BMO Virtual Technology Summit

Company Participants

- Michael Spencer, General Manager, Investor Relations

Other Participants

- Keith Bachman, Analyst, BMO Capital Markets

Presentation

Keith Bachman {BIO 3018411 <GO>}

Okay. I think we're live here again. This is Keith Bachman from BMO. We are thrilled to have Microsoft here, Mike Spencer who's joined us today. Some of you may have participate already in some one-on-one or group sessions, but this is our formal fireside chat. So, Mike, thanks very much for agreeing to participate.

Michael Spencer {BIO 20838577 <GO>}

Yeah.

Questions And Answers

Q - Keith Bachman {BIO 3018411 <GO>}

I'm going to just -- I'm going to jump on mostly vertical or industry business unit specific questions, but I wanted to ask one question that comes up at an industry level before we jump into the business unit segments, and that is the edge. Microsoft I think was the first to talk about the intelligent edge, some other companies like frankly Fortinet has jumped on this a little bit. But why don't you give us some backdrop on why you talk about the intelligent edge? What it really means from an architectural perspective and how you think it benefits Microsoft or threatens Microsoft?

A - Michael Spencer {BIO 20838577 <GO>}

Yeah, it's a great question, Keith. Thanks. And thanks for having me. I would say, the edge and what you've heard from Satya and Amy over the past several years, as you highlighted Satya has been talking about this for, gosh, going on probably three years now. We constantly refer it as intelligent edge and intelligent cloud. And what Satya really means by that when he brings that phrase up is the notion that we're moving into a world where we believe most things will be cloud-based, most interactions you have with a database or customer service structure or how your company operates, et cetera, but more and more of that computing interaction is going to be pushed to the edge. Historically, it would have been running on a server or via the web, but more and more it's moving to mobile devices, it's moving into your thermostat in your house, it's moving to centers on a manufacturing line, it's moving to a device like HoloLens that allows remote oversight from a technical standpoint.

And so as more of that compute gets pushed to the edge, that's going to actually result in several things. One is, it's more distributed architecture of where the compute is taking place and you'll see a continued shift over time, where folks are going to demand more and more at the edge of responsiveness. That leaves the things like our Cosmos DB, it's distributed database architecture where it replicates it on a more localized basis, so it's closer to the edge, where it's being accessed. It means more and more sensors and edge-type devices that lead to a higher amount of data collection, which obviously has a whole set of positive implications associated with it and things like machine learning and artificial intelligence, et cetera, as well as more and more compute just in your hand. So, you think about your phone and just the evolution of your phones. You can use -- you can basically run almost your entire productivity stack directly from your phone these days. Obviously, there's always going to be a role for PCs and whatnot, but more and more you're going to see that architecture get distributed across that what we refer to it as intelligent edge. And so you'll see us focus on that as our customers really -- it's a -- it's the end of how their business is going to operate in the future. And so how we serve that reduction of latency, the ability to push power to that edge and then harnessing that data is going to be critical as we move forward.

Q - Keith Bachman {BIO 3018411 <GO>}

Okay, okay. Okay. Well, that's probably a good segue into PBV. I'm going to go business unit by business unit. And one of the things you and I've discussed over the last couple of years is a small line item called Office and Office 365, in particular. And I want to jump to this past quarter, in that growth slowed pretty materially, and this is Office 365 commercial, 22% year-over-year growth, constant currency, seat growth was kind of 15% versus 20% the last -- 20% percent the last four quarters. Now, some of that was the transactional part of the business. But talk a little bit about what happened in the quarter and more importantly what the runway is you see over the next 12 months as an opportunity set for Microsoft? The economy is a little bit tough as you think about integrating economy in your questions, but talk a little bit about Office 365 commercial, in particular.

A - Michael Spencer {BIO 20838577 <GO>}

Yeah, for sure. So, I will give you a couple of different angles to look at. First, let's talk about the seats dynamic because that's probably where you saw the -- quote-unquote, the slowdown more than any other part of the business. And within the seats slowdown, we actually were pretty direct about drivers of that more so than we had in obviously previous quarters, given just the moderate slowdown that we've seen in previous quarters. But within the quarter, we had a number of factors that were more -- that stuck out more than we've seen previously. First and foremost, with the introduction of COVID back in March, we actually launched a trial, an E1 trial that really saw broad adoption, much stronger adoption than we anticipated. And so, we had a number of customers, especially lower tier customers opt into the trial, which some portion of those would have been purchasers in the past. And so, it was a six-month trial. The trial ended as of July 1st. And so, we did a great job now of filling the top of the funnel in Q4. Those are not counted in the seats. It's now our job to convert those into paid users. And so, that's your first dynamic.

