How Enterprises Can Take the Ecosystem Path to Making the Most of Microsoft Azure Stack Apps

Transcript of a discussion on how the application development and PaaS benefits from Microsoft Azure Stack will provide vertical industries with hybrid cloud deployment flexibility.

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Dana Gardner: Welcome to the next edition of the BriefingsDirect Voice of the Customer podcast series. I'm **Dana Gardner**, Principal Analyst at **Interarbor Solutions**, your host and moderator for this ongoing discussion on digital transformation strategies and best practices.

Our next hybrid cloud advancements discussion explores the application development and platform-as-a-service (PaaS) benefits from Microsoft Azure Stack. We'll now learn how ecosystems of solutions partners are teaming to provide specific vertical industries with applications and services that target private cloud deployments.

Here to help us explore the latest in successful cloud-based applications development and deployment is our panel, Martin van den Berg, Vice President and Cloud Evangelist at Sogeti USA, based in Cleveland. Welcome, Martin.

van den Berg

Martin van den Berg: Thank you, Dana. I am glad to be here.

Gardner: We're also here with Ken Won, Director of Cloud Solutions Marketing at Hewlett Packard Enterprise (HPE). Welcome back, Ken.

Ken Won: Thank you, Dana. Always a pleasure.

Gardner: Martin, what are some of the trends that are driving the adoption of hybrid cloud applications specifically around the Azure Stack platform?

van den Berg: What our clients are dealing with on a daily basis is an ever-expanding data center, they see ever-expanding private clouds in their data centers. They are trying to get into the hybrid cloud space to reap all the benefits from both an agility and compute perspective.

Bridging the gap

They are trying to get out of the data center space, to see how the ever-growing demand can leverage the cloud. What we see is that Azure Stack will bridge the gap between the cloud that they have on-premises, and the public cloud that they want to leverage -- and basically integrate the two in a true hybrid cloud scenario.

Gardner: What sorts of applications are your clients calling for in these clouds? Are these cloud-native apps, greenfield apps? What are they hoping to do first and foremost when they have that hybrid cloud capability?

van den Berg: We see a couple of different streams there. One is the native-cloud development. More and more of our clients are going into cloud-native development. We recently brought out a white paper wherein we see that 30 percent of applications being built today are cloud-native already. We expect that trend to grow to more than 60 percent over the next three years for new applications.

The issue that some of our clients have has to do with some of the data being consumed in these applications. Either due to compliance issues, or that their information security divisions are not too happy, they don't want to put this data in the public cloud. Azure Stack bridges that gap as well.

Microsoft Azure Stack can bridge the gap between the on-premises data center and what they do in the cloud. They can leverage the whole Azure public cloud PaaS while still having their data on-premises in their own data center. That's a unique capability.

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On the other hand, what we also see is that some of our clients are looking at Azure Stack as a bridge to gap the infrastructure-as-a-service (IaaS) space. Even in that space, where clients are not willing to expand their own data center footprint, they can use Azure Stack as a means to seamlessly go to the Azure public IaaS cloud.

Gardner: Ken, does this jibe with what you are seeing at HPE, that people are starting to creatively leverage hybrid models? For example, are they putting apps in one type of cloud and data in another, and then also using their data center and expanding capacity via public cloud means?

Won

Won: We see a lot of it. The customers are interested in using both private clouds and public clouds. In fact, many of the customers we talk to use multiple private clouds and multiple public clouds. They want to figure out how they can use these together -- rather than as separate, siloed environments. The great thing about Azure Stack is the compatibility between what's available through Microsoft Azure public cloud and what can be run in their own data centers.

The customer concerns are data privacy, data sovereignty, and security. In some cases, there are concerns about application performance. In all these cases, it's a great situation to be able to run part or all of the application on-premises, or on an Azure Stack environment, and have some sort of direct connectivity to a public cloud like Microsoft Azure

Because you can get full API compatibility, the applications that are developed in the Azure public cloud can be deployed in a private cloud -- with no change to the application at all.

Gardner: Martin, are there specific vertical industries gearing up for this more than others? What are the low-lying fruit in terms of types of apps?

