MERRIE WILLIAMSON: Good morning, good afternoon, good evening, welcome to Day 2 of Ignite. We’re excited to have you join us for the Microsoft Cloud Unplugged session with Scott Guthrie. May name is Merrie Williamson. I am the Vice President of Azure Apps and Infrastructure. I spend my days talking to customers and partners, and today I get to talk to Scott. Hi, Scott, good morning.

SCOTT GUTHRIE: Thanks Mary. I’m excited to be here too. I’m really looking forward to the conversation.

MERRIE WILLIAMSON: Today, we’re going to focus, Scott, on conversations on Microsoft’s cloud, the investments that we’re making, the strategy behind our comprehensive platform, and a couple of questions from the audience. We’ll also have a lightning round of Q&A at the end, so be prepared. How does that sound, Scott? Are you ready?

SCOTT GUTHRIE: That sounds great. Let’s get started.

MERRIE WILLIAMSON: All right, my first question is around cloud. Given Ignite, our attendees yesterday heard Satya talk about the future of computing. We’d love to hear your point of view on Microsoft’s cloud approach and the value it brings to our customers.

SCOTT GUTHRIE: Yeah, I mean, I think we’re living in an interesting time right now, where, we’re all going through a pandemic, and all of our businesses are being stretched in new ways. I think every company and every organization is trying to figure out how do we reinvent ourselves? How do we connect with our customers better? How do we do business differently? We see cloud is kind of a key ingredient to enable that type of transformation for organizations. And our goal with Microsoft Cloud is how do we help our customers do that as best as we can?

I think one of the things that makes the Microsoft Cloud unique is both the breadth and the depth of what it provides. We have infrastructure, and an application platform and data and AI-rich set of services that anyone can build on with Azure. We’ve got productivity tools with Microsoft 365, enabling employees to be more successful and collaborate better. We’ve got business process applications with Dynamics 365, that can reinvent supply chain, or sales management, or a whole host of additional capabilities that power businesses.

We have our Power Platform, which is our low-code/no-code offering, which allows you to stitch together all of these clouds and build applications without having to write code.
Then we have, with GitHub in Visual Studio, the world’s richest professional developer tools and services, that enable any developers to build custom applications across all of this.

That comprehensiveness is really one of the unique things that makes the Microsoft Cloud, the Microsoft Cloud. The depth of richness in each of those product offerings is incredibly unique. And the ability to use all of that, and then protect it all with a common identity management and a common set of security solutions and management capabilities. That means you can ultimately be more successful within your organizations, and we can help power our customers’ businesses forward, and adapt for this new and changing world.

MERRIE WILLIAMSON: I think that’s a fantastic lead-in for my next conversation because you talked about the capabilities. You talked about connecting with customers. You talked about innovation. Given yesterday’s announcement regarding Microsoft Mesh, can you share how mixed reality, how that experience ties into innovation across Cloud and Edge?

SCOTT GUTHRIE: Yeah. I think a lot of the work that we’re doing with the new Mesh capability is an example, I’d say, of some of the richness that you can build on top of the Microsoft Cloud I just described. It leverages things like HoloLens 2, and a lot of the work that we’ve done, which enables you, and enables customers, for example, to be able to work remotely in a mixed reality-based world.

We’ve got customers like Toyota that are using it for enabling engineers in, say, Japan, to be able to connect to service teams all over the world and be able to experience that remotely, help them to fix and improve things. That stitches across Azure, it stitches across HoloLens, it uses our Dynamics 365 Remote Assist App, and it’s built on top of Teams, using Microsoft 365. So that’s just one example in, say, the industrial space.

The NHS is another great example in the U.K. who is using HoloLens and that same set of solutions to help keep doctors safe as they treat patients with COVID-19. They’re able to use that same solution in a healthcare scenario.

And what Mesh is doing, and the new Microsoft Mesh offering that we talked about yesterday, is that it’s sort of taking all of that capability to the next level, providing an even richer collaboration platform that’s going to integrate as part of the Microsoft Cloud, and enable workflows to naturally transition from someone in your 2D world to the world of mixed reality, enabling even richer communication experiences across the globe and across an even broader variety of scenarios.