Second is going to be SMB. We did see, just like we saw in the transactional side or the on-premise side of the business, we did see some transactional slowdown in Office 365 purchasing in SMB. And so, that was an impacting factor. And then third is first-line workers. And so, not surprisingly, in this environment where customers are looking at furloughed workers, maybe they've shuttered some retail stores for example that you see enterprise customers slowing down maybe on coverage of some of their first-line workers, in some cases, because they have lower first-line workers than they had previously. That's much more of a new seat statement than it is existing seats turning up, but something that did factor into the seats in the quarter.

That all said, some of that was more near-term COVID-related, so that will flush itself out and normalize as you move forward. That's baked into the guidance in Q1. But more importantly is ARPU remains strong, so that variance between revenue growth of 22% what you called out and seat growth of 15% gives you roughly a 7% growth on ARPU, the implied ARPU, if you will, which has been pretty consistent with previous quarters. That spread over the last four quarters has been in that 7% to 9% range. And so, we're super-pleased a big driver there or that we've been continuing to monitor closely and see good momentum in the market has not only continued to upsell the E3 or into E3, folks coming into the equation, but also E5 upsell is starting to take hold. We called that out in our Q3 or our March quarter and we saw that momentum continue into Q4 and that will become a material factor as we move forward as well.

So, in general, I think expectations as we move forward is, if you expect continued seat growth, although continued moderation like we have been seeing, and then more importantly ARPU starts to become a bigger mix of the equation. And we feel very good about the momentum we have there. And so, the formula is intact. We're just going to see the dimensions of it change a little bit.

Q - Keith Bachman {BIO 3018411 <GO>}

And so, just before we get to ARPU, on the seat growth, is the thesis there if the economic conditions improve then your seat growth improves, but given the current economic environment, the seat growth probably remains just mid-teens? Is that how we should be thinking about it or is that the wrong calibration?

A - Michael Spencer {BIO 20838577 <GO>}

I think that's relatively in the right ballpark. The thing I would tell you, obviously, we don't guide on specific numbers on growth, but the biggest factor that I called out, the number one factor there is the trials dynamic.

Q - Keith Bachman {BIO 3018411 <GO>}

Yeah.

A - Michael Spencer {BIO 20838577 <GO>}

Obviously, that's gone because we ended the trial as of July 1st.

Q - Keith Bachman {BIO 3018411 <GO>}

Exactly.

A - Michael Spencer {BIO 20838577 <GO>}

You could kind of remove that factor from the table, but I do think some of the SMB dimensions that we're seeing as well as -- around first-line workers, those are trends that are more to the broader environment. So, I wouldn't expect those to change.

Q - Keith Bachman {BIO 3018411 <GO>}

Okay. Okay. Well, let's shift to mix for a second. And the way I think about it is, there's two different dimensions. One is within Office 365. You have two E3 and then two E5. That's one dimension. And then there's also to Microsoft 365, which is another pull up. But maybe just remind me what the difference between Office 365 and Microsoft 365, but then let's talk about what the ARPU opportunity is. You talked about seven points, is that -- it sounds like that remains kind of a way to think about the model over the next 12 months, but maybe talk about those two aspects, Office 365 and Microsoft 365.

A - Michael Spencer {BIO 20838577 <GO>}

Yeah. So, from a definition standpoint -- and I would encourage folks if they haven't -- we do have some SKU maps available on our website at Office 365 and Microsoft 365, and you can lay them out pretty clearly. But in short, the way to think about it is, Office 365 is going to be your core workloads that everyone I think has grown to know and love. So, E1, which is more Exchange Online base, E3, which is your suite with Office, and then E5, which brings you up to telephony and security and things like that.

As you move across the stack to Microsoft 365, the two components that are added are Windows and then EMS. EMS is our enterprise and mobility and security suite. There's an E3 and then an premium version of E5 there. EMS has been around for a while. And so, the stickiness and the go-to-market is very mature in attached Office 365. Windows is the newest of the equation, relatively newest of the equation. And Windows E3 gives you Windows Enterprise. So, think about a commercial customer who goes out and buys a PC and then wants to put Windows Enterprise on their machine. They'll buy a Windows Pro machine and then their IT department will upgrade that to Windows Enterprise, which gives them the IT overlay control structure associated with Windows. And then, when you move up the stack on Windows E5, that brings in the security layers of threat protection on Windows. And so, you're right, there's kind of two vectors to think about. There's vertically up the stack within Office 365, E1, E3 to E5, and then there's horizontal and vertical, so across the stack to Microsoft 365 E3 and then up to Microsoft 365 E5.