Hybrid healthcare files

van den Berg: I would say that hybrid cloud is of interest across the board, but I can name a couple of examples of industries where we truly see a business case for Azure Stack.

One of them is a client of ours in the healthcare industry. They wanted to standardize on the Microsoft Azure platform. One of the things that they were trying to do is deal with very large files, such as magnetic resonance imaging (MRI) files. What they found is that in their environment such large files just do not work from a latency and bandwidth perspective in a cloud.

With Microsoft Azure Stack, they can keep these larger files on-premises, very close to where they do their job, and they can still leverage the entire platform and still do analytics from a cloud perspective, because that doesn't require the bandwidth to interact with things right away. So this is a perfect example where Azure Stack bridges the gap between on-premises and cloud requirements while leveraging the entire platform.

Gardner: What are some of the challenges that these organizations are having as they move to this model? I assume that it's a little easier said than done. What's holding people back when it comes to taking full advantage of hybrid models such as Azure Stack?

van den Berg: The level of cloud adoption is not really yet where it should be. A lot of our clients have cloud strategies that they are implementing, but they don't have a lot of expertise yet on using the power that the platform brings.

Some of the basic challenges that we need to solve with clients are that they are still dealing with just going to Microsoft Azure cloud and the public cloud services. Azure Stack simplifies that because they now have the cloud on-premises. With that, it's going

to be easier for them to spin-up workload environments and try this all in a secure environment within their own walls, their own data centers.

Won: We see a similar thing with our client base as customers look to adopt hybrid IT environments, a mix of private and public clouds. Some of the challenges they have include how to determine which workload should go where. Should a specific workload go in a private cloud, or should another workload go in a public cloud?

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We also see some challenges around processes, organizational process and business process. How do you facilitate and manage an environment that has both private and public clouds? How do you put the business processes in place to ensure that they are being used in the proper way? With Azure Stack -- because of that full compatibility with Azure -- it simplifies the ability to move applications across different environments.

Gardner: Now that we know there are challenges, and that we are not seeing the expected adoption rate, how are organizations like Sogeti working in collaboration with HPE to give a boost to hybrid cloud adoption?

Strategic, secure, scalable cloud migration

The future is in the clouds from a scalability and agility perspective.

van den Berg: As the Cloud Evangelist with Sogeti, for the past couple of years I have been telling my clients that they don't need a data center. The truth is, they probably need some form of on-premises still. But the future is in the clouds, from a scalability and agility perspective -- and the hyperscale with which Microsoft is building out their Azure cloud capabilities, there are no enterprise clients that can keep up with that.

We try to help our clients define strategy, help them with governance -- how do they approach cloud and what workloads can they put where based on their internal regulations and compliance requirements, and then do migration projects.

We have a service offering called the Sogeti Cloud Assessment, where we go in and evaluate their application portfolio on their cloud readiness. At the end of this engagement, we start moving things right away. We have been really successful with many of our clients in starting to move workloads to the cloud.

Having Azure Stack will make that even easier. Now when a cloud assessment turns up some issues on moving the Microsoft Azure public cloud -- because of compliance or privacy issues or just comfort (sometimes the information security departments just don't feel comfortable moving certain types of data to a public cloud setting) -- we can move those applications to the cloud, leverage the full power and scalability of the cloud while keeping it within the walls of our clients' data centers. That's how we are trying to accelerate the cloud adoption, and we truly feel that Azure Stack bridges that gap.

Gardner: Ken, same question, how are you and Sogeti working together to help foster more hybrid cloud adoption?

Keep IT simple

Won: The cloud market has been maturing and growing. In the past, it's been somewhat complicated to implement private clouds. Sometimes these private clouds have been incompatible with each other, and with the public clouds.

In the Azure Stack area, now we have almost an appliance-like experience where we have systems that we build in our factories that we pre-configure, pretest, and get them into the customers' environment so that they can quickly get their private cloud up and running. We can help them with the implementation, set it up so that Sogeti can help with the cloud-native applications work.

Sogeti and HPE work together to make it much simpler for companies to adopt the hybrid cloud models.

