

Presentation

Operator

Welcome to Microsoft's Second Quarter Fiscal Year 2016 Earnings Conference Call. [Operator Instructions] As a reminder, this conference is being recorded. I would now like to turn the call over to Chris Suh, General Manager of Investor Relations. Chris, please proceed.

Chris Suh

General Manager of Cloud & Enterprise Finance

Thank you. Good afternoon, and thank you for joining us today. On the call with me are Satya Nadella, Chief Executive Officer; Amy Hood, Chief Financial Officer; Frank Brod, Chief Accounting Officer; and John Seethoff, Deputy General Counsel and Corporate Secretary.

On our website, microsoft.com/investor, you can find our earnings press release and financial summary slide deck, which is intended to supplement our prepared remarks during today's call and provides the reconciliation of differences between GAAP and non-GAAP financial measures.

Unless otherwise specified, we will refer to non-GAAP metrics on today's call. The non-GAAP measures exclude the net impact from revenue deferrals and the impact of integration and restructuring charges. The non-GAAP financial measures provided should not be considered as a substitute for or superior to the measures of financial performance prepared in accordance with GAAP. They are included as additional clarifying items to aid investors in further understanding the company's second quarter performance in addition to the impact that these items and events had on the financial results.

All growth comparisons we make on the call relate to the corresponding period of last year, unless otherwise noted. We also provide growth rates in constant currency, when available, as a framework for assessing how our underlying businesses performed, excluding the effect of foreign currency rate fluctuations.

At the segment level, we provide constant currency growth for both revenue and gross margin. However, due to recent change in our segment reporting groupings, we aren't able to provide segment level constant currency operating expense growth and consequently cannot derive constant currency segment operating income either. We do provide constant currency operating expense and operating income growth at the company-wide level.

Please note that we have recast certain prior period items to conform to the current period presentation, with no impact on consolidated net income or cash flow. Additionally, any mention of operating expense refers to segment operating expenses as defined in the footnotes of our Form 10-Q and includes research and development, sales and marketing and general and administrative but excludes the impact of last year's integration and restructuring charges.

We will post our prepared remarks to our website immediately following the call until the complete transcript is available. Today's call is being webcast live and recorded. If you ask a question, it will be included on a live transmission, in the transcript and in any future use of the recording. You can replay the call and view the transcript on the Microsoft Investor Relations website until January 27, 2017.

During this call, we will be making forward-looking statements, which are predictions, projections or other statements about future events. These statements are based on current expectations and assumptions that are subject to risks and uncertainties. Actual results could materially differ because of factors discussed in today's earnings press release, in the comments made during this conference call and in the Risk Factors section of our Form 10-K, Form 10-Q and other reports and filings with the Securities and Exchange Commission. We do not undertake any duty to update any forward-looking statement.

And with that, I'll turn the call over to Satya.

Satya Nadella

CEO & Director

Thank you, Chris. Good afternoon, everyone. Today, Amy and I will share the results of our second quarter and look ahead. Overall, this quarter we had solid performance and more importantly, drove growth in areas that are key to our future. We delivered \$25.7 billion in revenue, with an operating income of \$7.9 billion. We continue to advance towards our goals for fiscal year '18. Our Commercial Cloud run rate surpassed \$9.4 billion, up over 70% year-over-year and almost halfway to our goal of \$20 billion. We nearly doubled our cloud customers over the last 12 months.

We also made progress towards our goal of more than 1 billion Windows 10 monthly active devices, we crossed the 200 million milestone, and Windows 10 is outpacing adoption of any of our previous operating systems. In fact, adoption is nearly 140% faster than Windows 7. I appreciate the incredible work and focus of both Microsoft team members and our partners to deliver these results.

Now let's get to the specifics for each of the 3 segments, starting with Productivity and Business Process. As we seek to help people get more out of every moment, we're delivering new innovation and seeing new opportunity with Office 365. Consumer response to Office is strong. Office attach rate is up, Office 2016 adoption is outperforming Office 2013 over the same period of time, and consumer subscriptions are up to more than 20 million.

We're also enthusiastic about how people use Office on other platforms. On iOS and Android, Skype has more than 900 million downloads and Office apps surpassed 340 million this quarter. There are also 30 million iOS and Android active devices running Outlook. Office 365 commercial revenue grew nearly 70% in constant currency while seats grew 59%. It is clear customers value the ongoing innovation we're delivering in Office 365, and this allows us to advance further into markets like voice and information protection.

In December, we released a major update to Skype for Business, which drives productivity up and cost down. Our customers can now use Skype for business to get a dial tone without the need of their own PBX and conduct online meetings for up to 10,000 attendees.

Security is both a mandate and an opportunity for Microsoft across all our segments. As customers look to protect themselves, we are creating new demand for all of our security solutions. The number of people using our information protection capabilities built into Office 365 increased 25% quarter-over-quarter. At the same time, we released new capabilities like Advanced Threat Protection, advanced e-discovery and customer Lockbox. These new innovations in voice and information protection accrue to our premium productivity and collaboration SKU, E5, which we released last month.

Our Dynamics business is also contributing to our growth in the cloud. This quarter, we released major updates to Dynamics NAV and Dynamics CRM, both of which deliver enhancements in mobility, insights and organizational productivity as well as deeper integration with Azure and Office 365. 3 out of 4 of our CRM customers are choosing to deploy in the cloud, which is driving continued triple-digit paid seat growth for CRM Online in the enterprise.