I would tell you two different things that we're seeing in the market. One is in this environment, teams and security have really pushed the momentum that we're seeing on the E5 side of things. Folks moving to the softphone associated with our Cloud PBX and Teams offering as well as security resonating more now than maybe it ever has been. That's been our lead dog on E5 for a while. But in this environment, it's becoming more and more to the forefront of the dialogue. The second thing, I would say, our hero motion has evolved. Over time, if you go back in history, our original hero motion was E1. So, customers who move into exchange online and they still maintain Office on-premise, that evolved to being Office 365 E3 to today where it's customers who are now coming into Office 365 really are going to Microsoft 365 E3, and that's really become the hero motion.

For clarity purposes, what's important to understand is that the revenue associated with Windows and the revenue associated with EMS will land in their respective units. So, Windows portion of Microsoft 365 will land in Windows commercial and EMS will land inside Azure. That's a SaaS portion of Azure. So, that's the important aspect to understand. So, we see good momentum, but where it surfaces is the ARPU story within Office 365 that we just talked about will only surface part of the dialogue versus a broader horizontal play that gets you into Microsoft 365.

Q - Keith Bachman {BIO 3018411 <GO>}

Have you said what your penetration trade on Office 365 E3 versus E5?

A - Michael Spencer {BIO 20838577 <GO>}

We haven't. The last stat we gave Keith was a few years back now, we said over 60% were on premium. That could be E3, that could be E5, that could be E1 plus Office Online. But we are -- we've gotten a lot of feedback on that. And so, we're investigating how we might update a stat there, but I don't have anything new to share.

Q - Keith Bachman {BIO 3018411 <GO>}

Okay. You also offer bundles. If you buy E3, you can also buy separately the security bundle. Right? So, you have specific SKUs. What are you getting more traction? And are people in this environment moving more just saying, we're on E5, it's just more aggressive momentum, or are you actually finding people buying the individuals SKUs?

A - Michael Spencer {BIO 20838577 <GO>}

Yeah. That's a great question. So, the journey that we've been on is with E5 is earlier on, it was much more standalone specific SKU. So, think about advanced threat protection being a solid seller, audio conferencing being a solid seller. So, it was very one-off specific workloads. About a year and change ago, so 16 months ago, let's call it, 15, 16 months ago, we introduced a security bundle and a compliance bundle, both around $8 -- $8 or $9, I can't remember the exact price. But -- and that was intended to capture the value of the security structure and the compliance structure within E5. We started to see good success there. And then (Technical Difficulty) E5, you really had to believe in two plus workloads in E5.

And so, we weren't quite there from tipping the scale to the full suite sale. And what's changed is Teams really has brought telephony to the forefront. So, now, we have telephony hunting along with security and compliance. And so, if you're a believer in two out of those three now, that's enough to tip the overall scale. And keep in mind, a number of customers were already believers in Power BI. That tends to be a little bit more of a departmental sale than a broad coverage play, but the other two tend to be more coverage plays. And so, that's really led to the success over the past six months that we talked about in the last couple earnings calls of the full E5 suite sale now being more to the forefront versus standalone workloads or components.

Q - Keith Bachman {BIO 3018411 <GO>}

Yeah. I mean, one of the questions we often get is how does Microsoft monetize Teams. And the way I think about it is, the heavy force or gravity to take you that E5 bundle. Is that the right way to think about it?

A - Michael Spencer {BIO 20838577 <GO>}

It is. And that's certainly the most direct way that we'll monetize it. And what's important to understand about the dimension -- of what we're seeing in the Teams usage is a couple of fold. One is, we saw good early adoption of audio conferencing, which I mentioned earlier, but more and more what we're seeing in this remote environment is customers wanting to take advantage of the softphone within Teams. But that's coming on the heels of a change that we made, it's about a year and a half ago now, where we introduced kind of what's called Bring Your Own Trunk. So, most of our enterprise customers, as you know, have legacy relationships with the AT&Ts and the Oranges of the world. And they have very good deals usually from a PSTN offering standpoint business. And everyone knows that the minutes is a very commoditized business. We offer a minutes package that folks can add on to E5, but it's not something that is going to be a high-margin, lucrative business for us. And so, 9 times out of 10, most of our enterprise customer base can get better deals directly with the telcos than they can with us on those minutes. And so, the notion of they can bring their own trunk to the E5 offering and then take advantage of the Cloud PBX and softphone offering within E5 really is what's pushed us to the forefront. That's not going to stop folks like our RingCentral, for example, an 8x8 or others, that would offer their own softphone structure on top of it with a broader minutes package using our public APIs. But we do see more and more customers seeing the viral effect of Teams take place and saying, wow, I can really take advantage of this now, I'll take advantage of the softphone offering to make it a fully encompassed best user experience they can get out of Teams, which has really led to the momentum.

