Patrick Moorhead: We're recording. Smile, we're having so much fun. Okay.

Hi, this is Pat Moorhead with Moor Insights & Strategy and welcome to the Six Five Summit 2021. I am here with Microsoft's Erin Chapple. She is Corporate Vice President of the Azure Core product for Azure Core. Erin, welcome to the Six Five Summit. How are you doing?

Erin Chapple: It's so great to be here, Pat. I am having an awesome day.

Patrick Moorhead: Yeah, I'm just so looking forward to this conversation. Maybe a great place to start is to talk about what you do for Azure. There's a lot of people that do a lot of things in product, what do you do for Azure?

Erin Chapple: I'm the corporate vice president for the Azure Core infrastructure. So think of about that as the foundation of Azure. It's all of the solutions we provide from the network to our storage to the virtual machines, including things like our high performance computing, Azure NetApp files, and all of those solutions that really help customers think about how do they, in some sense, trust us to be able to run their workloads.

Patrick Moorhead: I love that. I love that. Compute, storage, networking, and a lot of other fun stuff. I love it. So, hey, let's kick this off. Maybe we talk about what's happening with your customers, your response to COVID. I mean, we're not through it all the way, but boy, there's definitely a light at the end of the tunnel.

Erin Chapple: There is and you know it. But you and I have talked about this, I think, over the last year, it's just been the most significant change our society and economy has seen in modern history. I think it's really an understatement to say that the last 12 months has been a time of transformation. It's much more than that, right? Just the changes across our daily lives have been beyond anything I could have imagined.

This is true across so many pivots, right? Thinking just about tech and business, early on, we saw two years of digital transformation in two months. The change was so fast it was evident and it impacted everyone. But I think, stepping back, what really inspires me about the response was just the sheer collaboration I saw happen, right? Across geographies and countries and industries and even within organizations, people came together in ways I never could have imagined.

So you have all of this qualitative data on just what we're seeing in the industry, but while we had that qualitative experience, we really wanted to get greater insights around COVID business impact. So a few months ago we commissioned a study with The Economist to learn how business leaders view the past year and how they're responding to the change. Really, the data validated the acceleration that we've seen, right? The pace of change, the industry transformation, the digital investments. An amazing 72% of respondents

reported an acceleration of their industry's pace of transformation. Can you imagine that?

Patrick Moorhead: No, I can't, and I've never really experienced anything like it. I know we were doing a kind of a pre-show meeting, and it didn't hit me as much as some others, but I'll tell you, I see how it impacted others. IT, in addition to the first responders, were the real heroes of this. I mean, they kept businesses going, they kept governments going, they helped create the infrastructure to get the vaccine out, and it truly has been incredible.

Erin Chapple: Yeah. It's amazing, I think, in many ways is that the study that we did found that organizations and businesses that had already begun their digital transformation journey felt better equipped to respond to those swift changes, as you're talking about, right? Companies becoming digital responders to first responders, the work that was being done across the medical and healthcare business with vaccine development, and all of these different conditions that we never would have expected.

Really, if you double click into that, the top three technologies that were most prominent in the respondents in transformation efforts were cloud computing, the tools for remote work, and then AI and machine learning.

Patrick Moorhead: Interesting.

Erin Chapple: Yeah. We've really seen a consistent set of priorities that has emerged across businesses over the last year in response to this, right? How do they respond, recover, and rebuild by accelerating the time to value, by increasing agility, and ultimately reducing cost?

Patrick Moorhead: The first two that you rattled off, cloud and, essentially, collaboration, absolutely are unsurprising. I'm a little surprised that AI and machine learning came in third, but I think that's a really good precursor to what's in store for the future. I find that fascinating.

Erin Chapple: Well, I think part of it, too, was these companies were taking the opportunity. I mean, some of them, it wasn't an opportunity, it was a necessity to think about how they move through this digital transformation and how they modernize and rebuild their applications. They were looking at how do I not do that looking forward, but looking ahead and take advantage of the capabilities that I have today and build for the future, is that sense, if I'm going to invest the time right now.

Patrick Moorhead: My final thought on this, and I just picked this up maybe in the last month talking to CIO's and people on the front line, is this was the time to take a few risks as well. Because typically IT doesn't get put in the penalty box for maybe all of these amazing things they do, it's that there's stability and nothing breaks,

but IT was able to take some risks that they never had permission to do before. I think that's a great thing.