That both is available to end users to take advantage of and to organizations, but also has a rich set of developer services, so developers can build on it as well. It’s just integrated and part of the overall Microsoft Cloud.
MERRIE WILLIAMSON: It’s so exciting to see these innovations and also putting them in the hands of developers, because we know that that’s going to power even more and more of those customer innovations. In thinking about developers, what tools and frameworks are available to help them collaborate in this more remote world that we’re living, this new current reality and environment, where many of us are disconnected and working from home? That’s going to be a new normal.

SCOTT GUTHRIE: Part of what makes the Microsoft Cloud unique is the richness of the APIs and the services that we provide. And let’s just say starting with Azure. We’ve got databases as a service. We’ve got IoT as a service. We have rich AI platform capabilities with Azure Machine Learning, and so much more, in terms where developers can program against and build solutions on top of.

We’ve got application hosting environments, whether it’s Azure App service, or Azure Kubernetes service that you can use in order to run those applications in either an on-demand or a serverless based way. That richness, I think, enables so many opportunities for developers to build really transformational things.

But I think one of the things that’s made us unique, as a company, really going back to the founding of the company in 1975, we started as a developer tools company. Our first product was Microsoft BASIC. I think, since our very beginning, from the very early days with Bill Gates and Paul Allen, we’ve recognized that having developer tools and having great developer tools can make developers even more productive, helping them to achieve success beyond just providing platform APIs.

In addition to things like Azure and the overall Microsoft Cloud of APIs, we have great tools in GitHub and in Visual Studio that are not just great tools, but they’re the No. 1 and No. 2 developer tools used in the market. It really enables developers to leverage all these APIs and leverage all these services in an even faster, more repeatable way. Increasingly, with things like our built-in support inside Visual Studio for doing collaboration, and then also within GitHub we now have, for example, our Codespaces capability, our GitHub Actions capability for doing CICD, and a whole bunch more.

We’re also kind of looking to work to enable teams of developers to collaborate, often remotely, whether they’re working from home or working all over the world and building those solutions as well. GitHub and Visual Studio are multi-cloud, and so you can use them with any cloud. The depth of the integration that we’ve done with the Microsoft Cloud, I think really stands out, and it enables you to go even further and be even more successful.

MERRIE WILLIAMSON: I think that ties in really well with the next question, because you talked about developers, you talked about multi-cloud, and kind of paired with that is hybrid. One question from one of our Ignite attendees, Shaheed (ph) asked, what’s that future of addressing on-prem, hybrid and cloud in the Microsoft model?
SCOTT GUTHRIE: Yeah, I mentioned earlier about our developer tools with Visual Studio and GitHub, and how we’ve explicitly taken a multi-cloud hybrid approach, meaning you can build apps anywhere. That notion of hybrid has been something we’ve really built into the Microsoft Cloud from the very beginning.

Part of that was our heritage. I mean, we had a lot of customers that used our products on premises, and that promise that you can both use our capabilities, in our cloud, on premises and in other people’s clouds, even, stitching that together into a solution or a set of solutions, I think is also one of the things that makes Microsoft unique.

I don’t think there is any other vendor in the cloud space that has the depth of hybrid and the depth of multi-cloud support that we have. We’re seeing pretty much every customer taking advantage of it in some way, shape or form. And whether that is around our operating systems, whether that’s around our database platforms, whether that’s around, as I mentioned, the developer tooling support, or things like our IoT, or even our higher-level Azure services, that’s one aspect.

With things like Azure Arc, which we’ll talk a lot more about, also at Ignite, we’re enabling people to not only deploy our things in a hybrid multi-cloud way, but also govern and manage them in a hybrid multi-cloud way. Azure Arc provides that glue and that management framework, if you will, so that you can manage these services everywhere.

You can even use things like Azure Sentinel, Azure Policy and our Azure Security Center to also securely manage and monitor these environments, again, regardless of whether they’re running on premises, running in a multi-cloud environment, or running on, say, on an edge, on an IoT device. You’re going to continue to see us drive forward this hybrid multi-cloud approach. Enabling that is a key design tenant that you’re going to continue to see us push hard on in the years ahead.