Q - Keith Bachman {BIO 3018411 <GO>}

Okay. Yeah. Teams is certainly getting a lot of traction, I mentioned to you in the pre call that BMO just standardized on Teams. So, we're certainly pushing forward it. Staying within PBV, my favorite is actually Dynamics. The way -- the comment I've made you in the past is I still think Microsoft is underserved by Dynamics. And the reason I draw that conclusion is it's, call it, 3% of Microsoft's revenues and 3% market share and market serve. And so, that's -- in my mind, that's not good enough. Right?

Because it's Microsoft and you should be doing more. So, how do you think about -- Satya still brings it up a lot a on the conference calls, but how does Dynamics become more relevant?

A - Michael Spencer {BIO 20838577 <GO>}

That's a great question, Keith. And I appreciate it. We -- I would say, a couple things and then I could talk about the strategy of D365 specifically. So, Dynamics business has shown a very steady growth over the past couple of years. We just passed $3 billion in FY '20. And more importantly, D365 is the majority of that revenue now and growing at a pretty healthy clip. Last quarter, I think it was 42% or something, almost 38%, but close to 40% growth. And we feel very good about the momentum there. And for core SaaS business, being in attached motion, if you will, or an expansion motion beyond the core SaaS offerings we just spend time talking about, there's a natural path to penetration inside the enterprise space.

I would say a couple of things about how you think about the go-to-market and strategy around D365, given the level of excitement we have you hear from Satya because he talks about it so much on the biz app space. We're obviously in the CRM online business. We go against a pretty formidable opponent there. That's got a lot of incumbency in most of our enterprise customers. But we have had our share of wins against them. But it's -- you're in a battle every single time when you go head-to-head with them. But we're still really focused on that as a core growth aspect of the business.

The second thing though is we don't need to land the CRM online socket to be able to land a broader D365 functional structure. Meaning, we can surround a competitor offering within a customer with our finance and operations, our HR for talent, our marketing line of business applications and start to expand the footprint of Dynamics 365 in our customer base. And that's led to the success there as well. And then the last piece -- and that's only growing by the way, as customers look to really push their, quote-unquote, digital transformation. I don't necessarily love that term because it's so broad. Customers look to automate the various lines within their structure. Those functional apps become super important.

And then the last piece is Power platform. And specifically within that, if you think about Power Apps, Power Automate, which is your RPA structure as well as Power Virtual Agent, which is a customer service automation, those are all your low code, no code environment that close up in the D365. And we're super nascent in that market still, but it's growing rapidly. And we're seeing a number of smaller companies pop-up in that arena. But as customers really start to push the envelope on what they're, quote-unquote, transforming, to use that term again, you're seeing a reliance more on non-developers being able to carry some of that water, given the shortage of developers as they migrate their all workloads to public cloud. So, we're super excited about this space, where we have seen success in customers like Chevron. It's gone viral very quickly. And so, you can see the building blocks there, this land and expand motion on a SaaS-based offering of D365 and we feel like we've got the tenants in place and now it's about execution and serving our customers there.

Q - Keith Bachman {BIO 3018411 <GO>}

What's the distribution between SFA or Salesforce automation versus the rest, which is HR and the accounting -- or the financial and accounting rather, what's the difference between those two broad buckets?

A - Michael Spencer {BIO 20838577 <GO>}

Difference from a mix standpoint?

Q - Keith Bachman {BIO 3018411 <GO>}

Yeah. Mix. Exactly.

A - Michael Spencer {BIO 20838577 <GO>}

Yeah. We haven't disclosed, so I can't really give you a lot of color on it. What I can tell you though is that those two buckets versus Power platform are the majority of D365.

Q - Keith Bachman {BIO 3018411 <GO>}

Okay. And who do you compete most against because when you say Chevron, that's not what I would have thought for the other category, forgetting SFA for a second, I would have thought it had been mostly SMB?

A - Michael Spencer {BIO 20838577 <GO>}

When you say -- sorry. Maybe we mixed apples and oranges. When you say compete, you're talking about within the functional applications?

Q - Keith Bachman {BIO 3018411 <GO>}

Yeah. Within the applications of HR, F&A, marketing, those activities. I would have thought that would have been mostly SMB aligned.

A - Michael Spencer {BIO 20838577 <GO>}

Yeah. They're going to be -- well, no they're going to be I would say more mid-market and upper market where you're going to see those because usually they're based on being able to integrate broader solutions across those functions or broader processes across those functions. And so, they're not really SMB targeted. And they're not priced to be SMB targeted really. And so, that's when I look at it, it's the land and expand motion of surrounding somebody like a CRM and then going after those line of business functions to automate processes that integrate with your CRM structure.

