## **INTERVIEW WITH MURTUZA CHOILAWALA**

Eric Green:	Hello and welcome to a new podcast series from IBM software that explores the challenges IT managers and business professionals are facing today. I'm Eric Green and I'll be talking with a range of experts to discover new perspectives, approaches and examples that can help meet these challenges and introduce you to the capabilities of smarter software from IBM. So let's get started.
	Cloud computing and virtualization have become household names for most enterprises, given both the masses of data being accumulated and stored as well as the cost effectiveness and agility of using such technologies. Here to discuss how to manage this all is Murtuza Choilawala, who is IBM's Tivoli Portfolio Manager for Cloud Solutions. Murtuza, thanks so much for joining us today.
Murtuza Choilawala:	Thank you, Eric. Good afternoon and how are you?
Eric Green:	Great! So I want to start by asking, why do you feel cloud management has become such an important topic for so many enterprises?
Murtuza Choilawala:	So Eric, as you mentioned, right, it is all about getting the business agility, getting the cost down, and making the enterprise have a delivery mechanism which can adopt to the business needs. So what we see out there in the field is that most of the customers are seeing how the data center costs are exceeding every day, how management of those system costs have increased – doubled since 2000, power and cooling systems have doubled since 2000. As well as we are seeing that utilization of data centers across is pretty low. We are seeing normal numbers from 20 to 30% utilization.
	So consolidating all this, being business agile, is what Cloud provides and that's why Cloud no longer hype but it is reality.
Eric Green:	So within that, how does virtualization management fit into cloud computing?
Murtuza Choilawala:	A great question, Eric. So virtualization management is pretty much part of cloud computing, right? They're not different but it's a journey. One looks at data centers and how movement and cost across it is and then you start consolidating, standardizing, virtualizing. At that point of time when you start implementing models across cloud, where you're doing service as you go, pay as you go and adopt those cloud models is where you move into the

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	cloud space. So customers are very quickly looking at virtualized environments and seeing how they can adopt those infrastructures and move into cloud delivery models so that they can have a service automation aspect of it on top of it.
Eric Green:	So is this a big company thing, a small company thing – you know, SMB versus midsize, is this an important phenomenon across all sizes of organization? Or sort of, where's the sweet spot for this?
Murtuza Choilawala:	I think it is across the board. We basically look at it from enterprise perspective across to different industries – whether it is retail, manufacturing, government, utilities and everybody is looking at adopting to that space. People are looking at it at different angles and then different maturity models on where they are. So and they will also look across on different delivery models from their business aspect. So they could either look at it as an enterprise set up private cloud, or managed services or managed host services space of cloud, or they could look at public services aspect of it, like IBM Smart Cloud and our providers of the service, and things like that.
Eric Green:	Interesting. So how about, you know, when you talk about traditional virtualization, I mean, do you see a progression moving from what you would consider a traditional virtualization technology to cloud and cloud management?
Murtuza Choilawala:	As I said before, right, I think the traditional – it is adoption of a new type of data centers and how these new data centers will help the industries and businesses to be more agile. So it really – it's not about old traditional models and you throw them away. Like in IBM, we are very much looking into heterogeneous platforms, where we look into a customer's current investment and how they have it set up today, and how we can leverage their current investments to move them to cloud services.
Eric Green:	So innovation has been, I mean it's been really important to America as the industry side, but of course, to the world – how do you see organizations leveraging this new set of technologies around cloud and cloud management for innovation?
Murtuza Choilawala:	I think, Eric, innovation is key, innovation is the driving force to enable customers to move to the cloud service delivery model and a cloud model and adoption of it – we are seeing virtualization, something which IBM believed in 1960s, right? We had virtualization on mainframes, we progressed it across, we started