MERRIE WILLIAMSON: Yeah, I have a ton of customer conversations around our continued investment in hybrid, a lot of excitement about Arc, and probably another pool of excitement is around data. One key component of successful collaboration with our customers is really fully embracing and unlocking that data. Can you share your thoughts on the role data plays in digital transformation?

SCOTT GUTHRIE: Yeah, I mean I think, increasingly, every organization is trying to use data in a deeper way, and not just to kind of record what happened, but really also understand why did it happen. And how can you use the insights of why something happened to kind of predict what will happen in the future, and/or change the behavior of how your organization works to better optimize for future outcomes? A lot of that means you’ve got to be able to store lots of data, breaking down those different silos of data that you have inside an organization.

Things like Azure Synapse is one example, and the rest of our Azure Data Services, as a way to bring those siloes together into one common data lake, or one common data
warehouse view of that, is incredibly important. I think you also need to be able to empower people to be able to look at that data, whether it’s business intelligence or business analysts that want to be able to create dashboards and turn them into insights that they can give to people within the organization.

If you look at Power BI, we’ve now got the leading BI tool in the world. I think it’s used by somewhere like 98% of the Fortune 500 now. You can use Power BI separately, but it has incredible integration with Azure Synapse. Even at Ignite this week, we’ll talk about some of that deeper integration that we’ve done, so that you can do performance optimizations, or you can do better management of the data in a deeper way, that I think is really, really unique.

And then with our Azure Purview service that we just announced a couple months ago, we’re now providing data governance, so that you can understand the lineage of the data, like where did this particular row come from? Do I have privacy issues?

Or if someone is asking to be forgotten, are we correctly following the GDPR requirements or some of the other policy and privacy laws that are enforced? The nice thing about Azure Purview is it gives you that framework that allows you to kind of manage these increasingly important privacy and data lineage questions.

And then, with our Azure AI services, you can not only store data and look at it, but you can also train models that you can operationalize either in applications, or directly inside Power BI for data insights.

So that again, you can kind of predict what’s going to happen in the future, based on the data you have, and again, have it all be secure, have it all be governed and have it all be compliant. I think that ability to kind of work with data, in a flexible way that’s comprehensive, helps organizations that want to go down that data-driven path, accelerate dramatically towards that goal.

MERRIE WILLIAMSON: Yeah, I think you touched upon a couple of things that build on each other with data and the Power Platform. That kind of leads me to the next question, which is, we see this emergence of low code in that abstraction of insights and actions. Can you talk a little bit about what we see connected to digital transformation and low-code capability?

SCOTT GUTHRIE: Yeah, I think one thing that I would say is, at a high level, in terms of when you think about what we’re trying to accomplish at Microsoft, and if you saw in Satya’s talk, when he talks about our mission statement, as a company, it really is to empower every person and every organization in the world to be able to achieve more. That is the foundation and mission statement of our company.

I think one of the things that this speaks to is that need to kind of democratize technology. How do we make everyone that’s attending Ignite a hero inside your organizations, because you were able to help your organization transform more? The more we can do,
both in our core platform, but also in the tools that we build to enable that, you know, the more successful you and your organization will be.

I talked earlier about the tools that we’re building for professional developers, with Visual Studio and with GitHub. Those tools are optimized for developers that are writing procedural code and building custom applications. There is a lot of need for those. I talked about it earlier, the work we’re doing around data platforms, enabling people to store, process and work with data, whether they’re a data engineer or data scientist. How do we provide the rich tooling there?

And then part of what we’re trying to do with the Power Platform is this low-code/no-code solution, which enables a whole host of people, who aren’t professional developers in a lot of cases, or who are not data scientists or data engineers, to build great solutions.

With Power Apps, Power Automate and Power Virtual Agent, in particular, we kind of enable a whole host of business units and IT professionals to build applications faster, that don’t require procedural code, that are more metadata driven, and can really stitch together all of the Microsoft Cloud, and can integrate with things like Teams and collaboration platforms that people are using at home, in order to deliver business outcomes faster.