Our momentum with Office 365 and Dynamics creates a compelling case for developers. This quarter, we exposed the data APIs, which capture the relationships between people, conversations, projects, schedules, processes and content. We call these APIs the Microsoft Graph. The ability for developers to build on the Microsoft Graph presents a strategic opportunity for our customers and partners. Smartsheet has already taken advantage of these APIs. Oracle plans to use Microsoft Graph to enhance their line of business applications like Oracle Sales Cloud and many innovative startups are extending it to create new generation of productivity applications.

Now let's move to the Intelligent Cloud segment. The enterprise cloud opportunity is massive, larger than any market we have ever participated in. Last quarter, I reflected on how we are now 1 of the 2 leaders in this space. At the same time, we are the only one in this market providing SaaS, PaaS, IaaS and hybrid cloud at scale. We are growing in each of these areas simultaneously.

Our unique approach is resonating. Our cloud architecture reflects real-world distributed cloud computing needs and services that enable businesses to convert data into intelligence and drive business

transformation. Azure revenue grew 140% this quarter in constant currency, with revenue coming from new and existing customers.

We saw organizations like NTT Docomo, Honeywell, NASA's Jet Propulsion Labs, Dow Chemical and the UN Development Programme deploy innovative solutions on Azure. We see that Azure customers who also purchased Office 365 consume 8x more Azure than other customers. More than 70% of the Fortune 500 have at least 2 different Microsoft Cloud offerings, up 13 points year-over-year.

And now, we're continuing to grow in new ways. Together with Red Hat, Dell and Hewlett Packard Enterprise, we will increase our ability to address real-world infrastructure needs. These partnerships give customers the flexibility to connect their existing on-premise infrastructure or Linux-based applications with our cloud.

We are leading innovation in new agile and dev ops workloads as well, with Azure App Service's power apps and Visual Studio team services, where we surpassed 3.8 million developer subscriptions. We are adding thousands of new developers every day who are building cloud and mobile solutions that support industries like oil and gas, finance, e-commerce, consulting and health care.

As we expand into new markets, our revenue from premium services like security, mobility management and analytics nearly tripled year-over-year. Enterprise Mobility solution customers have more than doubled year-over-year, and we have nearly tripled our share among Fortune 500 in the last 12 months.

Security is now a major driver of the cloud adoption. As threats become more frequent and sophisticated, Azure's unique technologies like machine learning empower customers to adapt to these new realities. This quarter, we organized the enterprise cybersecurity group to help customers prepare for and respond to attacks. We unveiled plans for new data centers in Germany and the U.K. that address customers' data access and sovereignty needs. And we continue to release new capabilities like Advanced Threat Analytics as part of our \$1 billion product innovation and security, spanning Azure, Office 365, Windows 10 and our Enterprise Mobility Suite.

At the heart of every business in the future will be systems of intelligence, powerful AI that helps people understand the past and predict the future. Cortana Analytics is the building block for these systems of intelligence. We released Cortana Analytics last July. It's a comprehensive suite of services that enable businesses to reason over massive quantities of data that emanate from connected people, places and things and converts them into intelligent insights and automation.

Coca-Cola, Russell Reynolds and the Dartmouth-Hitchcock Health System already use Cortana Analytics to dramatically change the way they market products to customers, uncover talent in the workforce and offer patients predictive and more personalized health care. Our goal is to make it possible for every company in every industry and every country to take advantage of this new artificial intelligence to transform.

In the More Personal Computing segment, I'm encouraged by our progress to unify our installed base on Windows 10 and to create new opportunities for Microsoft and our entire ecosystem. As of this month, we crossed 200 million active devices running Windows 10.

Near term, in what analysts predicts will be relative flat market over this next year, we are focused on 3 ways to drive growth for our partners and for Microsoft: first, deliver more value and innovation, particularly for enterprise customers, who need advanced productivity, security and device management; second, grow new monetization through services across a unified Windows platform; third, continue to innovate in new device categories in partnership with our OEMs. Let me briefly expand on each.

First, in November, we released the first major update of Windows 10 with solutions designed to address critical business scenarios: security, manageability and ease of deployment. More than 76% of our enterprise customers are in active pilots, including organizations like Kimberly Clarke and Alaska Airlines, and 22 million enterprise and education devices are already running Windows 10. We are well positioned to grow our commercial device footprint in the second half.

Next, as we unify and grow the Windows 10 platform, we grow new monetization opportunities with the Windows Store search and gaming. This holiday season, we doubled Windows Store paid transactions from

PC and tablet customers. This increase is an outgrowth of Windows 10 monthly active devices all up and the addition of new Windows 10 applications.

This quarter, Netflix, Pandora, Uber, Wall Street Journal, NPR released new apps designed to take advantage of Windows 10 experiences. For example, you can ask Cortana to recognize a song in Shazam, play a movie on Netflix or book a ride via Uber.

With Search, the clearest indicator of our progress is U.S. search share, where Bing now exceeds 21%. Nearly 30% of our search revenue in December came from Windows 10 devices, partly as a result of user engagements with Cortana. We are seeing increased search engagement and monetization on Windows 10 over previous versions.

This holiday, we saw record engagement on Xbox LIVE. Active users grew to an all-time high of 48 million across consoles and PCs. On December 28, we had more fans using Xbox LIVE than any other day in the Xbox history. Clearly, with Xbox One now upgraded to Windows 10, a vibrant community joined the Windows ecosystem.

