

Episode 5:

Guest: Rick Lievano, Microsoft

10/13/20

Speaker 1 00:00:04 I'm Danielle Royston and this is telco in 20.

Speaker 1 00:00:18 All right, guys. It's time to unleash the "Der." So you all know how much I love Elon Musk and his mission to Mars. And to accomplish that mission, he knew he had to build a really big rocket to get there. Do you know what he calls his rocket? He calls it the B F R you know what BFR stands for, right? I think he tried to get everyone to think the F stands for a Falcon, but we all know what it really means. And just like Elan, you telcos out there need a BFC to help you achieve your goals as well. So we're kicking off the next series on the podcast and I'm calling it the BFCs. Yes, the big fucking clouds. Can I say that on a podcast? Oh, well, fuck it.

BFCs are the big fucking clouds. We're going to take you inside the big three cloud vendors, Amazon's AWS, Google Cloud Platform, and Microsoft Azure, to help you navigate and decide which hyperscaler is right for you, and also give them the opportunity to tell us why they think telcos should pick them as their BFC. Today, we're talking to the carrier-grade-cloud people themselves. We have Azure on the podcast, so let's take 20.

Speaker 1 00:01:33 Rick Lievano is worldwide director of industry technology strategy at Microsoft. Rick, welcome to our podcast.

Speaker 0 00:01:41 Hey, DR. Nice to talk to you again. Thanks.

Speaker 1 00:01:43 Awesome. So I guess to start out, you know, your title is worldwide director of industry technology strategy -- sounds like a really big job. What are the kinds of things that you think about and focus on each week?

Speaker 0 00:01:58 Maybe a little bit of background, because a lot of people don't know that Microsoft indeed has a telecom practice, right? So we do. And I'm part of this corporate team that's really focused on the success of our telecom customers all over the globe. I really work with the Microsoft field sales teams. I also work closely with our product groups, but maybe most importantly, I really work with a very large ecosystem of telco partners. And these are the folks that are really building the telco specific solutions on the Microsoft platform. So, you know, that Microsoft know we're really a platform company. That's our core focus. We really rely on either customers or partners, like CSG, like Netcracker, Amdocs, that really build those solutions on top of our Azure platform. And so I kind of see myself as this conductor of

this grand telecom orchestra at Microsoft, right. Getting all the various groups to collaborate and then connecting the dots wherever necessary.

Speaker 1 00:02:53 Yeah. That's awesome. I think I read in your LinkedIn profile that you've been with Microsoft for almost 22, which is crazy and awesome. And so what keeps you there and keeps you excited about, about the Microsoft future? Are there like particular projects that are going on that really gets you jazzed and proud to represent that organization?

Speaker 0 00:03:14 Oh, absolutely. Uh, so what gets me out of bed every day? I mean, we had Ignite last week, we had some really cool announcements around Azure Communication Services, right? So you can, it's cool. I mean, it's basically our, um, communications platform as a service. It's going to enable us as developers to really start adding all these rich communications capabilities and features to their apps using really, really simple API. So, drop it in and it works. Just drop it in. Yeah. Another cool thing was Azure Orbital, the LEO stuff. It basically allows you to connect and communicate and control the satellites, start processing all the data that these little gadgets generate and then be able to just pump that data right into Azure. Right? So you can start processing that data immediately start going through analytics, you know, all your geospatial tools, machine learning immediately, right from the get-go.

Speaker 0 00:04:03 So another cool one, another nice service that I really like on there called Azure Cognitive Services. These are really services that make AI approachable by anyone. You don't have to be a gear head, a propeller head, really any web developer can start using AI within their applications because these are just APIs. And so with cognitive services, it really enables your apps to see, to hear, to speak and really understand language. And they're super, super easy to use. We provide some base models, machine learning models that you start with, but you can really easily extend them to behave however you want it to address your own business.