But hey, we're not fully through this yet. There's a light at the end of the tunnel. Let's talk about, sometimes we call it the new normal, sometimes we'll call it the next stage of the cloud, where do you see Microsoft leaning in to help customers get around the next stage of cloud and maybe talk about what the next stage of the cloud is?

Erin Chapple: Well, I think we've seen that digital transformation is a reality, right? The digital transformation that was projected to happen over the next 10 years, it's happening today, right? As companies become more embedded in every aspect of our lives, as the technology becomes more embedded in every aspects of our lives, there's just no longer such thing as a tech sector, right? Every organization will need to not only adapt to the latest technology, but more importantly, to build their own unique digital technology or be left behind. Right? We saw that over the last year.

So that's where the Microsoft cloud comes in. Our ambition is really to be the platform for platform creators, from the developer tool change, to the core infrastructure, to that rich data and AI platform, to the foundation of hybrid work with Teams and Office. We really provide solutions that empower organizations around the world to focus on what they know best and be able to take advantage and leverage the Microsoft cloud in order to provide those foundational or platform capabilities.

So let me dive a little deeper into what I know best, right? Azure. So our vision for Azure is to be the world's computer. As computing becomes embedded everywhere in our world, transforming how we act with people, with places, with things, we see the physical and digital worlds really converging and we require more sovereignty and more decentralized control. So cloud and edge computing really has to evolve to meet these real world needs, right? If I would say something, and you've heard us say it as a company, we're at peak centralization right now and what we need for the future is to enable more seamless hybrid multicloud and cloud to edge, really supporting that diverse infrastructure choices that our customers have along with the different deployment needs that they have in deployment models and workloads. All of this really comes together to give customers the flexibility to innovate anywhere.

Patrick Moorhead: Yeah. Far too many people, I think, forget about the place where the data is is on the edge and you have to comprehend at the edge because it's not necessarily the most efficient thing to phone home to the big cloud or the big data center anymore. You have to have different stages along the way and do it in an intelligent way, do it in a secure way, in a way that just truly meets the needs of, really, the reality out there. Because the more data we're creating on the edge, the more intelligence we're going to need on the edge, but we don't want to lose the ability to manage that and secure that.

Erin Chapple: Agreed. I feel like you've given me the great lead in something, Pat, which is this is why Azure has been hybrid from the beginning, right?

Patrick Moorhead: Right.

Erin Chapple: And we continue to invest in that spectrum of infrastructure solutions, right? So from the end point with Azure Sphere, to the intelligent edge with things like Azure IOT and Azure Percept, to on-premises data centers using Azure Stack or Azure Edge Zones enterprise, to Azure Space, Azure Orbital, and the Azure that we know, Azure proper, in terms of the public cloud. But as you said, it's not the infrastructure itself. That's just one piece of the solution. The operations and the security are really critical in this multi edge and multicloud world.

So from an operations standpoint, if you have infrastructure and services that are running in all these different locations, the complexity of that management just becomes the gating factor. That's where something like Azure Arc comes in, right? Azure Arc enables you to extend governance, management, and Azure services beyond Azure public. The value here is really to provide that consistent way of managing all of your environment based upon the same mechanisms and approaches that you're using in Azure. So you have that common tooling, common skillset, right?

All of this is really backed and supported by our Azure control plane, which enables things like common identity and security and policy and compliance. So again, directly from Azure, customers can just easily organize, they can govern, they can secure, whether it be their windows machines, their Linux machines, their SQL servers, or Kubernetes clusters, across that data center, the edge, as well as multi-cloud environments, which are becoming more and more the norm.

Patrick Moorhead: Yeah, it is. I have to give credit where credit's due, and coming out with Azure Stack, being the first mover on hybrid, I mean, of course that made sense to me given all the data that was in Windows Server on-prem and then having Azure public cloud and then connecting the two when Azure Stack first came out. That really set the pace and it's been impressive to see the innovation, the addition of the Arc, the addition of Sphere, with IOT really embracing the end to end capabilities.