Our games also performed strongly this quarter. We doubled the number of Xbox One gamers playing Microsoft published titles year-over-year. Minecraft concluded the holiday as the top paid app globally on Windows 10, iOS and Android, and we grew monthly active users by 18% year-over-year.

Lastly, we're innovating in new device categories and driving growth. With Surface, we created a new type of device, the 2-in-1, and partners are now bringing similar devices to market with success. At the same time, this was the best quarter for Surface ever with over \$1.3 billion in sales, driven by the launch of Surface Pro 4 and the initial rollout of our brand-new Surface Book.

We see more opportunity ahead with Surface Book coming soon to China, Japan, the U.K., France, Germany and other markets in Europe and Asia. We believe in our ability to grow the Windows ecosystem. Near term, we are taking the right steps. We are also clear that long-term Windows growth and vibrancy rest on our ability to reinvent personal computers and personal computing. We accept that challenge as we see it as one of the greatest opportunities to prudently expand into new markets and generate shareholder value.

Before turning over to Amy, I want to briefly reflect on the past few months. I've had the opportunity to meet with customers from all over the globe and observe the effects of the macroeconomic trends impacting business today. Of course, any macroeconomic uncertainty will create pressures for our business.

But increasingly, I think it also creates opportunity for us. Every organization is looking for ways to gain efficiencies, insights and ultimately transform. This is at the heart of our mission. I believe Microsoft is uniquely positioned to empower them to find new growth areas while finding new growth for ourselves.

With that, I'll hand over to Amy to go through this quarter's results in greater detail and share our outlook for the next quarter, and I look forward to rejoining you after to answer questions.

Amy E. Hood
Executive VP & CFO

Thank you, Satya, and good afternoon, everyone. This quarter, revenue was \$25.7 billion, down 2% and up 3% in constant currency. Gross margin declined slightly, but was up 5% in constant currency. We grew operating income this quarter by 3% and 13% in constant currency, and earnings per share was \$0.78, growing 11% or 23% in constant currency.

We achieved strong results this quarter through targeted investments and innovation and consistent execution. From a geographic perspective, our performance in most markets was as expected. The key markets like Brazil, China, Japan and Russia continue to be challenging.

Our commercial business once again delivered solid results as we executed well in a large quarter for annuity renewals. Commercial bookings increased 12%, up 19% in constant currency, and commercial unearned revenue was in line with expectations at \$19.6 billion or 8% growth in constant currency.

In addition, our contracted not billed balance reached an all-time high of \$25.5 billion. With our continued cloud growth, our commercial annuity mix reached 83%, up 5 points year-over-year. This quarter, more than 60% of customers with enterprise agreements attached Commercial Cloud services, up 15 percentage points year-over-year.

Additionally, we continue to make progress in improving our cloud gross margins. In Q2, total Commercial Cloud gross margin was 46%, an increase of 9 points year-over-year, driven primarily by improvements in both Office 365 and Azure.

Last quarter, I provided the expected foreign currency impact on total revenue as well as across each of the reporting segments. In Q2, the FX impact came in nearly as anticipated though the U.S. dollar trended stronger-than-expected in December. This resulted in less than 1 point of additional negative impact to total revenue as compared to expectations, rounding up to 5 points.

Consistent with Q1 and as Chris explained, we are not able to provide constant currency impact at the segment level for operating expenses, and therefore, segment operating income. In general, FX had a favorable impact of 3% on operating expenses at the total company level.

Now let's turn to each segment's results. This quarter, our productivity and business processes segment delivered in line with our expectations, with \$6.7 billion in revenue, declined 2%, but growing 5% in constant currency.

In Office commercial, revenue declined 1%, but grew 5% in constant currency, driven by ongoing strength from Office 365 while revenue increased nearly 70% in constant currency. 80,000 transacting partners sold Office 365 to small business customers, and our installed base continued to expand across Office, Exchange, SharePoint and the Skype for Business workloads.

Office consumer revenue declined 14%, down 8% in constant currency, ahead of the consumer PC market. Subscribers increased to 20.6 million, attach rates grew and recurring subscription revenue continued to more than offset the impact of the customer transition to the cloud.

And our Dynamics business grew 3% or 11% in constant currency, with triple-digit installed base growth for Dynamics CRM Online for the fifth consecutive quarter. We look forward to the upcoming launch of Dynamics AX, our ERP cloud solution built on and for Azure, that increases the breadth of our offerings in the business process market.

Segment gross margin declined 6%, up 1% in constant currency. The gross margin percentage declined, reflecting the increasing mix of cloud services within the segment. Segment operating expenses decreased 3%, and we repositioned resources to align with our highest growth opportunities. And as a result, operating income declined 8%.

The Intelligent Cloud segment delivered over \$6.3 billion in revenue, slightly ahead of our expectations and grew 5% and 11% in constant currency. Our enterprise customers continued to choose, adopt and use our hybrid cloud platform offerings, which resulted in server product and services growth, revenue growth of 10% in constant currency. Additionally, Enterprise services revenue increased 10% or 16% in constant currency, driven by our premier support services.

Segment gross margin grew 4% or 11% in constant currency. Gross margin percentages were flat. As the rapid and continued growth of our cloud mix offset margin improvements in Azure and Enterprise services. Given the addressable market opportunity and enterprise customer demand, we continued our investment in research and development as well as sales and marketing resources. This quarter, operating income declined 1%.