Speaker 1 00:04:43 Well, I think what people fail to really realize are all these sorts of drag and drop capabilities. There are these little building blocks. That's exactly what they are, right. They're not snippets of code, but they're like little blocks and I'm just going to grab this off the Microsoft shelf and ...

Speaker 0 00:04:59 Yeah, that's exactly right.

Speaker 1 00:05:00 That's the one thing that I still don't think people in telco really understand, get your stuff up there and then start to use these building blocks to change and learn and grow. And you know, I like to say standing on the shoulders of Microsoft, right? Like

one of the best technology organizations in the world and I get to leverage your dev team for my benefit. And so I keep evangelizing that, you know, until I'm blue in the face, I'm always the crazy person and talking about public cloud, but that's where I think it's not the hardware that's the advantage of public cloud. It's the software, it's these building blocks you can leverage.

Speaker 0 00:05:38 We hear you loud and clear. You're absolutely right. Yeah.

Speaker 1 00:05:41 Yeah. I'm so excited. And so late September Jason Zander, you know, EVP for Azure, put out his big blog post on Azure for Operators that you guys want to be known as carrier grade cloud. So if you're in the room with a bunch of telco execs, how do you explain that to me?

Speaker 0 00:06:04 Does it just sound cool. Azure carrier grade cloud. Okay.

Speaker 1 00:06:07 It's perfect. It's great. Branding. I love it actually. Yeah.

Speaker 0 00:06:10 It really illustrates the heavy investments that we're making in telco. No question about that. As you mentioned, these are great acquisitions. And with them, we're really gaining all these telco-specific functions, but really more importantly, I think we're getting an infusion of telco DNA straight into our Azure team, right? So, I mean, that's a clear differentiator across the industry. We have now over 200 telco engineers, not cloud engineers, not software developers that understand how to build for the cloud. These are software engineers that know how to build for the industry. They deeply understand telco. And if we marry that telco DNA with all of our existing expertise in cloud, I mean, you're going to get capabilities that no other provider can match, and you really do get the carrier grade cloud.

Speaker 1 00:06:54 So are there three or four other reasons that sorta separate you guys from AWS and GCP?

Speaker 0 00:07:05 Yeah, I don't think there's three or four. There's probably 20, but I'll try to narrow it down first. Uh, we really do want to partner with telcos, right? We want to bring the power of the cloud and the edge to their networks. And we have a really broad edge set of products that are really relevant to what telcos do. And what really should be clear is that we can't make our vision a reality without telcos. We need them. And so partnering is key. The second one is that we do want to work with telcos to help them around reducing costs, but maybe more importantly, around increasing revenues. We know that collectively Telco's are probably spending upwards of a trillion dollars on deploying 5G network. I mean, that's a

bundle of cash and we know that traditional devices are just not going to cut the mustard, right?

Speaker 0 00:07:52 It's not gonna pay the bill by upgrading your subscriber base from 4G to 5G. So, you know, there's a whole new suite of value-added services that telcos need to deliver. You're going to be able to do it with much greater cost efficiency and with a lower capital investment that you could ever do before. This, I think is the most critical component of the model is that we're really doing this under an umbrella of trust. Right? And, and not only as it relates to security and privacy, but also around as a trusted partner who doesn't compete with your core business as a telco, right? So again, we're a platform company, you know, as a telco, it's your customer, it's your service powered by our technology. And that's a key differentiator as well.

Speaker 1 00:08:33 So I really love to hear if you have any examples of customers using Azure that have taken a hairy legacy application, moved it up to the public cloud, and they're just having this like Nirvana, you know, angel singing experience that's really dramatically cut the cost, huge ROI, massive business speed ups. Do you any of those examples that you can tell us today?