So we talked about the what, maybe we can talk a little bit about how Microsoft empowers those folks doing the heavy lifting, the developers for the next stage of the cloud?

Erin Chapple: Yeah. This is really about empowering creators in communities everywhere, right? We want to empower creators to seize the opportunity that's ahead and build what comes next.

Patrick Moorhead: Let me time out. What do you mean by the creators? I mean, I just want to make sure. That term gets thrown around a lot. Well, what do you mean by that?

Erin Chapple: Well, I think you think about consumption and creators, right? So in the last decade we've seen several tech advances that drove more from a consumption basis, right? More browsing. More shopping. More binge-watching. But all of this is actually because of the creators, right? Those that are creating the content, the solutions, et cetera.

So the other thing in that, too, is that developers are not just one size fits all anymore. You have everything from low code to pro code. You have these teams coming together where you want to capture the expertise around the business and transition that into business applications as part of that digital transformation. So the creator is that spectrum in many sense of those that are really helping to power and create the next generation of applications and solutions.

Patrick Moorhead: Yeah, it is wild when I look at the combination, GitHub, Visual Studio, Power Platform, and Azure. In a recent, this was at Build, Microsoft CEO Satya Nadella, I loved the graphic that he used, that that showed this in totality. So it was almost like if you're a developer, developing for anything, or to use your word, the creator of anything, Microsoft has you covered. This is not me doing a commercial, but it is impressive when you look at how much ground, all the way from, and I like to say, a full code, a lot of code, to no code and everything in between, every depository, and every way that you can do that. I think that has to give IT a pretty good feeling that they can accomplish what they need to accomplish and get what they need to get done given the lack of developers that are out there.

Erin Chapple: You know, I think it's important to remember we're a company that was built by developers for developers. You talked about Build and some of the recent announcements, but let me talk about two that are really, to me, very exciting. Right? I'm going to kind of maybe go back in the context of some of our conversations on hybrid as well and Arc, but when we think about the applications of the future, they will be intelligent, right? They're infused with AI. They provide these advanced insights. They incorporate open source technology, libraries from around the world. They have to be reliable, secure by design, and really built with tools that empower developers to move from idea to code and code to cloud seamlessly. Today, Azure customers are already building these applications using cloud native technologies, right? Things like containers, Kubernetes, microservices.

So for example, Mercedes-Benz, as a customer, is improving their in-vehicle experience for customers by delivering applications dynamically over the air and sort of requiring you to go into that in-person maintenance visit. I know if I can reduce one of those visits in my life that gives me more time to spend with my family and so this is just a great thing, I would say, all around.

So with the success our customers have experienced using cloud native technologies on Azure, many of them are now trying to replicate that success in other environments, right? They want that best in class development and management experience for their cloud native workloads in Azure, but they want to deliver that on premise environments, in edge locations, on other clouds. So to enable this, at Microsoft Build we announced a preview capabilities of the Azure Application Services to run on Kubernetes anywhere. Across Azure, on premises, AWS, Google cloud, effectively any cloud native computing foundation conformant Kubernetes cluster can be connected through Azure Arc and is now a supported deployment target for Azure Application Services.

Then as you said, with the cloud native application services deeply integrated with GitHub and Visual Studio, developers can build the application as a feature on Azure today with high velocity. The developers no longer have to choose between do I want the productivity of Azure Application Services or the control of Kubernetes, but I can save time by building these applications using these portable applications services enabled by Azure Arc.

Patrick Moorhead: Yeah, I will-

Erin Chapple: One more.

Patrick Moorhead: Yeah. Yeah. No, please. Just one comment. I'll admit it was a mind bender to think I could do all these things in multicloud. I had to read, I watched the video a few times, but this is what enterprises want. They want to be able to run different applications or the same applications sometimes in different places and the ability to control and manage and actually run these workloads, but have a consistent way to manage that, is I hate to say it, it's the holy grail. It really is.

Erin Chapple: So let's flip maybe to the other end of the spectrum of creators or developers. On the low code end of the spectrum, we're bringing the world's most powerful language model, GPT-3, to the Power Platform, right? So you can describe what you want in natural language, human readable, and GPT-3 generates a list of the most relevant formulas for you to choose from. So we now have code effectively writing itself. So that helps as we think about creator scale and amplify their work so that we can bring these teams together that really collaborate and pair development with business insights in order to build those business applications together.

