JPMorgan Global Technology, Media and Communications Conference

Company Participants

- Kirk Koenigsbauer, Corporate VP of Office 365 Client Applications

Other Participants

- Mark Ronald Murphy, MD, JP Morgan Chase & Co, Research Division
- Unidentified Participant, Analyst, Unknown

Presentation

Mark Ronald Murphy {BIO 17750249 <GO>}

Okay. Good afternoon, everyone. Thank you. So much for joining us here at the conference. I am Mark Murphy, software analyst with JPMorgan. And it is a great pleasure to have with us today, Kirk Koenigsbauer, from Microsoft. Kirk, thank you so much for being here with us.

Kirk Koenigsbauer {BIO 5905758 <GO>}

Thank you. Excited to be here.

Questions And Answers

Q - Mark Ronald Murphy {BIO 17750249 <GO>}

And we're going to be talking about one of the most exciting, fastest-growing products for Microsoft, which is called Microsoft 365. Kirk, why don't we start off with your background?

A - Kirk Koenigsbauer {BIO 5905758 <GO>}

Sure. So my name is Kirk Koenigsbauer. I've been with Microsoft since, gosh, 1991. I spent a little bit of time at amazon.com for about four years in the middle of all that. I run our Microsoft 365 business, which is inclusive of Office 365, our Enterprise and Mobility Suite, a Security suite as well as Windows 10 in the Enterprise and a bunch of other stuff.

Q - Mark Ronald Murphy {BIO 17750249 <GO>}

So I think people are familiar with Office. They're familiar with Windows. They're probably a little less familiar with the whole suite of products, which you are

overseeing now. Can you give us a little bit of an overview of Microsoft 365 and just how it fits into the overall Microsoft portfolio?

A - Kirk Koenigsbauer {BIO 5905758 <GO>}

Sure. So Microsoft 365 is a product that we launched just about two years ago. As I mentioned, it is a product that includes many products that you may have heard of before. But essentially, the cloud productivity versions of them. We think of Microsoft 365 as sort of the world's productivity cloud. And so again, it includes all of the value that you would find in Office 365. So for example, all the Office apps, SharePoint, a new product that we've launched called Microsoft Teams, Exchange Online and so forth. It includes this Enterprise Mobility and Security suite, which has a number of different workloads within that around management and security and compliance. And then of course, it has Windows 10 as a core part of the offering as well. And we sell this as a part of our -- essentially what we call our modern workplace sort of go-to-market, which is really centered around productivity and collaboration.

Q - Mark Ronald Murphy {BIO 17750249 <GO>}

So can you help us frame up the growth opportunities that we may be looking at here with Microsoft 365? I think we've noted that the Office 365 commercial revenue line, which is a very, very large one, has been growing over 30% recently, pretty incredible given the scale of that. Windows is going well. EMS is going well. How do we want to think about the broader opportunities here with Microsoft 365?

A - Kirk Koenigsbauer {BIO 5905758 <GO>}

Yes. No. It's a good question. So essentially, the way I would start to frame it is we are repivoting our whole approach in terms of selling productivity and collaboration value to customers with Microsoft 365. It has all of these workloads in it. It is the way that we organize our sales force when we go to market. It's the way that we organize our partner incentives, our channel incentives. It's the way that we're increasingly organizing our R&D and our engineering and how we make investments, not in a sort of siloed way in any individual product in these regards. But literally thinking about the whole system across Microsoft 365 to deliver that integrated value.

In terms of how we think about growth, this is a product -- you mentioned the 30% growth on the Office 365 component, I think we're up to about 800 million active users on Windows 10. We just crossed 100 million seats sold of EMS. And so the sort of substats underneath are really quite impressive. We did -- we have about 180 million people monthly active in the commercial space of Office 365. So there's a ton of momentum there, which is just, for me, working on the business for so many years, is just really great to see.

