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INTERNET OF THINKING

VIDEO TRANSCRIPT

CREATING INTELLIGENT DISTRIBUTED SYSTEMS

Dominic Delmolino: Hi Paresh. Thanks for coming to joins us as we talk about Accenture Technology Vision for 2018.

There are five trends in that technology vision. And today, we're going to talk about 'Internet of Thinking'. Which I guess for me, is kind of the extension or natural progression of what we use to call 'IoT'. And so, it sounds like in this trend, in the Internet of Thinking, they're making those edge devices more powerful, more perceptive, they can prioritize what they look at; maybe more intelligent. I know you've been spending a lot of time in this area and doing some research there. As one of our experts, what are your thoughts about this trend and how do you see our clients kind of adapting to it?

Paresh Patel: When I think of Internet Thinking, there's two key philosophies that come to mind. The first I'd like to talk about is the edge computing. The devices are getting more sophisticated, more powerful and balancing that out with what you do centrally or cloud-based. There are scenarios where you could be saving lives or securing your infrastructure by using this technology. But there's also situations where you want to pull this data back and be able to deep-dive and do analytics on it. So, that's one key area that I think about. The other, is this concept of understanding your surroundings. So, when we're young and learning to read we come across a word we don't understand, and we're told to use context, to understand what's context.

I think we need to apply that same principle to this type of computing. So, we're interacting with a user, but we also need to understand what's around that user to better understand his or her actions.

DD: It sounds like I'm also seeing the fact that most of these devices are multi-sensor, multi-functional, right? So, in the past they might have had this one sensor, now I've got a sensor package or one device that can maybe assemble that context you're talking about from different kinds of things. So, it sounds like I need a lot more horsepower down there. Is that possible nowadays?

PP: Absolutely. The computing power is getting cheaper, it's getting more sophisticated. Some of the trends that we're seeing in cloud computing are also coming to consumer-rated devices as well. So, it's definitely becoming more powerful. It's really putting it all together, right? The previous models that we've worked with, where you have a system and a user, are becoming blended together, right? You don't know where the user really ends and where the system begins now with wearables and all sorts of devices. So, it's beginning to put all the pieces together.

DD: Do you think also now, since there's more horsepower there, can they work together? Do we have like an integrative approach where there's static devices and then there's mobile devices that kind of work through a landscape and they talk to each other and share information?

PP: Absolutely, and I think there's been an evolution, right? We saw some of this with the first rounds of the smartphones, then you started having these Bluetooth connected devices, where there's some processing

happening on the Bluetooth device and then it was tethered to these smartphones, which was the conduit to carry the information back. And so, that's a constant evolution where you're seeing those types of advancements to these types of sensors.

DD: Sure. I could see a scenario where there's a smart city that's interacting with my smart car so, as I drive into the city, that city is giving me information about road closures and other issues, and the city is talking to my car, but these internet devices are doing that negotiation autonomously. Is that how you see you see it?

PP: Right. It's almost a system of systems interacting with each other. So, you've got things focused on you and are monitoring you, and you've got things that are happening in your car, and monitoring your car, at a city level. But then there is going to be events that interact with one another. You're driving behaviors will affect how the car responds, that would affect the maintenance that's being communicated, and so on and so forth at the city level as well.

DD: As you're filling out your body of knowledge on this, what questions do you still have that you think fill in the gaps around this?

PP: I think the biggest is around the security. How to be able to wrap all these things under one roof and be able to secure it.

DD: Also, something you said earlier about securing the devices and cyber-aspects of this; I'm wondering if there's a way for devices to help each other out? So, if I've deployed several of these devices in a location and one of them was under attack, can the other ones help? Can they help reboot it, refresh it? If somebody says, 'Help I'm under attack', one of these devices raise it hand and say, 'Hey, I need some help here'.

PP: Sure. I think there are a number of ways to look at it. Like you said, potentially helping and rebooting that device. But the other thing is to have, sort of network monitors. To be able to look at various streams of traffic and say, 'Okay, this one feels like it's compromised' or we've gotten an indication for some reason so, let's just ignore that traffic and we have a field of view. One screen's not going to destroy what we're trying to accomplish.

DD: Right, that's a good idea.

PP: Great.

DD: Well thank you so much. I really appreciate your point of view on this and perspective and it really sounds like a great topic to explore.

PP: Great. Thank you for having me.