Patrick Moorhead: Yeah, I love what GPT-3 inside of the Power Platform can do, and I like it even better because it's not a proprietary approach from Microsoft. It's from open AI and it is wild to see all of the industry standard technologies that Microsoft has embraced. If there was one thing over the last 10 years I can say one of the biggest differences between Microsoft then and Microsoft now is embracing open source. I mean, it's great. And open sourcing some of your own products like VS.

Erin Chapple: Yeah. As you said, it's not only embracing that, it's about contributing back, right?

Patrick Moorhead: Right.

Erin Chapple: I think that it's so important as part of that community in order to embrace the spirit of that community and think about not only how are you making this accessible to more and more of the development community and organizations around the world, but what are you contributing back in service of moving that technology forward as well.

Patrick Moorhead: So Microsoft is very well-known for its developers, but it's also well-known for having one of the largest partner ecosystems out there. When we look at that relative to cloud and infrastructure, what role do you see for partners in next phase of the cloud?

Erin Chapple: Well, partners are also a major part of this next stage of the cloud. As you said, a major differentiator for Microsoft is the unmatched breadth and depth across the solutions and the partnerships that we have. It's somewhat mind-boggling. Partners are really part of the entire life cycle, right? If I just think about Azure, there are a set of partners we collaborate with deeply to deliver best of breed solutions. So from our partnership with SAP on Azure to NetApp and Azure NetApp files to Azure VMware services, we're really taking the collective wisdom across our organizations in order to deliver those great capabilities to our customers.

But there are also thousands of technical and consulting services, right? End to end solutions that are built by partners to deliver customers those tailored solutions they need to meet their needs. So we work closely with them to develop programs to allow customers and partners to work directly with us. So things like Azure Migration Program, which is all around simplifying the speed at which you can migrate to Azure and making sure that that migration is tailored to an organization's unique needs.

But on the flip side, we think of ourselves as partners for customers as well, right? This is a shift from how people have traditionally seen cloud vendors, but it's possibly the most critical shift a company can make is seeing their cloud provider not as a vendor, but as a partner. We believe a cloud provider should only be successful when it helps the world around it and when customers succeed. So customer success is our success and that's why we collaborate so closely with customers as trusted advisor, as a co-innovator, as a partner.

So for example, we recently announced and launched several industry specific clouds.

Patrick Moorhead: That's right.

Erin Chapple: To do this, we built specialized components that light up industry scenarios using capabilities of the entire Microsoft cloud and we deliver that to customers along with the partner community. So I know tomorrow you have Alysa Taylor joining and I know she's going to talk more about that, so hopefully you'll tune in to hear a little bit more about that area.

But, Pat, looking ahead, every organization will need to not only adopt technology, but build their own technology. The cloud advances that we talked about today are what will enable every organization in every sector to create that broad economic surplus, right? A cloud that amplifies human ingenuity and allows people everywhere to reach higher aspirations and impact. All of this requires us to continue to work together as co-innovators with customers and partners and we're ready.

Patrick Moorhead: Yeah. Erin, I love the idea that every company will need to become a technology company in some way, shape, or form. I grew up in the Midwest. I grew up in the rust belt and I saw what happened when certain industries didn't retool and rethink in what they did. It's my hope that people, companies out there and organizations, if their governments kind of look at what the potential is, and not that they feel comfortable about it, but what could they become? How can they do things better? How can they serve their customers better? How can they serve their constituents better, if they're a government? I think it's a great way to look at the future. Sure, humanity will still be in there more than ever, but technology, I believe, I'm a technology optimist and I do believe it can bring out improved humanity when done the right way.

Erin Chapple: That's why I love the job that you and I get to do.

Patrick Moorhead: Oh, totally. I think that's a great time to pause here. Erin, I just want to thank you so much for coming on the show. Today is going to be better because of this interview with you and I sincerely appreciate that.

Erin Chapple: Thank you so much, Pat. It's always a pleasure to talk.

Patrick Moorhead: This is Patrick Moorhead with Moor Insights & Strategy, signing off for the Six Five Summit 2021 with Erin Chapple from Microsoft Azure. Have a great day.