When we think about the growth prospects, in many ways, it's a lot like we think about the growth of -- or we used to talk about the growth of Office 365. It's essentially a play that is a P x Q business. We look at the installed base of sockets. We constantly want to look at how we can grow that socket pool. Then we look at how we can increasingly drive the ARPU for all those sockets that we have. On the socket side, from a growth perspective, certainly, we're well positioned in the enterprise and in corporate space. But we still see room to expand seats in those

businesses primarily as we think about entering markets like regulated industries that we have historically had challenges selling into. Now with the sort of cloud and unit economics of Microsoft 365 and so forth, we're able to reach pockets of users that we hadn't been able to sell to in the past.

SMB is a very, very important socket growth market for us. We see lots of white space there, wide open space for us to drive more sockets, more cloud sockets overall. Then the last area on the socket side that I would say is big growth area for us is how we think about first-line workers, a category of workers that historically, again, have been underserved by technology. They might be in manufacturing. They might be retail sales professionals. They might be in hospitality. They might be in certain segments of health care, even financial services, where it's -- they're not tethered to a desktop machine. They don't have their own dedicated laptop. Maybe they're on a shared device. We have opportunity there to reach those customers as well. Then on the ARPU side. And we've talked about this before, we have the opportunity to then move these customers up the stack in terms of value. And so whether it's moving from on-prem to cloud as sort of that first step, that's an ARPU driver for us given the LTV that we derive from those customers, to then selling increasing tiers of service within Office 365 or within Windows and then getting them to Microsoft 365. So we see quite a bit of growth on both of those dimensions with this new offering.

Q - Mark Ronald Murphy {BIO 17750249 <GO>}

So you've talked a lot, Kirk, about building modern experiences. You've talked a lot about security in the past. You've talked a lot about compliance in the past. I think it's apparent to us that there's a lot going on here in the componentry of this stack. Where do you see Microsoft's core differentiation today?

A - Kirk Koenigsbauer {BIO 5905758 <GO>}

Yes. So putting aside the workloads that you referenced. And we can certainly jump back to those, I think there's a few things that customers talk to us about in terms of differentiation. One is the integration value in the sense of, for sure, customers don't want to go to just one single vendor. But the opportunity to have all of these workloads on a common platform from a management perspective, from an interoperability perspective, from a broader TCO perspective, all this stuff just works better together. That is increasingly an important differentiator for us. And by the way, it's not just at the Microsoft 365 level. When we think about security and how fragmented that business is, we see CSOs and sec ops really valuing that notion of integration, which is a key one.

Another value prop that has been resonating for us, particularly on the enterprise side, is the position that we've taken around data privacy and trust. And increasingly, with all the sort of things that are happening in the world today, that's a message that's resonating really quite well. And so we've benefited from our investments in work around GDPR and other regulations that you see sort of happening all over the world. Customers trust, whether it's public sector customers or of course, large organizations, they trust our hyperscale cloud infrastructure and the work that we're doing there. And that's a big deal.

Another big differentiator that we are seeing increasingly is around data and AI. And as we -- I'll just pick security as one example. When you think about all the signal that's out there in the world, all the security signal that we have, whether it's coming through our e-mail system, whether it's coming from our identity system, whether it's coming from the variety of different end points that we have, being able to look at all that signal and reason over that with our AI capability and our investment that we have in security professionals at Microsoft, that is a differentiator in and of itself. And so for a number of these reasons, let alone the work we are doing with products like Teams you referenced on the experience side, the work we're doing in security, the work we're doing in compliance, those are some of the things that we hear from customers.

Q - Mark Ronald Murphy {BIO 17750249 <GO>}

I want to come back to Teams in just a moment. Before we do that, I wanted to mention that -- so my team attended your Build conference last week, incredible amazing event. Satya spent quite a bit of time talking about the Microsoft Graph. And I think this is something that has really captured our attention. Can you explain to us what is Microsoft Graph. And then how is it going to be leveraged across Microsoft 365?