Now to our last segment, More Personal Computing. Revenue exceeded our expectations at \$12.7 billion, down 5% and 2% in constant currency. First, our OEM results. Our total OEM business declined 5% this quarter, outperforming the overall PC market. OEM non-Pro revenue declined 3%, outperforming the consumer PC market as we expected.

Driven by a higher mix of premium and midrange devices, which led to higher average revenue per license than the prior year. OEM Pro revenue declined 6%, slightly better than the commercial PC market. Pro license inventory is slightly above historical levels, which we expect to work through in Q3.

Windows volume licensing grew 3% in constant currency, with annuity growth partially offset by transactional declines. IP licensing declined, impacted by both the decrease in total unit volume and the higher mix of low royalty units. Our Search business performed well again this quarter. With higher revenue per search, higher search volume and U.S. market share growth, which resulted in continued profitability.

Devices revenue decreased 26% or 22% in constant currency, primarily due to phone, where revenue declined 49% in constant currency, reflecting our change in strategy announced last July. Surface revenue increased 22% or 29% in constant currency, with the launch of Surface Pro 4 and Surface Book, with continued channel expansion and growing commercial sales.

On a constant currency basis, device gross margin dollars declined 18% and gross margin percentage improved, driven by a shift in revenue to our higher-margin Surface portfolio. As Satya referenced, we had a good holiday for Xbox. Gaming revenue increased 5% or 9% in constant currency, driven by record Xbox LIVE transactions as well as first-party game releases.

As expected, hardware revenue decreased due to lower volumes of Xbox 360 consoles sold. Segment gross margin declined 1% or increased 5% in constant currency. Operating expenses decreased 14%, primarily due to reduced expense in our Phone business as well as a successful transition of display advertising sales to AOL. As a result, segment operating income grew 35%.

And now back to our overall company results. Customer adoption and usage of our cloud services continues to accelerate globally, and we are investing capital into our data centers and servers to respond to this demand. This quarter, we invested \$2 billion, up sequentially from the \$1.5 billion invested last quarter.

Other income was negative \$171 million due to interest expense and net losses on derivatives, partially offset by dividend and interest income and net recognized gains on investments. Our non-GAAP effective tax rate was 19%, in line with our expectations, with the year-over-year decrease primarily due to an IRS audit adjustment in the prior year and lower nondeductible operating losses in the current. This quarter, we returned \$6.5 billion to shareholders, an increase of 42%.

Let's move to the outlook. I want to preface my remarks with 3 overall comments and then move to more specific comments by segment. First, FX. I previously stated that we expected the FX impact on total revenue to be about 3 points in H2. For Q3, given the recent strengthening of the U.S. dollar, we now expect an overall impact of 4 points.

By segment, we expect 5 points of impact on Productivity and Business Processes, 4 points in Intelligent Cloud and 3 points in More Personal Computing. And we anticipate continued lessening of FX impacts by segment and on total revenue in Q4, assuming current rates stay stable.

Second, our Commercial business. We expect our Commercial business to remain healthy, with ongoing shift to annuity as new and existing customers adopt and use our commercial cloud services. Therefore, even with continuing currency headwinds, we expect Commercial unearned revenue to be within the range of \$18.8 billion to \$19 billion.

Our Commercial Cloud run rate trajectory remains on path, with continued focus on gross margin improvement across each of our key services. Office 365, Azure and Dynamics Online -- though the total commercial cloud gross margin percentage will be impacted by the mix of revenue.

Third, we will continue to meet global customer demand for cloud services and will increase our investment in data centers and capital equipment in the second half of our fiscal year.

Now let me share some additional commentary on each segment. In productivity and business processes, we expect revenue of \$6.4 billion to \$6.6 billion, which reflects 5 points of negative FX impact. This

represents 6% year-over-year growth in constant currency, driven by Office 365 momentum and Dynamics Online.

For the Intelligent Cloud segment, we expect revenue between \$6.1 billion to \$6.3 billion, which reflects 4 points of negative FX impact. Continued customer preference for our hybrid solutions will drive sustained growth in server products and cloud services and robust demand for Enterprise services. We expect this business to continue to grow double digits as it has throughout the first half of our fiscal year.

For More Personal Computing, we expect revenue between \$9.1 billion and \$9.4 billion, which includes 3 points of negative FX impact. As this segment has both devices and software, I'll provide a bit more detail.

First, Windows. As I mentioned earlier, we will return to normal levels of Pro inventory in Q3, and we expect non-Pro revenue to align more closely with the consumer PC market. In Search, Bing will continue to gain share and will remain profitable. For Phone, we expect similar year-over-year revenue declines and the gross margin percentage for Q3 to look similar to Q2.

After a solid launch quarter with Surface Book and Surface Pro 4, we anticipate continued momentum and growth, with Surface Book expanding into additional countries. And in gaming, we expect normal post-holiday seasonality.

We expect COGS to be \$7.7 billion to \$7.8 billion, with variability driven by device sales. We expect operating expenses between \$7.7 billion and \$7.8 billion. And for the full year, we are lowering our guidance to \$31.4 billion to \$31.6 billion as we continue to improve efficiencies and invest in key growth opportunities. We expect other income and expenses to be negative \$300 million in Q3. This includes the net cost of hedging and interest expense, offset by dividend interest income. We expect our Q3 and full year tax rate to be between 19% and 21%.

In closing, our Q2 results and our Q3 outlook demonstrate our execution discipline and our investment in strategic areas to sustain long-term growth. We remain focused as we both create new markets and take share in existing ones. And with that, I'll turn it back to Chris for Q&A.