What’s nice is that it can work together with pro devs on the backend, or together with data engineers or data scientists in the data environment. It doesn’t replace the need to have those. It’s designed to integrate with the apps and the APIs, and the datasets that they’ve exposed, but I think it can dramatically accelerate getting a business value and a business outcome into your employees’ hands.

If you look at, whether it’s T-Mobile or Toyota in manufacturing, or Telstra or Sterling Bank or GSI in the pharma world, those are just some examples of great organizations and great customers that are using these low-code/no-code tools and seeing tremendous success in terms of rapidly deploying solutions into their environment that take a fraction of the time that it maybe would have a couple years ago, when everything had to be built by hand.

I think, if you haven’t looked at the Power Platform, I definitely recommend looking at it, because I think it can dramatically accelerate pretty much every business with success. And in some cases, the Power Platform is now built in, for free, into Office 365 and Microsoft 365, so you can use a bunch of the scenarios at no extra cost inside Teams, for a whole host of different scenarios. It’s definitely something that I think is magic, and so if you haven’t looked at it, I would definitely encourage you to spend some time looking at it.

MERRIE WILLIAMSON: Yeah. I was going to say the same thing, Scott. If you haven’t spent the time, Ignite is the perfect time to go think about Power Apps and look. It’s my experience too, and I’ve had customer conversations where I’ve used that, too. It’s you’re a hero. You solve a very real-term, real problem, really very quickly and
easily. That then takes off, inside the company, and so I would encourage folks to look at that.

Top of mind, when we’re talking about the entire picture of the cloud, is security. I’m switching gears a little bit. On security, what are some of the continued investments Microsoft’s making in that space? And what’s your point of view on that?

SCOTT GUTHRIE: Yeah, I mean, I think security is probably one of the most important topics that we focus on as both a cloud provider and as a company. We spend over a billion dollars annually at Microsoft, just on our security. We have thousands of cybersecurity experts that are working to, both protect our cloud and make sure that as someone who’s providing infrastructure and services, how do we make sure our apps and services are secure?

But also building the right tools so that you can very easily secure your estate as well, because security is both something that we need to watch and to work on, but it’s also something that, as you build apps and deploy things, you also need to make sure that you’re looking at your own code and looking at your own way of configuring things as well.

As part of that, we’ve built rich security features into our cloud products, and management and compliance capabilities. For example, with Azure, we have our Azure Policy Support. That allows you, as an IT professional, to set a policy that says no open ports on the internet, or you can’t add admin roles to this particular application without the right workflow, or things must be encrypted at rest.

You can set that policy now, do it centrally, and then have every application in the Microsoft Cloud honoring that policy as just sort of one example of a feature we’ve built in that can really help you be more secure in how you use our cloud.

And with things like our Azure Security Center, or the equivalent of the Microsoft 365 side, we’re also looking to provide the right dashboards and the right tools, so that you can know, are you using our cloud in the most secure way.

Across the Microsoft Cloud we now publish what is called the Security Score. You can look and see what your security score is for your environment on the Microsoft Cloud. Definitely, if you don’t know it, you should find out what it is, because it tells you how secure we think you are using our cloud. It also provides very prescriptive guidance.

If your score is low, here’s what you should be doing to be more secure in how you use our products and services. Again, that’s built in for free, and I definitely encourage everyone to take advantage of this.

You’re seeing us also build even higher level capabilities, things like Azure Sentinel, which is our next-generation cloud SIEM that you can use to kind of investigate issues, that you can use to monitor your environment in even more advanced ways. What is nice
about those security tools is they work, not just on the Microsoft Cloud, but they are also hybrid and multi-cloud as well.

You can use Sentinel to monitor your on-prem environment as well as, say, your AWS environment if you have one of those. We’re also really trying to make sure that this hybrid multi-cloud approach is something we’re thinking about, broadly, inclusive of security. You’ll see us continue to invest heavily there in the years ahead.

MERRIE WILLIAMSON: It’s amazing to hear how much robust points of view we can pull together and security because of our catalog and our vast touchpoints in technology. I have one more question for you, before we get to the lightning round, Scott. And that question comes from James, another Ignite attendee. It’s a bit of a crystal ball. Can you share how you see the Microsoft Cloud evolving over the next five years?