A - Kirk Koenigsbauer {BIO 5905758 <GO>}

Great. Yes. Maybe I'll start with what it is and then what it does. What it is. So basically, the Microsoft Graph you should think of as an API into a database that sits in our cloud service. It's secure. It's tenant-based meeting. The data is only available to that customer. It's secure. It's their data. They get to do what they want with it. But essentially, think of it as a collection of all of the activity that people do inside of the organization, whether it's their collection of emails and the meetings and the tasks and the people that go to those meetings. We have essentially a graph of all of that activity. Then on top of that sort of raw information, we also derive insights on top of it. So for example, if you and I aren't spending as much time as we used to spend before, that's information that we can derive. Or if one organization within a company is doing a better job at collaboration than another, those are insights that we can just derive from that graph.

And so this is a pretty powerful capability that's available to customers, both in the sense that we can use the graph for our own first-party experiences. A good simple example would be the Microsoft search that we have. Microsoft search is a great example of an app that uses -- that we built, that uses the graph on the back end, where I can search for people, content, apps in my infrastructure, whatever I might need, all of that is really provided to me via the graph. But what's also really interesting is the ecosystem that's building up around the graph, whether it's ISVs that build solutions that they want to sell into businesses. And those solutions can be made better by accessing graph information. One example, I think, that Satya used to build was SurveyMonkey, where if a company wants to do a bunch of surveys, they can better target their population of people by integrating their tech with the Microsoft Graph to have it be more precise. Or for that matter, even just building a simple line of business applications, integrating them into experiences like Microsoft 365, they can use that graph data to make those experiences better for their people. Those are some of the ways that we think about the graph.

Q - Mark Ronald Murphy {BIO 17750249 <GO>}

So this is something that's leverageable for both your corporate customers as well as these third-party app providers, third-party developers?

A - Kirk Koenigsbauer {BIO 5905758 <GO>}

That's correct. I want to be really crystal clear that it's the company's data. And I should say, the customer's data. And only if the customer says yes, this ISV app can plug in and access the graph, they can use that data. But that is the model. It's something that's available for ISVs and something that they can use on their own.

Q - Mark Ronald Murphy {BIO 17750249 <GO>}

Okay. Now I want to come back to Teams now. You mentioned this a moment ago. It appears to be making great progress, something we've heard when we have gotten out and done our checks and interviews with your ecosystem, with your partners, your resellers, the SI firms, they are telling us that when Teams goes in, they will see a few months later that the seat count is doubling, tripling, quadrupling. Satya said something about it's the fastest-growing app that he can ever recall seeing. He said that last week at Build. How do you see Teams, first of all, differentiating? And secondly, how do you see Teams competing against companies like Slack and Zoom?

A - Kirk Koenigsbauer {BIO 5905758 <GO>}

For sure. So starting with the differentiation piece. And maybe I'll also talk just a little bit about what it is, in case, everyone is not familiar with it. Teams is a product that we launched, or I guess it just hit its 2-year anniversary as a product that went general availability in March. It's a product that brings together a number of different workloads to help people in organizations communicate and collaborate. Think of it as a hub for teamwork essentially. And the teams can be really of any size, you can be a participant in many different teams. A core part of the value proposition of this offering is that it provides a number of different workflows integrated into a single experience.

And so, for example, it's got collaboration capability. It's very conversation-oriented from that perspective. You've got chats. And you can use bots and you can integrate content with that. It's got meetings capability. So you can host a meeting like this. You can do ad hoc one-to-one meetings. You can do things like record meetings. You can do audio conference meetings. There's a lot of meetings capability that's built into the product. It has capabilities to communicate as well, not just using chat and so forth. But through phone system technology. So if I wanted to call a customer or call my wife, call a cellphone number, it has PSTN services integrated, there's a dial pad and so forth. There's a bunch of work we're doing with third parties to create Teams-oriented hardware devices, whether they're for meetings, for conference calls, whatever, what have you.

Then also, we've integrated the Office applications into Teams. And when I say the Office apps, I don't just mean Word, Excel or PowerPoint, those are, of course,

integrated into the experience. But also things like OneDrive for storage or SharePoint. You can literally take a portal page, an Internet page. And you can include it, you can integrate it right within Teams. It's super, super easy to do those sorts of things. Power BI dashboards, analytics, all that can be wired into Teams.