Q - Keith Bachman {BIO 3018411 <GO>}

Okay. Maybe we'll end on M&A and come back to this for a second, but we'll migrate on to the IC segment. Let's talk about Azure. I think there was a little bit of disappointment on the last quarter, although, how industrial expectations shape around, that's always interesting. But maybe just talk about the components of growth on Azure that you want to remind us, particularly when you dissect consumption-based models versus user-based models? And how those dynamics, for a lack of better word, play out in helping us think about the growth potential there?

A - Michael Spencer {BIO 20838577 <GO>}

Sure. So, I hear you and we heard the feedback loud and clear on the level of anticipation, if you will, on Azure. We've been reminding folks that we came in actually where we expected in Q4. We're pleased. We actually had slightly more FX headwinds in Q4 than we had originally guided. And so, that factored in a little bit to it. But in general, the components that we've been talking about for a while are also very intact on that business from a growth standpoint. So, first, obviously, the SaaS business continues to moderate. You can see that in the seats number that we provide. Seats growth in the quarter was 30 -- low 30%-ish range. And you can look at the SKU prices. I mean, EMS E3 SKU is just under $9, you can use enterprise discount. And so, I can encourage folks to do the math of what the P times SKU looks like there. And you can see that piece of the business moderating. And so, that was a material driver in that slowdown in Q4. And Q4 always is a seasonal heavy period from an EMS standpoint. So, no surprises there.

And then, on the IaaS and PaaS side of the business, we did see a few things, I would say, in Q4 that will carry forward, but peaked in -- we think peaked a little bit in Q4, which obviously then gives you the implied guide for Q1. So, first and foremost, we saw -- we did see slowdown in impacted industries when it comes to IaaS and PaaS, so think hospitality and travel, things like that. Second thing is we see -- we saw optimization within the customer base more than we might have normally historically seen. Optimization is always a core tenant of when customers migrate to public cloud. One of the first steps they'll take within workload and they move it over is refining that workload, find things like reserved instances and things like that. We saw a bit more of that in Q4. And so, we expect that to continue because it's an easy way for customers to ensure they're getting the most bang for their dollar, if you will, of what they're buying on IaaS and Pass.

And the last piece is, we did see some ebb and flow of customers in some cases accelerating their migration to public cloud. In other cases, looking at it and prioritizing workloads and saying, hey, maybe moving my ERP system to use an example at this particular point might introduce a little bit more risk than I have appetite for given all the other moving parts I have. And so, there was a little bit of that that occurred in Q4 as well. But again, all within line of expectations. Keep in mind that when we provided guidance for Q4, we were already at the end of April. And we were already, what, at that point, six weeks into kind of that COVID dynamic. And so, things largely played out the way we expected.

The big thing in Q4 that was a surprise, but a pleasant surprise, which we highlighted, but didn't show up in revenue in Q4 was that sales were actually stronger than we anticipated. If you go back to the April dialogue, we actually anticipated a slowdown in larger longer-term Azure deals. We expected customers maybe to hold back a little bit on their commitment. We actually saw the opposite.

We saw customers actually push harder. And so, the larger longer-term commitments to Azure are really showed up and you can see that in the RPO that came through in Q4, long-term RPO specifically being higher growth rates than short-term RPO. And so, that's an important aspect to keep in mind as you think about that IaaS and PaaS equation. Overall, customer commitment never wavered and actually increased during the quarter, which is a great sign.

Moving forward, Keith, to the second half of your question. The guide for Q4 implies kind of that mid -- lower to mid growth percentage on Azure, depending on what you want to believe on the other components. And -- but a lot of the trends that we talk about are going to be very consistent. So, the SaaS slowdown that we just talked about, the optimization phase that we see, some of the trends around impacted industries, et cetera, that's all baked into that guidance. And so, we feel pretty good about the momentum going forward and the continued growth, especially on the consumption side of the business.

Q - Keith Bachman {BIO 3018411 <GO>}

What we found helpful too is we benchmark AWS growth to Azure growth at the same point in time of revenues and then we track the growth rates, if you will, and that's been actually a pretty good proxy for what it obviously comes down to is frankly some large numbers that impacts growth. With that, let's just talk a little bit about the competition that you're seeing between AWS and perhaps Google. What are you seeing in terms of, A, workloads? In other words, where is it more natural for workloads to migrate to? And then, B, pricing?

A - Michael Spencer {BIO 20838577 <GO>}

Yeah. So, great question. I would say, largely at a macro level on the competitive landscape, not a whole lot has changed. We see AWS everywhere. We go head-to-head with them on pretty much every deal. And, obviously, GCP has popped up a bit more over the past few months and they've been a bit more targeted. Obviously, their lever is to really go after price and we've seen that. We also tend to see GCP and AWS go head-to-head a bit more in kind of heavier DevOps environments, so think Silicon Valley startup type environment.