SCOTT GUTHRIE: Yeah, I think you’re going see a couple things with cloud in general, the Microsoft Cloud, in particular. I do think you’re gonna see cloud become an ingredient, really, in everything that happens in the world.

I mean, I don’t think there’s gonna be a physical device in the world that, five or 10 years down the road, will not have an IP address and will not be, in some way, cloud connected. Whether it’s our cars, whether it’s our refrigerators, whether it’s the thermostats in our buildings or homes, yeah, things are going to be increasingly connected.

We’re going to want, and expect, both as end users, but also as businesses, that our systems, because they are connected, are able to integrate together, and deliver even more value to us. I think you’re going to continue to see this push on enabling richer scenarios. The Microsoft Mesh and mixed reality capabilities we showed you yesterday, that’s just one example in the case of collaboration. You’ll see more with IoT. You’ll see more when it comes to data. You’ll see more when it comes to business processes.

I think it’s going to be an exciting time for us in the technology space, all of you attending Ignite, and all of us working at Microsoft, as we kind of enable that future together. It’s going to be one that’s going to require security, it’s going to require great tooling. It’s going to require great end-to-end integration.

We’re very much excited to go down that journey with you, and very much are committed to how do we provide you the tools that are going to help you transform your business in the years ahead. I think it’s going to be an exciting ride, hopefully, for all of us.

MERRIE WILLIAMSON: Thanks, Scott, really compelling, really exciting and challenging, which I think we’re all bought in, to lean into. OK, now I get to ask you to clear your mind and answer some questions, really fast, in our lightning round. Are you ready?
SCOTT GUTHRIE: Go for it.

MERRIE WILLIAMSON: OK, what new hobbies, if any, have you picked up since COVID or this working from home time period started?

SCOTT GUTHRIE: I’ve gotten into model train layouts. I read some article in some magazine, and I thought, well, that sounds fun, how hard can it be? It turns out it’s hard, but I’ve been building a model train layout.

MERRIE WILLIAMSON: We’re going to have to check out your Insta’ now. OK, if you could teach one subject in school, what would it be?

SCOTT GUTHRIE: History.

MERRIE WILLIAMSON: Window or aisle seat?

SCOTT GUTHRIE: Aisle seat; I’m tall.

MERRIE WILLIAMSON: Music or podcasts?

SCOTT GUTHRIE: Music.

MERRIE WILLIAMSON: Favorite movie?

SCOTT GUTHRIE: Star Wars.

MERRIE WILLIAMSON: When you have the gift of free and unstructured time, how do you choose to spend it?

SCOTT GUTHRIE: I like reading a book on the couch.

MERRIE WILLIAMSON: Dawn or dusk?

SCOTT GUTHRIE: Dusk.

MERRIE WILLIAMSON: Talking or texting?

SCOTT GUTHRIE: Talking.

MERRIE WILLIAMSON: Sea exploration or space exploration?

SCOTT GUTHRIE: Space exploration.

MERRIE WILLIAMSON: Invisibility or super strength?

SCOTT GUTHRIE: Invisibility.
MERRIE WILLIAMSON: Climb a mountain or jump from a plane?

SCOTT GUTHRIE: Neither; I hate heights.

MERRIE WILLIAMSON: OK, final question, what is the one thing that makes you happy about the work that you do?

SCOTT GUTHRIE: It’s fun to do. It’s fun meeting a customer or partner who’s using the technology that I got a chance to build and hearing what they’re building with it. It’s always more than I was expecting, and it has more impact. It provides meaning to me, and I’m hopefully helping them. That’s fun.

MERRIE WILLIAMSON: Fun and meaningful. Thank you, Scott. Scott, thank you for your time today, and for your perspective on the Microsoft Cloud strategy. And everyone, thank you for joining us. We hope that you enjoy the rest of Ignite.

SCOTT GUTHRIE: Thanks, Mary. Thank you everyone for watching. As Mary said, I really hope you enjoy the rest of Ignite, and really looking forward to seeing what you build with all this technology we’re talking about this week.

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