And so this sort of 4-in-1 combination is a pretty powerful differentiator for us because customers will tell us, yes, I might have some legacy meeting solution or I might be using Slack or some other solution. But the idea of being able to come in and offer a single tool for end users that's integrated, where all of these different workloads are coherent across them, is really quite a differentiator for us.

Another differentiator that we've really seen, again, the product is only just a couple of years old. But in the last, I would say, 6 to 12 months, we've been super enthusiastic about how customers are responding to the scaffolding that Teams provides to integrate line of business processes and workflows into that experience. I referenced, for example, first-line workers earlier. That's one use case. But we're seeing companies, again going back to the graph that we talked about a few moments ago, using graph data, integrating their line of business applications. Sometimes, those business applications can be, say, built on Azure. But they front-end them inside of Teams. Those experiences can also be front-ended with things like Power Apps as well. And this is a really great experience for customers because you could have this notion of these horizontal workloads, the ability to be able to just do a meeting. But then simultaneously have that line of business application or that business process integrated right into that experience. And so it's super, super sticky. It's a much cleaner environment because everything is integrated into one space. And customers are really resonating with that.

Q - Mark Ronald Murphy {BIO 17750249 <GO>}

So it sounds like this is the core differentiation, is the comprehensiveness, the integration points. Office is woven in with this. Graph is woven in with this. I presume Cortana is woven in with all of this.

A - Kirk Koenigsbauer {BIO 5905758 <GO>}

Yes, I would say one other piece that I didn't mention that's important is the enterprise-grade capability around it, whether that's again the fact that we operate in data centers worldwide, the fact that we've added DLP types of capability, things like ethical walls, the sort of security and compliance around the Teams infrastructure is one, where companies love it because it's got this great sort of new experience for end users that they love. But then also, it's something that can be controlled and managed in a way that works for that business.

Q - Mark Ronald Murphy {BIO 17750249 <GO>}

Now is this going to be one of the hooks for pulling enterprises into your premium SKUs like the E5 SKU? Maybe you could talk to us about how the customer conversations are shaping up around E5 or even E3?

A - Kirk Koenigsbauer {BIO 5905758 <GO>}

Sure. Well to the first part of your question, we do see Teams as something that will help us drive that sort of ARPU growth over time, in the sense that, as you mentioned earlier in our conversation, once people start -- organizations start using Teams, we do see usage rates increase dramatically across the board, not just Teams. But Teams pulls through all this other Microsoft 365 value. And that's a good thing for a couple of different dimensions. One, of course, is that the more people that are using the products, the more satisfied people typically are. Retention and rates are -- renewal rates are higher and so forth. But the really great thing about it is as it helps us with that up-sell approach as we look to sell higher tiers of service, which then would transition me, I guess, to the conversation around E5.

E5, for folks that don't know much about it, is essentially -- well, I've chased the fact. When we sell Microsoft 365 or Office 365 or EMS components, even Windows, we have different tiers of service, E1, E3, E5. On Microsoft 365, we have these 2 tiers. The E5 set is the premium set of value that we offer for customers. There are essentially 4 core workloads that are there. There's a workload around security. There's a workload around compliance. There's a set of workloads around communications. And there's a set of workloads around analytics. And the value proposition around all of these is interesting to different customers at different times depending on where they are in their life cycle. I would say, right now, in terms of driving growth of E5, security and compliance are the top conversations that customers want to have. Security's just so top-of-mind for every customer that we go and talk to. They want to hear about Teams and they want to hear about security. And that's got a lot of pull for us in the enterprise.

You referenced E3. We still have a lot of room to go in moving customers, whether it's in on-prem to cloud, to that E3 tier, or from Office 365 E3 to Microsoft 365 E3. And so that's another ARPU driver for us essentially. And we still see that as having legs. So again, going back a little bit to the first part of your question, whether it's a socket play or the ARPU play, we feel like there is good growth opportunity here.