Chris Suh

General Manager of Cloud & Enterprise Finance

Thanks, Amy. We'll now move to Q&A. Operator, can you please repeat your instructions?

Question and Answer

Operator

[Operator Instructions] Our first question comes from the line of Philip Winslow with Credit Suisse.

Philip Alan Winslow

Crédit Suisse AG, Research Division

I just wanted to focus in on Commercial Cloud and Azure specifically. I mean, Commercial Cloud, as you mentioned, the run rate was up \$9.4 billion. I mean, that's up \$1.2 billion quarter-to-quarter, 70% year-over-year. That's higher growth rate than even last quarter, Azure a similar thing, accelerating growth versus even last quarter. A question, Satya and I'll follow up for Amy. So Satya, when you look at the growth rates there in Commercial Cloud and particularly Azure, you talked about new customer wins, but also existing customers transitioning more workloads to Azure. I hope you could give us may be some more color there as far as what you're seeing and kind of how you're thinking about the growth going forward there. And then Amy, based on our calculations, it seems like Azure had a pretty meaningful improvement in just the gross margin year-over-year. I wonder if you could help us with sort of the 2 curves in that business, and sort of where we are in Azure's, call it, gross margin life cycle, you've got the fixed costs and the variable costs and how you're thinking about that.

Satya Nadella

CEO & Director

Thanks, Phil, for the question. The way we think about Cloud is how I described it in my remarks, which is it's the combination of the work we're actually doing in the SaaS, PaaS, IaaS and also our hybrid cloud layer, because we don't think, for example, of our servers as a distinct part, but it's, in fact, the edge of our cloud and we're building for that with things like Azure Stack. So we think what we have done here by bringing these things together as one architecture for distributed computing and how people will consume applications and build applications in the future, we speak to more of the real-world needs, I think, of an IT organization or a business organization that's trying to transform through digital technology. I mean, if you put yourselves as a CIO of an organization -- in a multinational organization, and you want to operate in multiple geographies with different regimes for data sovereignty, and then you want to be able to take some workloads, move them all to the cloud, some you want to be able to tier with the cloud. That's the kind of flexibility we provide. And we also see network effects between -- if you're using Office 365, you want to extend the data in Office 365 by building applications that join it with some other data inside of our Data Lake service in Azure. Obviously, Azure becomes a natural choice for such application development, and we're increasingly seeing that. So that's really our strategy. Our strategy is not to compete in these constituent parts independently with different competitors. It is to bring one architecture and really drive the value for our customers because of that.

Amy E. Hood

Executive VP & CFO

And Phil, let me quickly cover, I think, your gross margin question. You're right. We did actually make significant progress in both Azure as well as Office 365. And then the mix of those obviously impacts the overall commercial cloud gross margin. What's important, the dynamic's actually quite similar even though the services are quite different. There are really 2 fundamental components to gross margin improvement. Number one is obviously scale efficiencies and where we are in that curve, which we are doing and continue to make consistent improvement in. The next obviously is the mix of premium services. And Satya talked about some of the increasing mix of premium services in Azure. That's been encouraging, especially in existing customers over time and through adoption curves. And Office 365, as you know, we continue to be excited by our premium mix in the Commercial segment. So those 2 combinations each quarter impact it as well as the overall.

Operator

Our next question comes from the line of Keith Weiss with Morgan Stanley.

Keith Weiss

Morgan Stanley, Research Division

Satya, you mentioned a -- both new and existing customers increasingly using the Azure Cloud. I was hoping you could give us some color into what that looks like, specifically when an existing customer starts using Azure in terms of how does their overall spending get impacted? And what happens to sort of their spending for the more traditional server and tools? How does that get impacted as people use the public cloud utility more and more?

Satya Nadella

CEO & Director

Yes, I mean, the thing that we sort of notice is that with anyone who's moved to the cloud, there is a real opportunity for us to expand to multiple workloads over time because it's a design win. It's like essentially an ISV win in the client/server area, where you could get someone to build on your core infrastructure, they build their first application, and it turns out that once you've done that, you would want to look at our infrastructure for a second workload and third workload. So that's one side of what's happening with the expansion. The other side of the expansion is what I also referenced, which is if you're an Office 365 customer, you have data in Office 365. You want to build applications that tap into that data, then you use Azure. So that's the other piece. The EMS growth is also very much related to that, which is if you deploy Exchange Online, you have Azure AD and then the natural expansion from there is the full EMS suite with device management for all your mobile devices and also Advanced Threat Protection and what have you. So we see those -- both those trends of -- from an application workload development synergy as well as infrastructure from identity management, device management workout.

Operator

Our next question comes from the line of Brent Thill with UBS.

Brent John Thill

UBS Investment Bank, Research Division

Amy, macro is on everyone's mind. I'm just curious if you guys could comment a little bit about what you're seeing. I know it may be too early to see some of the weakness that others have seen. But how are you looking at the demand environment? And how does that change your plans as you look towards the back half of the year? Just any assumptions change in your mind?

Amy E. Hood

Executive VP & CFO

Thanks, Brent, for the question. The geos I specifically called out obviously, are where we are the most impacted and they are the bigger geos. But really I think the focus that we have here is how we can best execute no matter what the macro environment turns out to be, focus on our own execution, focus on continuing to drive cloud services, focus on continuing to drive annuity mix. Those movements actually, and as we help customers transform, is really the best plan in the face of any uncertainty, which you're clearly asking me about. But I tend to probably focus more on what we can control versus the external environment and how we can best react to that.

