devices. And we are going to bring back content to our Windows devices. We actually launched the first launch of a AAA game through the Windows 10 marketplace recently -- Rise of the Tomb Raider. It's early. We're learning. But when you think about bringing this content to Windows and using our distribution mechanisms and our engagement mechanisms across our global customer base, we think there's a big opportunity for us to distribute third-party content through our store. Gamers are a big part of any store transaction and that's a significant area of focus for us.

Heather Bellini (BIO 2268229 <GO>)

Now how do you think of virtual reality as an opportunity for Microsoft? Not HoloLens.

Bill Duff {BIO 18415528 <GO>}

Right.

Heather Bellini {BIO 2268229 <GO>}

We'll get to that. Because virtual reality -- because you guys have been relatively quiet versus, say, what Sony's been talking about from a console perspective and with Gear VR. Obviously the ocular (inaudible) is only running on Windows machines. But how do we think about whether it's HMDs or using a Windows device as similar to what we're seeing with the Gear VR? Where are you guys? What are you betting on there?

Bill Duff {BIO 18415528 <GO>}

Well I think we've bet on -- we're -- as we were talking about earlier --

Heather Bellini (BIO 2268229 <GO>)

Yes.

Bill Duff {BIO 18415528 <GO>}

It's a really interesting area. If you've tried any of these devices, you can see sort of two things. One, the promise of where the world is going in this area, whether it's

gaming, whether it's entertainment, whether it's productivity. It's just the use cases, to me at least, from my opinion, are significant and out there and obvious. But we're still very early. And so from a Windows perspective right now, we obviously have our first-party bet, which is hardware on HoloLens. And we can talk about that in a second. On the virtual reality side, a lot of the virtual reality players are leveraging Windows PCs. And if you think about it as part of the Windows PC ecosystem, we have differentiation on Windows there. We have differentiation in terms of the power that we provide with these devices. We have differentiation on graphics. We're investing a lot in software in that general area. But we haven't really talked at all about any sort of first-party roadmap in that area.

Heather Bellini {BIO 2268229 <GO>}

And any questions from the field? I was going to shift. I don't know if someone raised their hand. Anyhow, from a video game perspective --

Bill Duff {BIO 18415528 <GO>}

Yes.

Heather Bellini (BIO 2268229 <GO>)

First-party (huddles). You guys have had people talk about what if Halo were a VR game, right? How could would that -- how do you think about software development at Microsoft for VR?

Bill Duff {BIO 18415528 <GO>}

Software development for VR -- we actually have a pretty significant effort. Some of it is on the gaming side. Some of it is on --

Heather Bellini {BIO 2268229 <GO>}

(inaudible).

Bill Duff {BIO 18415528 <GO>}

Yes. But if you think about sort of, let's say a Halo or a Minecraft --

Heather Bellini (BIO 2268229 <GO>)

Yes.

Bill Duff {BIO 18415528 <GO>}

Or gaming studios, we have a pretty significant investment. We call it our Studios business. But this is first-party content across our platforms. And so we think about what are the devices that we want to target with our games and how do we think

about it bringing value to our ecosystem. And so if you think about our Studios, a lot of it is around Xbox Live and sort of engaging with the Xbox Live user base. And so I think these new type of gaming scenarios are going to be a big part of that. We also have pretty significant efforts, I would say, on the AR side with HoloLens --

Heather Bellini (BIO 2268229 <GO>)

Right.

Bill Duff {BIO 18415528 <GO>}

To make sure that we're providing the visionary scenarios and the proof points where people can see what's possible on these types of platforms and the types of opportunities that they unlock.

Heather Bellini (BIO 2268229 <GO>)

So with HoloLens, it seems like you're taking -- correct me if I'm wrong -- making more of an enterprise bet initially than a consumer bet? In the past, we've seen this type of kind of revolutionary technology take off faster on the consumer side. Is there a reason why -- what was behind the decision to focus on the enterprise first?

Bill Duff {BIO 18415528 <GO>}

I think it was more around -- we see a big opportunity across both. We see some really, really interesting use cases on the enterprise side. When we talk to our customers, they're very excited about the different scenarios that they can see with HoloLens on the enterprise side. And so --

Heather Bellini {BIO 2268229 <GO>}

Can you share with us some of those enterprise use cases, broadly speaking?

Bill Duff {BIO 18415528 <GO>}

Well they could be anywhere from virtual showrooms, if you think about it from a sales force type of scenario. So you don't necessarily -- you're sort of in a room, you have your goggles on and you can see -- you could see cars, you could see other things to sort of -- you're not necessarily in a physical showroom.

Heather Bellini {BIO 2268229 <GO>}

Right.

Bill Duff {BIO 18415528 <GO>}

You can see training-type scenarios. You can see remote work scenarios. You can see design scenarios. For example, if you're building buildings, how would a building

look in a certain environment? There's all sorts of stuff that's just really, really interesting. And once you sort of walk through some of these scenarios, you start thinking about the 10 other things that are interesting as well.

Heather Bellini (BIO 2268229 <GO>)

Right. I wanted to go back to -- one of the stats that Oculus put out was that right now -- I think Nvidia put it out, actually -- the installed base of PCs capable of running Oculus (inaudible) about 13 million.

Bill Duff {BIO 18415528 <GO>}

Yes.

Heather Bellini (BIO 2268229 <GO>)

How do you see this as a driver of PC demand over the course of the next few years?

Bill Duff {BIO 18415528 <GO>}

I think it's a good opportunity for us. Any sort of innovation -- gaming has always led innovation on the hardware side, on the software side and the PC industry. And there's -- gaming is a -- the gaming PC market is a significant part of the overall PC market. So when we see these new use cases that require faster processors, more memory, higher-resolution screens, all of the new capabilities from the hardware side and the capabilities from the software side, we think this will factor in to the overall demand on the PC side. It's tough to -- it's tough for me to know where I think the long term is extremely bright, as I talked about for these things. I don't know what's going to happen over the next couple of years. We'll see. It's -- we're early stages and it's pretty speculative.

Heather Bellini {BIO 2268229 <GO>}

It's -- if anyone hasn't checked out the HoloLens part of their website, you should check it out. There's a lot of interesting demos on there, both from a consumer and an enterprise side.

Bill Duff {BIO 18415528 <GO>}

Yes.

Heather Bellini {BIO 2268229 <GO>}

Bill, thank you so much.

Bill Duff {BIO 18415528 <GO>}

Absolutely. Yes.

Appreciate it.

Bill Duff {BIO 18415528 <GO>}

Thanks, Heather.

Heather Bellini {BIO 2268229 <GO>}

Thank you.

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