Q - Mark Ronald Murphy {BIO 17750249 <GO>}

So you would put Teams and security in the kind of 1 and 2 position, or maybe you can interchange them. Those are both critically important in terms of driving the gravitation upward toward E3 and E5?

A - Kirk Koenigsbauer {BIO 5905758 <GO>}

For sure. Absolutely, yes.

Q - Mark Ronald Murphy {BIO 17750249 <GO>}

Okay. It's just interesting that Teams would be in that context already at this early point.

A - Kirk Koenigsbauer {BIO 5905758 <GO>}

Yes. It might not be -- it may be not intuitive initially. But again, if you think about it as something that is driving just incredibly rapid usage inside of accounts, that in and of

itself lays the foundation upon which you can go and drive that up-sell to higher tiers of value.

Q - Mark Ronald Murphy {BIO 17750249 <GO>}

Okay. So switching gears a little bit, there was a very interesting announcement in the past week or 2. It was a partnership between VMware and Microsoft. Clearly, something significant happening there. And it did have some very specific references both to Microsoft 365 and Office 365. So I want to make sure that we're kind of thinking through what that's going to mean specifically for Microsoft 365 and the portfolio of products that you oversee.

A - Kirk Koenigsbauer {BIO 5905758 <GO>}

You bet. So for -- first, I guess, I would say. And you referenced Build earlier, one of the key messages that we wanted to lay into Build. And we've been really, since with Satya's leadership, I think, in particular, doubling down on the notion of interoperability and the notion of openness, we want to do super well in the industry. But we also want to create a platform that other companies can integrate with. And I think Scott had mentioned at Build, just over half of the VMs on Azure, as an example, are running Linux these days. So the shape of the company has really changed from that perspective.

The relationship that we've just announced with VMware, we're excited about. There's sort of 2 components to it. One is around Azure, which is essentially helping customers move from their on-prem environment, if they're using VMware tech, in hybrid ways to Azure, which is fantastic.

On the Microsoft 365 point to your question, there's sort of 2 related things that are happening there. One is with the workspace one product, that product can now manage the Office applications on mobile devices, devices like these, Android, iOS and so forth. And also integrate in with Azure Active Directory for things like conditional access, conditional access being a really foundational sort of security capability. In other words, if I've never been to Boston before and I'm logging in with my device, we can sort of detect, oh, that's a different place that Kirk has been to, let's actually throw up a multifactor auth or something along those lines. That's some of the kinds of scenarios that VMware will now be able to participate in with Microsoft 365.

Q - Mark Ronald Murphy {BIO 17750249 <GO>}

Okay. Again, going back to some of our survey work, we have been seeing in recent months that there's a lot of feedback about EMS, growth and adoption of EMS, very strong momentum for EMS. Can you maybe talk about how the mobility and security are fitting in as part of this broader Microsoft 365 conversation?

A - Kirk Koenigsbauer {BIO 5905758 <GO>}

Sure. Sure. So it's a -- so EMS, the Enterprise Mobility and Security suite is a core component of Microsoft 365. Think of it as the -- one of the 3 legs of the stool essentially. And for folks that aren't aware, EMS essentially has 4 core workloads as a

part of that suite. There is a workload around identity. And identity is just so core today, particularly from the security perspective, although there are also other important ways that identity is used in organizations. But with sort of perimeter-based security sort of a thing of the past and identity and sort of 0 trust identity with Azure Active Directory, our service, is very, very core to the EMS value proposition. There's also a value proposition around management. There's a management plane that EMS provides. It uses technology that we have called, Intune, for managing a wide range of devices on iOS and on Android. There's also a part of EMS that I referenced around security.

So in addition to identity, there's a bunch of security value that's a part of EMS, whether that's protecting those Azure Active Directories, the people within those directories, threat protection capability, cloud apps security capabilities. So for example, an organization can understand all the SaaS usage that's happening inside of its perimeter or inside of its boundaries and can put policy against those and so forth. Then on the compliance side, EMS also is a very, very important element of how we protect customers' information with something called Azure Information Protection as a part of that solution.