Operator

Our next question comes from the line of Heather Bellini with Goldman Sachs.

Heather Anne Bellini

Goldman Sachs Group Inc., Research Division

I was just wondering, Satya, you mentioned, and I know there's been a lot of questions on Azure. But you mentioned strong growth in compute and SQL usage on Azure being up, I think you said 5x. I was just wondering if you could give us your take on how you see the mix of Azure workloads. I mean, is it

right now more new workload growth and there's -- it's very little existing workloads moving over. I'm just trying to get a sense for kind of how you see the wave cresting for new workloads versus existing workloads that can migrate over. And I'm also wondering if you see it helping with share. You mentioned it's kind of like a design win or an ISV win. Wondering if you could share with us how this might be impacting your share versus say Linux or versus other types of infrastructure platforms.

Satya Nadella*CEO & Director*

Yes. The thing, Heather, the move to the cloud has done for us is expanded the market opportunity that we have had more than ever before. In some sense, if you compare it to the TAM of STB versus what we now describe as Intelligent Cloud, we are operating in a much bigger market. And that's because, first of all, the move to the cloud combines a whole bunch of different categories, as well as take something that you mentioned, which is Linux. We now have the ability to take Linux workloads and run them first class and over 20-plus percent of Azure is Linux workloads, which is sort of a growth opportunity we tapped into with the cloud, which we didn't have previously. And even take something like EMS, which is a service, you could say in the past, we participated with Active Directory. But we -- and some amount of System Center. But now, with the growth of actually mobile devices and SaaS applications, our opportunity with EMS is much bigger than anything that we had in the client/server era. So clearly, we are migrating some workloads, and structurally, some of that helps us because we had that position in the client/server space. But when we look at what we are doing in the cloud, it's mostly about attaching to one of the secular growth trajectories going forward, be it open source Linux development, mobile use and SaaS applications. So those are all things that we participate in, which we didn't participate in the past.

Operator

Our next question comes from the line of Mark Moerdler with Bernstein Research.

Mark L. Moerdler*Sanford C. Bernstein & Co., LLC., Research Division*

So I got a question for Satya and then a quick follow-up for Amy. Satya, following up on the cloud discussion, recognizing that SaaS, PaaS, Infrastructure as a Service, hybrid are all related, but as Azure continues to grow fast and become a bigger part of the business, how should we think about the opportunities or the opportunity size for PaaS versus Infrastructure as a Service? PaaS is much smaller industry-wide today, but is the opportunity big, bigger? How should we think about that? And then I have a follow-up for Amy.

Satya Nadella*CEO & Director*

The opportunity, I believe, in both cases is high because it just comes in different forms. IaaS growth comes because people already have existing code that they want to move over and then they start extending by writing more PaaS because it's sort of more efficient for them to write new code and new apps in PaaS. So I think that depending on what -- if you're bringing something over, your IaaS will be heavy first and then PaaS will grow. If you're starting new, you will have PaaS, which is going to be the first thing you do, but then you'll always find the need to go integrate with something that was already existing, existing data, existing code in a virtual machine. So I, myself, in fact, one of the things that Amy and I do is when we think about our CapEx, we think about all these layers together. In fact, we amortize our CapEx across all of these, and we pay attention to margin and premium mix because what we have come to understand is customers, depending on where they start, how they start, have different mix profiles. So it's the all-up as long as we're growing our premium services attach and margins for those remains strong. We feel that the mix can be different and it's okay. And we really want to speak to the needs of the customers more than any product strategy goal we have.

Mark L. Moerdler*Sanford C. Bernstein & Co., LLC., Research Division*

Perfect. Amy, a slightly different topic. Free cash flow grew 25% year-on-year, much faster than the other metrics. How should we think about this trend continuing?

Amy E. Hood

Executive VP & CFO

That was impacted, Mark, in the prior year by some integration and restructuring charges on the cash flow statement.

Mark L. Moerdler

Sanford C. Bernstein & Co., LLC., Research Division

Okay. So it's really a onetime event more than anything else?

Satya Nadella

CEO & Director

Yes, just always make sure you check the integration and restructuring in the prior year.

Operator

Our next question comes from the line of Raimo Lenschow with Barclays.

Raimo Lenschow

Barclays Bank PLC, Research Division

Quick question for Satya. Now that Windows 10 is on 200 million devices, what do you see on the developer network because one of the big aims was you have a uniform platform for developers to go against the PC, tablet, et cetera. What do you see in terms of them kind of starting to embrace the platform and use the opportunity there?

Satya Nadella

CEO & Director

Yes, thanks for the question. Yes, you're absolutely right. That was one of our biggest strategic objectives was to get active devices and with store integrated into the install base and in the user experience so that we could increase the success for developers. And we're seeing good early signs. In my opening commentary, I talked a little bit about both the increased visits to the store and transactions as well as the fact that we are attracting new applications from developers, like Netflix to Wall Street Journal to others. And as you can imagine, our share is today in desktops, in emerging in tablets, in 2-in-1, and of course, now with Xbox as well, which has got great attraction to gaming developers. And so those are the natural places, where you will see us gain more developers and gain more traction. We are big believers in a unified developer platform and a unified store. And then as Windows 10 monthly active devices increases and the store usage increases, we'll see more and more developers take advantage of it.

Operator

Our next question comes from the line of Walter Pritchard with Citi.