With Sogeti and HPE working together, we make it much simpler for companies to adopt the hybrid cloud models and to quickly see the benefit of moving into a hybrid environment.

van den Berg: In talking to many of our clients, when we see the adoption of private cloud in their organizations -- if they are really honest -- it doesn't go very far past just virtualization. They truly haven't leveraged what cloud could bring, not even in a private cloud setting.

So talking about hybrid cloud, it is very hard for them to leverage the power of hybrid clouds when their own private cloud is just virtualization. Azure Stack can help them to have a true private cloud within the walls of their own data centers and so then also leverage everything that Microsoft Azure public cloud has to offer.

Won: I agree. When they talk about a private cloud, they are really talking about virtual machines, or virtualization. But because the Microsoft Azure Stack solution provides built-in services that are fully compatible with what's available through Microsoft Azure public cloud, it truly provides the full cloud experience. These are the types of services that are beyond just virtualization running within the customers' data center.

I think Azure Stack adoption will be a huge boost to organizations looking to implement private clouds in their data centers.

Gardner: Of course your typical end-user worker is interested primarily their apps, they don't really care where they are running. But when it comes to getting new application development, rapid application development (RAD), these are some of the pressing issues that most businesses tell us concern them.

So how does RAD, along with some DevOps benefits, play into this, Martin? How are the development people going to help usher in cloud and hybrid cloud models because it helps them satisfy the needs of the end-users in terms of rapid application updates and development?

Spin-up speeds up

van den Berg: This is also where we are talking about the difference between virtualization, private cloud, hybrid clouds, and definitely cloud services. So for the application development staff, they still run in the traditional model, they still run into issues in provisioning of their development environments and sometimes test environments.

A lot of cloud-native application development projects are much easier because you can spin-up environments on the go. What Azure Stack is going to help with is having that environment within the client's data center; it's going to help the developers to spin up their own resources.

There is going to be on-demand orchestration and provisioning, which is truly beneficial to application development -- and it's really beneficial to the whole DevOps suite.

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We need to integrate business development and IT operations to deliver value to our clients. If we are waiting multiple weeks for development and the best environment to spin up -- that's an issue our clients are still dealing with today. That's where Azure Stack is going to bridge the gap, too.

Won: There are a couple of things that we see happening that will make developers much more productive and able to bring new applications or updates quicker than ever before. One is the ability to get access to these services very, very quickly. Instead of going to the IT department and asking them to spin up services, they will be able to access these services on their own.

The other big thing that Azure Stack offers is compatibility between private and public cloud environments. For the first time, the developer doesn't have to worry about what the underlying environment is going to be. They don't have to worry about deciding, is this application going to run in a private cloud or a public cloud, and based on where it's going, do they have to use a certain set of tools for that particular environment.

Now that we have compatibility between the private cloud and the public cloud, the developer can just focus on writing code, focus on the functionality of the application they are developing, knowing that that application now can easily be deployed into a private cloud or a public cloud depending on the business situation, the security requirements, and compliance requirements.

So it's really about helping the developers become more effective and helping them focus more on code development and applications rather than having them worry about the infrastructure, or waiting for infrastructure to come from the IT department.

Gardner: Martin, for those organizations interested in this and want to get on a fast track, how does an organization like Sogeti working in collaboration with HPE help them accelerate adoption?

van den Berg: This is where we heavily partner with HPE, to bring the best solutions to our clients. We have all kinds of proof of concepts, we have accelerators, and one of the things that we talked about already is making developers get up to speed faster. We can truly leverage those accelerators and help our clients adopt cloud, and adopt all the services that are available on the hybrid platform.

We have all heard the stories about standardizing on micro-services, on a server fabric, or serverless computing, but developers have not had access to this up until now and IT departments have been slow to push this to the developers.

The accelerators that we have, the approaches that we have, and the proofs of concept that we can do with our client -- together with HPE -- are going to accelerate cloud adoption with our clientele.

Gardner: Any specific examples, some specific vertical industry use-cases where this really demonstrates the power of the true hybrid model?