So there's a number of different workloads there. The growth -- the business model is such that it's obviously high-attached to Office 365 and then of course, Microsoft 365 all up. But increasingly too, we see EMS sold stand-alone as well, which is good to see again for its identity and security value proposition. I referenced earlier we just crossed 100 million licensed users for EMS. So it really -- that's doubling year-over-year, more than doubling year-over-year. So really, really strong growth rates with EMS, a very important battle for us.

Q - Mark Ronald Murphy {BIO 17750249 <GO>}

Okay. Impressive, 100 million. So let's continue down that path a bit. You're getting into the domain now of security. And this is a topic we've heard Satya and others at Microsoft spending a lot more time on. I think there is a notion out there in the marketplace that this whole world of security spend for the typical company is maybe an area of inefficient spend. Perhaps, there are too many point solutions, too many companies charging a little too much money in the security arena. So how is Microsoft -- if we kind of zoom back and take a 30,000-foot view, how is Microsoft thinking about security? And maybe how is that going to fit into this, again, Microsoft 365 conversation?

A - Kirk Koenigsbauer {BIO 5905758 <GO>}

Sure. Well taking a step back, it is an area, we think, that has a lot of opportunity for some of the reasons that you referenced, which I'll get to. From the customer lens, what we hear over and over again is it is just the #1 risk or blocker that they have to achieving this notion of digitally transforming their business. They want to move to cloud. They want to move to these SaaS apps. They want a variety of different devices that their employees can use for whatever task that they're working on. But at the end of the day, they really are quite concerned about the risk on the security front. So that's why this is such a hot topic is that it is that thing that's getting in the way to their digital transformation.

And so the other piece as you referenced in the space is that this is a hard category in the sense that there are just simply not enough security professionals in the world to keep up with the sorts of cyber threats that are out there. We -- as you referenced, it is highly, highly fragmented. There are hundreds, thousands of apps that are out there. They're all -- many of them are very, very narrow in terms of what they do. Many of them are also on-premises-based. They're not native cloud-based solutions. And so this is a space that we see as really ripe for us to tackle. And we're making major investments in this space across the board.

I referenced EMS and how important that is. When we think about security, we really think across the board in terms of, again, identity. We think of end point, end point security meaning across all these different devices, whether it's Defender on, let's say, on the Windows platform, which we're taking, by the way, across platform to Mac and others over the course of the next year.

We think about information protection again as another important part of the story. Compliance always comes into these conversations as well. And so it's not that we're just talking. When we think about security, super broadly, it's not that we're not just talking to CSOs and sec ops. But we're literally starting to have more and more conversations with Chief Risk Officers, Chief Compliance Officers, Chief Legal Officers, CFOs and so forth, that are super, super invested in the information protection of their content within their organization.

And so we're investing big time in these spaces. Again, it's tough to say what's 1 and 2. Typically, whenever it's about the end-user conversation around Microsoft 365, that's all about Teams. Then when it comes to infrastructure, customers care about management, they care about interop, they care about a lot of things, they really, really care about security. And that's, first and foremost, what they will want to talk to us about.

I would just mention briefly. And we announced this recently, there's a lot of work we're doing on the sort of end-user compute side with Microsoft 365. But Azure's also investing deeply in this space as well. And so, for example, the Azure Sentinel product that we announced at the RSA Conference a few months back, that's a great example too of a space that is largely on-prem, fragmented, really ripe for disruption, really ripe for using AI across the vast amount of signal that we have. And that's going to be a real differentiator.

Q - Mark Ronald Murphy {BIO 17750249 <GO>}

In which how would you position Sentinel for anyone in the audience who's not totally familiar with that?

A - Kirk Koenigsbauer {BIO 5905758 <GO>}

Yes. It's -- you should almost think of it -- most simply, think of it as, again, cloud-based, think of it as a tool that allows a CSO, sec ops people generally to be able to look across their infrastructure, all the signals that they have, to be able to identify threats across, again, literally all of their different security systems. So it's something that is -- you should think of it almost as an aggregation layer across of -- across their

entire estate. And it's just -- it's critical for every company. And we're quite humble because it's early. But also really enthusiastic about what the opportunity is.