Walter H Pritchard

Citigroup Inc, Research Division

Just a numbers question for Amy. I noticed your long-term unearned revenue was up quite a bit. I mean, that's kind of been a flattish trend, and it was paired with commercial bookings being much stronger, I think, than I was modeling. I'm wondering if you could just help us understand what drove the unearned and how that contributed to those commercial bookings.

Amy E. Hood

Executive VP & CFO

Sure. A couple of things, Walter, which I know you recall. We do have a bit of lumpiness in our explorations, as I said on the call. This was a big exploration quarter for us. And so on occasion what that

does even with the negative currency impact on C&B is have a bit of lumpiness over time. Now that being said, I want to point to the core, which is that renewal rates were very good in a big quarter. There was very strong performance on that front, very strong performance in moving customers to annuity as well as to the cloud. So aside from a bit of the lumpiness that you do note and we have from time to time, the execution in the quarter was very strong.

Walter H Pritchard

Citigroup Inc, Research Division

And then if I can just -- one other numbers question. It looks like in the Q, you called out actually Windows Server declining as an offset to Intelligent Cloud growth. And I'm wondering we haven't seen that comment in the Q before. Was there something sort of one-off driving that or any further detail on that?

Amy E. Hood

Executive VP & CFO

The way I would think about that one, Walter, is, in general, our premium or enterprise workloads across Windows, SQL, System Center, et cetera, grew double digits. And so some of that weakness frankly is in the non-annuity and very transactional business, which happened to impact Windows Server a bit more than other workloads. And that is where macro pressure on occasion shows itself first is in some of that non-annuity lumpiness. So that's the nature of that comment.

Operator

Our next question comes from the line of Karl Keirstead with Deutsche Bank.

Karl Emil Keirstead

Deutsche Bank AG, Research Division

Amy, relative to your 2Q guide, the upside surprise really came in the personal computing business. And at least relative to our third quarter estimates, it's again the personal computing guidance that beat. I'm wondering if you could repeat the key factors that are contributing to the outperformance in that pretty important business.

Amy E. Hood

Executive VP & CFO

Sure, Karl. In Q2 -- let me talk about 2 key ones. Number one is really the device launches. We actually launched a very broad portfolio of devices into the quarter, with Surface Pro 4, Surface Book, Band 2 and the Lumia 950 and 950 XL. And so between all of those hardware products as well as our gaming performance, and other sort of hardware component in quarter, we did a little better than we had expected in our launches. Now when you launch mid-quarter, there's always some timing aspect to that. But I feel very good about the execution of those, and that is a meaningful component of that outperformance. The second one, which I talked about, is OEM Pro. We did a little better in the quarter than I expected, but inventory levels are a little higher. I expect to work through that in Q2 -- I mean, Q3. And that was a couple of points of impact, for example, on OEM Pro in quarter.

Karl Emil Keirstead

Deutsche Bank AG, Research Division

Okay, great. And then, Amy, for the third quarter, your guide for that business is also pretty good. Is that due to some of these similar factors? Or are there 1 or 2 others that are driving the -- what appears to be pretty solid 3Q performance in that unit as well?

Amy E. Hood

Executive VP & CFO

Well, it's similar drivers. In that segment, there's also some topics I tend to not get asked about in Q&A. Let me take the opportunity to talk about them, which is one, our search performance continues to be

very good. Frankly, our display business has been quite good. And if you go beyond that, I feel good about our gaming business sequentially. I feel good about the hardware, especially the Surface performance as we launch into more geos. And so if you think about all those components, which actually were very similar to Q2 in terms of their strength. You see them again in Q3. And so I'm not sure there's anything "new", Karl, I would say other than that bit of mix between OEM Pro, a little bit pulled into Q2 versus Q3.

Operator

Our next question comes from the line of Kash Rangan with Bank of America.

Kasthuri Gopalan Rangan

BofA Merrill Lynch, Research Division

I was curious to get your thoughts, Satya, on the Windows 10 upgrade cycle in the enterprise, and also the consumer market, particularly after you've anniversaried the free offer for Windows 10. And secondly and finally, thoughts on Surface. It's off to a great start with the latest model. Could that play a more important role in the corporate computing landscape?

Satya Nadella

CEO & Director

Thanks, Kash, for the question. I thought the upgrade momentum, the fact that we crossed 200 million active devices, we feel very, very good about that. And the pilot, the most -- the place, which in the second half is going to be a huge focus for us, is the enterprise deployment. And that's where I think there's real excitement because of some of the core capabilities of Windows 10 when it comes to security, manageability that I think is going to create great value for enterprises and that's showing up in all the pilots. And the accelerate -- I've never seen a Windows release in the enterprise with this level of accelerated deployments -- deployment plan. So we obviously need to do a great job in continuing to push that, and we are focused on it. As far as Surface, Surface is playing an increasing role for us in both consumer as well as in the enterprise market. And also, we just -- we created a new category of 2-in-1s, where even our OEMs are finding success, which was one of our strategic objectives of doing the Surface. And so overall, we do think that this tablet that can replace your laptop is ideally suited for productivity needs, which means it's great for your personal use as well as your use inside of the enterprise, and we continue to see good growth.

Amy E. Hood

Executive VP & CFO

I would just add one thing is that we've actually announced a number of important partners to help us take the Surface portfolio into commercial customers. I think we'll expect to see progress on that over the course of the year.

Kasthuri Gopalan Rangan

BofA Merrill Lynch, Research Division

If I could, your excitement is pretty palpable. What could be driving that 140% increase in adoption relative to Windows 10. We all thought XP to 7 was a major transition, but it looks like there's another big transition happening here.