Q - Keith Bachman {BIO 3018411 <GO>}

So, Azure and GCP compete more for that DevOps?

A - Michael Spencer {BIO 20838577 <GO>}

We try, and we've been really focused on trying to push into that, but we see more AWS and GCP go head-to-head in that space than us. I would say, to the point though, around kind of specifics of workloads, I would actually pivot it a bit more to be a bit more industry-focused, and we talked a little bit about workloads. But, obviously, we've had a lot of success in areas like retail is a good example. You've seen Google actually talk about some of these in the retail space as well versus I think AWS and a lot of success they've seen in what they've called out on some of their public acknowledgements is extensions and legacy business growing and extending into the future. And that just speaks to the lead that they've had in the market as being the first out of the gate. And so, you're seeing that benefit carryover, I would say, more than anything.

As you look forward, we've been very vocal about our offerings around things like data services. We are super optimistic there about our database offerings and a lot of what we have going on with like Cosmos DB and some of our quantum computing offerings within that. And we think a lot of our AI functionality is really starting to come into the fold. We've announced a lot of enhancements around with things like agriculture, or oil and gas, we're really focused on development around that, those AI functionalities. And so, you'll continue to see that. And then the last piece, and you've seen this in the press a little bit as well. We've passed every security clearance needed to go after the most classified structure within the US government. And that's obviously led to a lot of dialogue in the governmental space across the geographic landscape. And so, we're optimistic there. And so, moving forward from a sales standpoint, we've been hyper-focused on really putting technical solutions, sales specialists as well as vertical solutions sales specialists out in the market. And you're seeing that come through in a lot of what I just described.

Q - Keith Bachman {BIO 3018411 <GO>}

Okay. When you mentioned government, I want to ask you about the JEDI contract, but I think I'll skip that since I'm not sure what you can say.

A - Michael Spencer {BIO 20838577 <GO>}

I don't have much to say. You guys all read the press like I do.

Q - Keith Bachman {BIO 3018411 <GO>}

Satya on the last call said, Azure is the only cloud with limitless data and analytics. So, he was trying to highlight the capabilities that he sees in those areas. What's the message there? And if Satya highlights something to such extent, there's a reason for it. I would think in particular with Google on the data side or the analytics side, that's where they take a lot of pride in having extreme great capabilities. So, what do you think the aggregate portfolio of Microsoft has suggests competitive advantage in data and analytics on Azure?

A - Michael Spencer {BIO 20838577 <GO>}

Yeah. I mean, obviously, we have a legacy on database infrastructure with our offering with SQL that we feel very good about from a competitive landscape standpoint and there's a natural transition for that into Azure. And so, from that standpoint, we feel very good about our competitive positioning. You are right to highlight that the GCP is very formidable in this area and they get market recognition for that. In general, though, I would say that a lot of what you're seeing in our data offerings, especially around our Quantum offering within Azure, you're going to see more and more push from the customer base to really go after large sets of data that they have either locked on-premise or are in the process of building and aggregating.

Right now, to circle back to the first question you asked today, Keith, around intelligent edge, the amount of data and volume coming in now for our customer base is larger than anything they've ever experienced in the past, just because it's coming from every which way. Just think about the remote environment. The amount of data and interaction points that you and I are now interfacing with, either at home or on the road because we're not in the office is growing exponentially. And so, when Satya talks about limitless data, he's really talking about the ability for customers to harness the insights and the power of what that data can actually provide and be able to use that to their advantage.

And so, Azure being able to help them achieve that is really the goal at the end of the day with our offering sets. And you can kind of go across the structure on things like Azure Arc, which allows you to give you visibility across your entire portfolio, both on-premise as well as in the cloud. Data is obviously core architecture of that. Your ability to go to utilize AI and harness all of that data at the core of anything that is going to be success from an AI standpoint is going to be data. And so, until you solve that equation, everything else kind of becomes a second point, if you will, that is really going to limit you unless you can go after that. And so, that's why you're hearing Satya leaning to it.

Q - Keith Bachman {BIO 3018411 <GO>}

Okay. So, Microsoft talks also a lot about security, and there's a number of different points on this. But is security part of your competitive advantage as it relates to Azure specifically or is it broader than that and doesn't really orient around Azure?