Q - Mark Ronald Murphy {BIO 17750249 <GO>}

So Microsoft is going to tackle security across all levels of the stack. And from the core of the data center out to the endpoint. And it's going to be something that is extremely overarching. It sounds like pretty well thought out.

A - Kirk Koenigsbauer {BIO 5905758 <GO>}

Yes. We hope so.

Q - Mark Ronald Murphy {BIO 17750249 <GO>}

Okay. Let's move on. I want to touch on Windows 10. I know this is an important topic for people. In our work, I think we have been trying to assess when would be the peak of the actual activity for the typical enterprise that's going to be in this motion of upgrading and moving their environment to Windows 10. Their feeling is that, that the peak of this kind of migration activity is coming up sometime soon. It's coming up in the next kind of few months, a handful of months. How do you view this opportunity to kind of drive additional customers to adopt Windows 10 if they haven't already done that?

A - Kirk Koenigsbauer {BIO 5905758 <GO>}

Yes. No, you're right in terms of the context. We're within a year of Windows 7 reaching its end of support. Then within really 12 to 18 months -- by the way, Office 2010 reaching end of support. And so that's creating a real nice tailwind for us and a really important need for customers to get current, to get modern on the desktop, with both Windows and with Office. And so on the Windows side, specifically to your question, I'd say we're probably roughly halfway through the sort of upgrade cycle that's there. There's quite a bit of room and work left to go do. But this is really important to customers. It's really important to us from the perspective of not just having the latest and greatest value that is in Windows. But also to our conversation that we were just having, it's lower TCO, it is a more secure operating environment. We can do more with customers if they're on Windows 10 in terms of adding additional security value on top of that.

So this notion of getting current has both these end-user benefits. But is also really important in terms of the infrastructure itself. And the way customers are approaching this is that some customers, of course, will upgrade existing machines. Many will buy new Windows 10 machines on the refresh cycle. But the next 12 months will really be quite a bit of activity in the space.

Q - Mark Ronald Murphy {BIO 17750249 <GO>}

Kirk, if you were me, how much would you be thinking about growth versus the PC market in this point in the cycle?

A - Kirk Koenigsbauer {BIO 5905758 <GO>}

Yes. We don't share too much on this. I would say folks should expect our growth rate to be in line with the market essentially. Performance over the last couple of quarters is sort of consistent with that.

Q - Mark Ronald Murphy {BIO 17750249 <GO>}

We have about 5.5 minutes left. Let's check with the audience now for questions, if you would raise your hand. And we're going to get you a microphone from the back of the room.

A - Kirk Koenigsbauer {BIO 5905758 <GO>}

Is it lunchtime?

Q - Mark Ronald Murphy {BIO 17750249 <GO>}

Okay. A pretty packed room, in fact, we needed a room twice as big. But not a lot of hands going up quite yet. Well we can come back to that, we can come back to that in a moment. Let me try to ask you a final one on a broad topic, innovation, future investment. We've heard Satya now talking he's been using this term "tech intensity." I feel like he might have coined that one.

A - Kirk Koenigsbauer {BIO 5905758 <GO>}

I think he did.

Q - Mark Ronald Murphy {BIO 17750249 <GO>}

The notion that companies are just going to -- increasingly, they're going to have to adopt software technology to kind of maintain a competitive edge, if you will. He has spoken about how that's going to be -- this is kind of what's driving Microsoft today and into the future. If we go back to the last earnings call, Amy was talking about investing pretty aggressively in this upcoming fiscal year, fiscal '20, to try to capture the opportunity. How do we want to think about Microsoft 365, right. And how it plays into this notion of innovation and future investment?