When the ship comes in

Won: I can share a couple of examples of the types of companies that we are working with in the hybrid area, and what places that we see typical customers using Azure Stack.

People want to implement disconnected applications or edge applications. These are situations where you may have a data center or an environment running an application that you may either want to run in a disconnected fashion or run to do some local processing, and then move that data to the central data center.

One example of this is the cruise ship industry. All large cruise ships have essentially data centers running the ship, supporting the thousands of customers that are on the ship. What the cruise line vendors want to do is put an application on their many ships and to run the same application in all of their ships. They want to be able to disconnect from connectivity of the central data center while the ship is out at sea and to do a lot of processing and analytics in the data center, in the ship. Then when the ship comes in and connects to port and to the central data center, it only sends the results of the analysis back to the central data center.

This is a great example of having an application that can be developed once and deployed in many different environments, you can do that with Azure Stack. It's ideal, running that same application in multiple different environments, in either disconnected or connected situations.

van den Berg: In the financial services industry, we know they are heavily regulated. We need to make sure that they are always in compliance.

So one of the things that we did in the financial services industry with one of our accelerators, we actually have a tool called Sogeti OneShare. It's a portal solution on top of Microsoft Azure that can help you with orchestration, which can help you with the

whole DevOps concept. We were able to have the edge node be Azure Stack -- building applications, have some of the data reside within the data center on the Azure Stack appliance, but still leverage the power of the clouds and all the analytics performance that was available there.

We just did a project in this space and we were able to deliver functionality to the business from start of the project in just eight weeks. They have never seen that before -- the project that just lasts eight weeks and truly delivers business value. That's the direction that we should be taking. That's what DevOps is supposed to deliver -- faster value to the business, leveraging the power of clouds.

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Gardner: Perhaps we could now help organizations understand how to prepare from a people, process, and technology perspective to be able to best leverage hybrid cloud models like Microsoft Azure Stack.

Martin, what do you suggest organizations do now in order to be in the best position to make this successful when they adopt?

Be prepared

van den Berg: Make sure that the cloud strategy and governance are in place. That's one of the first things this should always start with.

Then, start training developers, and make sure that the IT department is the broker of cloud services. In the traditional sense, it is always normal that the IT department is the broker for everything that is happening on-premises within the data center. In the cloud space, this doesn't always happen. In the cloud space, because it is so easy to spin-up things, sometimes the line of business is deploying.

We try to enable IT departments and operators within our clients to be the broker of cloud services and to help with the adoption of Microsoft Azure cloud and Azure Stack. That will help bridge the gap between the clouds and the on-premises data centers.

Gardner: Ken, how should organizations get ready to be in the best position to take advantage of this successfully?

Mapping the way

Won: As IT organizations look at this transformation to hybrid IT, one of the most important things is to have a strong connection to the line of business and to the business goals, and to be able to map those goals to strategic IT priorities.

Once you have done this mapping, the IT department can look at these goals and determine which projects should be implemented and how they should be implemented. In some cases, they should be implemented in private clouds, in some cases public clouds, and in some cases across both private and public cloud.

The task then changes to understanding the workloads, the characterization of the workloads, and looking at things such as performance, security, compliance, risk, and determining the best place for that workload.

Then, it's finding the right platform to enable developers to be as successful and as impactful as possible, because we know ultimately the big game changer here is enabling the developers to be much more productive, to bring applications out much faster than we have ever seen in the past.

Gardner: I'm afraid we will have to leave it there. We have been exploring application development and PaaS benefits and best practices around Microsoft Azure Stack. And we have learned how ecosystems of solution partners are teaming to provide application development organizations with the services they need to target hybrid cloud models.

So please join me in thanking our guests, Martin van den Berg, Vice President and Cloud Evangelist at Sogeti USA, and Ken Won, Director of Cloud Solutions Marketing at HPE.

And a big thank you as well to our audience for joining us for this BriefingsDirect Voice of the Customer digital transformation strategies discussion. I'm Dana Gardner, Principal Analyst at Interarbor Solutions, your host for this ongoing series of Hewlett Packard Enterprise-sponsored interviews.

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