A - Michael Spencer {BIO 20838577 <GO>}

Well, I mean, it is obviously a core component of Azure. Things like Azure Sentinel, for example, is a core offering that we've been super aggressive about, but security is a much broader play. And we've been very vocal about our offerings across the security market and there's kind of several different aspects that I can give you. First, obviously, is identity sockets, so for us that's Azure Active Directory, that's we have to compete. It's going to be the first core tenant. Then you can move into things like threat protection becomes super important, the ability to go after folks like Proofpoint, et cetera, to detect and manage endpoints, detect threats that may be coming in from all sorts of angles, and in this environment, to the point of again circling back to intelligent edge, in this environment, that's a super important aspect.

The third thing is going to be -- is going to focus around cloud security. So, like I said earlier, Azure Sentinel, on the overall security of what your cloud estate is and what that looks like becomes a critical aspect. And then the last piece is going to be around your overall estate on the productivity side of things, so security built into the existing applications. And so, we've been hyper-focused on that as well. And so, in general, I would say, security is a very broad play for us. EMS is the lead security offering. We talked about it on the SaaS side of things, but it's also embedded in the Azure offerings as well with specific security services like Azure Sentinel.

Q - Keith Bachman {BIO 3018411 <GO>}

Okay, okay. Fair enough. Let's shift gears a little bit to commercial cloud gross margins. Last quarter, I think they were plus 1 to 66. And Amy, I think, suggested that gross margin will continue to expand, but maybe the pace will slow, given some of the mixed issues. But walk through one of those mixed issues and if you're at liberty, not only this next quarter, but the quarter thereafter, how should investors think about commercial cloud gross margins?

A - Michael Spencer {BIO 20838577 <GO>}

Yeah. Great, question. I would say, first and foremost, just on some basics, it's important, obviously, whenever you're looking at these numbers to normalize for the useful life change, that was an accounting change.

Q - Keith Bachman {BIO 3018411 <GO>}

Yeah, yeah. I'm trying to take that out of --

A - Michael Spencer {BIO 20838577 <GO>}

Yeah. And so, your point -- your question obviously takes that out, for the broader audience, that's important to make sure they understand. The second thing I would say is that there were some anomalies with the Teams usage in Q4 that it's important for folks to understand because we've gotten a number of questions around Office 365 margins. And it's important to understand that the beauty of our network architecture is that when we do have usage increase on a specific product, it's kind of a half inflated tyre structure, where Azure will benefit because we are able to, quote-unquote, allocate usage or capacity for Teams to utilize, but then it's charged, obviously, to the Teams P&L or the Office 365 P&L. And so, there is some ebb and flow there. That's why to your question, commercial cloud gross margin is the best metric to look at.

Within that, you have several factors. One is, we continue to improve across the SaaS services, although we have started to reach a steady state -- closer to a steady state where incremental improvement in those businesses will become smaller as we move forward. In the case of 365, in the quarter, it actually was down quarter-on-quarter. And so, that's important to understand. On the IaaS and PaaS though, more importantly, we continue to make material improvements on the Azure business, and we expect that to continue. But as overall mix shift towards IaaS and PaaS takes place, that's going to put additional downward pressure, if you will, on the commercial cloud gross margins. So, as you heard Amy talk about, we do expect continued improvement, but at a moderated pace as we look forward.

Q - Keith Bachman {BIO 3018411 <GO>}

Right. But when she was talking about continued improvement, it wasn't just this next quarter, it was the longer-term opportunity, not just because the 67 or whatever it is, but it is a longer term opportunity.

A - Michael Spencer {BIO 20838577 <GO>}

Yeah.

Q - Keith Bachman {BIO 3018411 <GO>}

Okay. And by the way, the change in depreciation schedule, I'd like to -- not very excited about that one.

A - Michael Spencer {BIO 20838577 <GO>}

Yes. I hear you.

Q - Keith Bachman {BIO 3018411 <GO>}

But maybe I want to jump to M&A -- go back to M&A. And my orientation is less around the consumer activities, such as TikTok, but more something we've talked about over the years is say in the applications or the business application side, in particular. Is there -- is that an area that -- Satya has mentioned a couple of different times that he wants to nurture that business, is that still something that should be under consideration, say, for perhaps inorganic help to help drive incremental business there?

A - Michael Spencer {BIO 20838577 <GO>}

I mean, obviously, I can't comment on anything specific. I would say, more broadly though that there's not a single business inside Microsoft, where there's not always an evergreen or constant dialogue around both organic and inorganic options to help grow that business from a strategy standpoint and in biz apps the dynamics is little different. So, I wouldn't -- I would never say never, but obviously the pieces have to be there. As you know, from an M&A standpoint, valuation is only one component but a very important component of how we look at M&A. And the others being even in a growing market, can we be better owner? Is it a good fit culturally? And if we can check the boxes and all those and then valuation makes sense, we're always exploring it. And so, I would never say anything is off the table, but obviously I can't be more specific.