A - Kirk Koenigsbauer {BIO 5905758 <GO>}

Yes. No. It's a good one. I would go back to what we chatted about a little bit. When I think about the top 2 things we're hearing from customers that they're interested in, it really gets around how can they create these sort of modern experiences for their end users. And Teams is at the forefront of that. And we are shifting more R&D resource to Teams. We are increasing the number of sellers that we have on Teams and folks that do customer success around it. We're working in the channel to make sure we have these incentives aligned properly and are recruiting partners to build the kinds of ISV solutions and so forth. So there's a huge investment around Teams across the board on so many different dimensions. It will be a really big 12 to 18 months for Teams, I think.

Security, we talked a little bit about sort of a similar profile. We're investing quite a bit in the security space from R&D through sales and channel and partner and

investing quite a bit there. There are other investments that we're making as well. Those are the top 2. But I would highlight things like we were just talking about. It is an important year for modernizing the desktop. And the Windows 7, end of support, the Office 2010, end of support, that is all within the sort of next fiscal year, next 12 to 18 months of growth for the company. Again, that's important for customers. It's also important for us to get customers modern. It allows us to do a better job of up-selling to higher tiers of service and so forth.

There's a lot that we're doing in the AI space underneath all of the investment that we talked about. Every single one of these products is benefiting from AI. And the opportunity to use AI to make these products better, to make them more relevant, to help people with automation, everything from automation to decision-making to insights, to identifying threats on the security side, to helping lawyers with eDiscovery processes, reducing the cost of those, all using AI is sort of really front and center to what we're doing.

I referenced a couple of examples of things that we're quite bullish on. The idea of delivering within Teams or using Power Apps or the Power Platform, these industry-specific line of business solutions. I really think there's something that's going to be quite important here that happens over the next 12 to 18 months. As companies lay down this infrastructure for Microsoft 365 by wiring in their business process, their workflows into that, that's going to be something that's going to deliver more business value than we've ever been able to really do before in terms of just sort of laying down vanilla infrastructure for collaboration. And I think that's going to be a big deal. So there's a ton of stuff.

Q - Mark Ronald Murphy {BIO 17750249 <GO>}

I'm going to check one last time for -- okay. Now we have a lot of questions. We got one of them from far back.

Q - Unidentified Participant

How much functional overlap do you see between Teams and e-mail? Said another way, to the extent people use Teams, how much less do they use e-mail?

A - Kirk Koenigsbauer {BIO 5905758 <GO>}

Yes. It's a question that comes up a bunch. So far, they are different products in terms of the problems that they're trying to go and solve. E-mail, Outlook, in combination with Outlook and Exchange Online and so forth, that's going to be around for a long time. People use it as sort of a ubiquitous way to reach sort of -- whether it's anyone inside an organization or anyone outside of an organization. Our growth rates, in terms of usage for e-mail, they continue to go up. They continue to increase year-over-year, not at the rates that we're seeing the growth of something like Teams. But we expect e-mail to be around for a long, long time.

With Teams, the use case is a little bit different. Teams is really designed around how you work, how an individual works with the broad set or collection of Teams that they are a part of. And so in my work environment, I have -- I'm probably a member of, I

don't know, 40 different Teams that I participate on. And there's a conversation sort of ongoing all the time about any of those. And I can sort of use Teams to sort of tick through those and stay current and share content and information. Teams is, in many ways, more of a hub. It's much more of a hub, I should say, for teamwork, whereas Outlook is much more of a sort of pure communications-oriented tool, communications and calendaring and so forth. But then we're doing more and more of it, where you can get notifications through e-mail of Teams activity. We show you your calendar information inside of Teams for meetings and scheduling. There's quite a bit of integration.

We talked a little bit earlier about bots as an example. We have sort of a write one-spot approach, where you can write a bot that shows up in Teams, it can show up inside of Outlook. So there's going to be increasing integration. But we do think of them essentially as 2 different use cases.

Q - Mark Ronald Murphy {BIO 17750249 <GO>}

Very well said. Apologies. We have multiple questions now. But we have just run out of time. Kirk, I want to thank you very kindly for sharing the vision and these insights and spending this time with us.

A - Kirk Koenigsbauer {BIO 5905758 <GO>}

Great. Awesome. Thank you. Thank you.