	delivering different forms and aspects of it. We went in from one model to the other into that space and IBM has also led its way into the innovation of the cloud space. But bringing those aspects together, bringing the business agility together and, on top of it, bringing the business processes together. So it is very critical that how innovation plays into it, how customers use their operation support services and business support services, how they are all tied together into it to provide a good responsive business agility tool to them.
Eric Green:	And you kind of touched on this very briefly earlier, but when you look at industry sets, when you're looking at the kind of agility organizations are getting from cloud computing and where innovation steps in, are there are any particular industries that are kind of, you know, stand outs, whereas retail and supply chain versus something like finance?
Murtuza Choilawala:	Definitely what we are seeing, at least at IBM right now is the adoption of cost industries financial industry. We have customers in financial industries where they have adopted the cloud model. Some of them have adopted the cloud model looking at it from a perspective, and some are moving their production workloads into that. When you talk about airports and transportation industries, very much utilizing the cloud service delivery to be very quick and responding to changes in the environments, changing into where your business environments are and model works across. And so does the government aspects, like we have seen the government is quickly adopting these. They are one of the first pioneers in adopting a lot of cloud services and so is IBM helping in the innovation to move these companies into that space.
Eric Green:	Very interesting. I was hoping we could talk a little bit about security. I mean, on the one side, we have cloud computing which traditionally there are a lot of questions of, you know, securing the cloud and how that works. And so when it comes cloud management, there are some questions and I know a lot of solutions that are being put out there. At the same time, you know, virtualization, managing virtualization is actually a great enabler to help security. So how does security come together across these two things?
Murtuza Choilawala:	Very good question, Eric. So security has always been a top concern when it comes to businesses to adopt cloud. And here from IBM, we've basically got the same view as the customer does

and have invested a lot into the security aspect of securing that cloud as well as helping our customers move to it. When I say that, when you look at our security delivery models and across, we talk about federated identity, entering controlled context, firewalls, service level management, and we have weighted solutions out there which helps into it. Whether it's from access management, to securing your VMs across the board and how you have compliance across industries as well as government compliances. So those are a complete portfolio of security, tying it back into our integrated service management helps cut costs on how you can secure your cloud and take it to the next level. We also look very closely at security when you talk about multi-tenancy, right? I mean you don't want Coke to see Pepsi's data, in a very basic form of saying it. So similarly, even if you have a private cloud enabled, there are reasons where you would not want one business or unit to be seeing other business unit's data, modeling, VMs, whatever. So we work tightly into it, we provide a multi-tenant solution, to basically address those security concerns. Eric Green: And sort of along those lines, I mean you touched on a handful of things that I know IBM is using to approach these different issues when it comes to dealing with cloud and virtualization. Are there any other offerings that sort of set IBM away from the pack as you, I guess, break these different pieces down into services? Murtuza Choilawala: Definitely. So when we talk about cloud, it means different things to different people, right? And depending on which industry you are, it depends on what services you're providing. Having said that, it is also critical how does cloud service delivery take place across the board? But if you're moving in from an enterprise private cloud or you're doing a public cloud or a heterogeneous hybrid environment where you want a hybrid cloud – having those and then moving up in the stacks of cloud, whether it's infrastructure as a service, platform as a service, software as a service, all business processes as a services, IBM plays in all the spaces. We provide within our Tivoli portfolio all the infrastructure of the service, where we do cloud service delivery, service assurance, availability, security, form a platform as a service, looking across our workload deployers and in organization platform services

delivery and then moving into the IBM cloud, IBM managed clouds as well as IBM smart clouds, where we provide software as a service. We also have solutions from Tivoli, doing Tivoli Live

	as software as a service. So Eric, we are across the board innovating all the time to be playing in different places at different products, depending on the business need and customer's need.
Eric:	Interesting. We have a few minutes left. You know, our listeners really like the sort of concrete and how's this thing working. So could you give our listeners perhaps some examples?
Murtuza Choilawala:	Absolutely. So when we do things like – say we talk about cloud service delivery, we provide solutions like IBM Service Delivery Manager, which comprises of Tivoli uses in accounting which is a T enabler for pay as you go services, allowing customers to take measure on usage, utilization, providing real time monitoring, service assurances, capacity planning, all these aspects of it.
	Now when you go back and look at one of our financial customers out there, they had – they have a defdes(?) environment where they have 8,500 servers and they usually have provisioning requests of almost 1,500 to 15,000 servers a year, addressing the 20,000 users in just the deb environment. They consider the defdes also a production enabled environment, but looking at that service delivery to provide a virtual machine in a highly virtualized environment, this should take 45 days.
	With implementation of ISCM Solution, which is the IBM service delivery manager, and incorporating the model, right, with delivery service automation, the usage in accounting, monitoring, and tying in with fixed solutions in their life cycle management, they have been able to reduce from 45 days to 20 minutes to get this service done. Not only that, but I talked earlier, when we started the conversation on operation expenses, they were also able to bring down their administrative costs from 1 admin for 50 servers to almost 1 admin for 600 servers, which is a huge business impact, when you look at the savings from a customer's perspective, you have reduced the operational cost.
Eric Green:	Excellent, well thank you very much. And indeed, thank you so much for joining the show.
Murtuza Choilawala:	Thank you, Eric.
Eric Green:	Thanks for listening. Please do visit IBM.com/software to connect with our experts, continue the conversation, and to learn more

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