Q - Keith Bachman {BIO 3018411 <GO>}

Okay. Let's shift to MPC. Excuse me. I'm actually going to jump to gaming. And you have some console launches. Our thesis was that the new console launches that are going on probably aren't a huge catalyst for the stock or the revenue profile, given that games are going to be backwards compatible and so you don't necessarily need to upgrade. In addition, some of the games, Halo may have different time trends, but how do you think investors should be thinking about the console as a potential driver of business within the framework of gaming? And then I have a follow-up.

A - Michael Spencer {BIO 20838577 <GO>}

I think if you look at previous launch trends around the console cycles for us, I think that's a good benchmark. I think there's two things to think about when it comes to the upcoming console launch. One is for folks that have -- we've seen a good -- and we highlighted this. During this current crisis, console sales have actually been stronger than anything we anticipated. So, we're going to enter the console launch cycle this upcoming holiday period with a leaner inventory than we had on previous cycles. So, that will help. But keep in mind, most of the folks that are going to upgrade, there's going to be kind of two camps of those folks that are going to upgrade. One are folks that just want the latest and greatest, that's a smaller portion of our audience. And then second folks who have been still on Office -- Xbox 360 versus moving to Xbox One. And so, there's still a sizable number of folks out there on that console. So, those are going to be your two primary drivers. In general, what I have to say is one of the things that will be a key dimension of this upcoming cycle will be the momentum we have around Game Pass and the launch of xCloud.

Q - Keith Bachman {BIO 3018411 <GO>}

Yeah. That was my next question. Yeah.

A - Michael Spencer {BIO 20838577 <GO>}

So, there's going to be a broader, I would say, buzz, if you will, in the market around the launch of xCloud and then the momentum we have around Game Pass, which has really started to take hold. We talked about over 10 million subscribers back in the April cycle and we're now six months further from folks being in remote environment. And so, you can imagine the momentum we've gotten. We feel very good about the dimension there of launching xCloud in Game Pass and what that means for the overall gaming business. You are right, I would say, Keith, though, back to your original question that from a percentage mix standpoint, consoles are a smaller mix now than they ever have been. So, that's just -- as we think about top line revenue, that's just an important dimension to keep in mind.

Q - Keith Bachman {BIO 3018411 <GO>}

Yeah. I was going to broaden it out from my follow-up question, which you hit on. I mean, it seems like the thesis around Microsoft gaming revenue line item is evolving. And so, what's your narrative on how investors should be thinking about that as more and more goes to subscription, which is in, I don't want to say an annuity business, but it's an ongoing revenue source. I've struggled with, is this a double-digit grower over the next few years? Obviously, this quarter coming, it's going to be higher and last quarter was substantially higher. So, I'm trying to normalize for what should be the investment thesis around Microsoft's gaming business as we look out over the next two years?

A - Michael Spencer {BIO 20838577 <GO>}

Yeah, it's a perfect question. And I would actually point to Q4 as being symbolic of where we hope the business and where we're pushing the business to go. The really great thing about the Q4 performance in gaming is that it wasn't siloed to a hit theme. If you go back over the last couple years, obviously, Fortnite was a very spiky nature of the game. We saw the very highs on that. And we saw the lows of it. If you look back in Q2 last year, we had a terrible Q2 in gaming and all that was a Fortnite comp. And so, what you saw in Q4 is you not only saw strength of Fortnite, but you actually saw a couple of other third-party titles come into the fold, which balanced out the third-party dimension. We had first-party strength in things like Minecraft and some of our other titles, like Sea of Thieves, and then Game Pass momentum.

And so to your point, if we can balance the ecosystem with a solid foundation or a recurring revenue stream with Game Pass moving forward to help balance out some of those highs and lows, as well as distribution of first and third party titles, and as you know, we've been heavily investing in our first-party portfolio to obviously mitigate that moving forward, we can de-risk, if you will, some of that volatility from the hit party or the hit game dimensions that we've seen in the past. And so, that's really the -- as you think about the business, that's the goal. It's going to be, though, I don't want to make it sound like this is going to be something that we're going to achieve now or in the near-term, it's going to be a journey over the next few years.

Q - Keith Bachman {BIO 3018411 <GO>}

Yeah. No, I think that'll be helpful too to kind of smooth that out. Well, I have 17 other questions to ask you, Mike, but I think at this point, we -- I can see the clock on the upper right. So, I will take this opportunity to thank you again for your time. Wish you the best of luck and we'll look forward to chatting soon.

A - Michael Spencer {BIO 20838577 <GO>}

Yeah. Thank you Keith for having me. I appreciate it.

Q - Keith Bachman {BIO 3018411 <GO>}

Okay. Cheers. Good day, everyone.