Satya Nadella

CEO & Director

I mean, I think there are 2 aspects of it. We have a good operating system release for the core desktop user. And second, I believe, is that we also expand out into new usage patterns. If you look at even the thing that we're seeing is in terms of engagement with the browser or things like Xbox LIVE, with the store or new device categories like the 2-in-1, all I think make it much more possible for users to engage with Windows in more mobile formats and in more productivity scenarios. So I think it's the combination of all of that. But it starts with having a good product truth which Windows 10 does deliver on.

Operator

Our next question comes from the line of Ross MacMillan with RBC Capital Markets.

Ross Stuart MacMillan

RBC Capital Markets, LLC, Research Division

Satya, I had a question on commercial Office 365. I don't know if you gave us the number, but I think the last couple of quarters, you talked about monthly active users, and I'm curious if you have an update on that number. And then I also was curious about thoughts around ARPU because you introduced the E5 SKU in December. Where are we on the path of penetration, if you will, with the higher value SKUs and the ability to see price lift across the base over time?

Satya Nadella

CEO & Director

Yes, I'll start and Amy, you can add. I mean, I think that's right. Last time we talked about the 60 million monthly active users for Office 365 and that continues to grow. In fact, there is always, I think we also talked about how we get licenses sold and then -- or subscriptions sold, and then there's deployment and there's always lumpiness as well as increased deployment that happens once the users migrate. And we'll continue to track that and we'll continue to disclose those numbers as they come along. But I feel very, very good in the growth of that. And I think the best proxy for you really beyond any numbers we talk about in terms of monthly active is our capital, because if you look at what we do is we spend our capital only to really fuel the growth or to service the growth of usage across Office 365 and Azure and you see that increasing. And then in terms of the margin profile, I mean, the entire story of having the E3 mix first to be high and now E5, that's the thing that Amy talked about, which is we now have good premium tier value in all of our products in Office 365 that's most evident with E3 and now E5. Even in Azure, we have things like EMS. We have our data services, even our developer services. So I think all of -- both of our cloud products, the major cloud products have these premium tiers that the mix shift to those or the addition of those is something that we're focused on, and we see in our results.

Amy E. Hood

Executive VP & CFO

That's right. I would just add that we did see that premium mix go up at Office 365 on the commercial side as you were noting. And really E5 has only been in market for the last month of the quarter. We're excited about the number of customers that are trying it and that all the value it offers, but I would expect that to sort of be a longer-term evolution as opposed to in Q2.

Ross Stuart MacMillan

RBC Capital Markets, LLC, Research Division

Can I just a quick follow-up? Amy, that was great. Just on Windows just so we all calibrate correctly. You've had this benefit from the RPL comps from last year. Should we think about Windows really now beginning to trend in line to PC units? Or can there still be some variability around that?

Amy E. Hood

Executive VP & CFO

Yes. In my guidance comments, I talked a little bit about that. On the Pro side, as I mentioned, we'll have a couple of point impact that will make a difference between that on the Pro side. And I would expect -- I think we actually even talked about that last quarter that the RPL delta, which we've seen in Q1 and Q2 would go away in Q3 and Q4 and it would trend much more similarly to the overall consumer PC market.

Operator

And our last question will come from the line of Ed Maguire with CLSA.

Edward Everett Maguire

CLSA Limited, Research Division

I wanted to ask if you've been able to quantify some of the uplift since you've been opening up Office to different platforms like iOS and Android, and now with the recent alliance with Red Hat, opening up a lot of opportunity to Linux developers. Have you been able to quantify how much uplift you've gotten and how do you see this impacting your broader market opportunity?

Satya Nadella*CEO & Director*

Let me sort of speak to it in generic terms because I don't think we have sort of quantified it as narrowly perhaps just to address those specific moves we made. But overall the way we have thought about it is, we want to make sure the Office subscription both to consumers as well as to enterprise subscribers is valuable across all of their devices because it speaks to the vision that we have, which is the cloud is what enables the mobility of the human experience across all of the devices in your life, because increasingly, there will be more devices. And we want to make sure that we are adding value and if we add value in that context, you will be more inclined to retain or purchase the Office subscription. So that's been our goal, and that's working well and it sort of shows up in our all-up growth. And similarly with Azure, we are making sure that as people are tapping into the cloud and moving to the cloud, we can get all workloads to be as first class as on Azure so that's why we've done the deals with Red Hat. We even did previously deals with Oracle. So Azure is a complete open platform where, of course, you can run all the Windows workloads, the .Net workloads, but we are increasingly seeing the open source workloads, the Linux workloads, the Oracle workloads, the SAPs and what have you and more interestingly the mix of all of them because it's -- the enterprise is heterogeneous, it has been heterogeneous. We participated only in a portion of it. Whereas with Azure, we can participate as the total open platform. And that's how we thought about it, and that's what we're executing on.

Amy E. Hood*Executive VP & CFO*

Thanks, Ed, and thanks, everybody.

Satya Nadella*CEO & Director*

Thank you very much.

Chris Suh*General Manager of Cloud & Enterprise Finance*

So that wraps up the Q&A portion of today's call. We look forward to seeing many of you in the coming months at various investor conferences. For those unable to attend in person, these events will be webcast, and you can follow the comments at microsoft.com/investor. Please contact us if you need any additional details, and thank you again for joining us today.

Operator

Thank you. This concludes today's teleconference. You may disconnect your lines at this time. Thank you for your participation.