Speaker 0 00:08:56 Yeah, I'm really a big fan of AI and using AI to streamline processes, particularly around customer care. We've had some stories with Telefonica. They have a chat bot named aura and aura is much more than just a chat bot, right? It's cognitive intelligence around everything that a subscriber could do with Telefonica services. So not only can they use it for customer care, you know, how's my bill, but also support issues. You know, my Internet's not working. They have a digital agent like an Alexa that's powered by aura and Microsoft AI. And then they can use that to interact with their Telefonica services, even TV services. If they in fact developed an entire application platform where developers can really start creating these apps for this device, um, movie star home is the name of it. So that one is, is really cool.

Speaker 1 00:09:41 This is a really big idea, right? Which is starting to use the machine learning or the AI that, you know, the chat bots that kind of predict your problem and help customers. Because if there is a universal human experience, it is that it's really hard to do business with telco. My mom, her internet went down here in the United States and she would rather call me and have me troubleshoot it, then call her provider. And so I think this is a really big opportunity for telcos, right? To come out as the leading provider of awesome customer experience. And so do you have visibility when it doesn't go, right?

Speaker 0 00:10:25 Yeah. I mean, if you referring to, to chat bot project, specifically, some of these have been underwhelming because again, they've been too simple.

Speaker 1 00:10:31 Yeah. I think you have to really spend good time. Like, I mean, sure. You're going to get the easy ones. Like what's my bill and how do I pay it, but to make it really valuable, there is a little bit of a learning curve for the chat bot, but once it's working and you really trust the technology, the results are huge.

Speaker 0 00:10:49 And we've done this not only with telephony, but Vodafone, Toby powered by our platform, telecom Italia teams that have Angie that's another example, customer care, they all have names. And for the most part, they're all going to be powered with Microsoft AI. So it's a really exciting, and maybe most importantly, again, we also have this ecosystem of partners. We actually have partners that have developed bot solutions specifically for chat bots, right? So from day one, you can already start addressing 4,000 plus intense that are specific to a telecom operator across multiple languages. So you don't have to build that language model from the ground up or from zero. Right?

Speaker 1 00:11:25 Exactly. Exactly. So if you guys could name drop and kind of brag, what are some of the telecom companies that are Azure customers?

Speaker 0 00:11:32 I mean, just about everybody's using Azure in some way, shape or form. We did announce partnerships, deep partnerships with ATT with NTT DoCoMo, Reliance, Geo Telefonica Telstra - a lot of big tier ones. And they've also selected Azure as their preferred cloud, which is great for us.

Speaker 1 00:11:54 And I saw you guys did a little experiment with a data center underwater. So what can you tell us about that crazy experiment? Are you guys getting ready to move it into space?

Speaker 0 00:12:07 It doesn't sound like the friendliest environment for data center, but Hey, neither does the bottom of the ocean. Yeah. There are no humans. Right. But that's actually a good thing. We're running a data center. So project Natick is what you're mentioning and yeah, that's a really exciting project. That's part of Microsoft research and really their objective was to evaluate the feasibility of underwater data centers. You know, like in the U S about half of the population is within 60 miles within a hundred kilometers from the ocean, from the shore. I think one of the really cool findings is that when they develop this capsule that, you know, they had underwater, they actually had a duplicate version of that, which they placed in a traditional data center. And this actually, this surprised me, the Natick data center

underwater had one eighth, the failure rate of the same set of components that were on land so far.

Speaker 1 00:12:58 Experimentation is super interesting. Right. But I think we're, we're getting to the point where we're going to start talking about a global telco.

Speaker 0 00:13:06 Absolutely. And I mean, imagine telcos should absolutely be taken advantage of these capabilities.

Speaker 1 00:13:13 Right. Maybe space is next. I mean, maybe not in my lifetime, I turned 50 and in like a month and a half here, yuck, but Elon Musk is working like crazy to get us to Mars. Right. We're going to need the internet in space. We're going to do data centers like on the moon. Right. And who's going to do that. So it's cool to see you guys experimenting. I think it's really innovative and it's fun. I think it's really fun. So you guys pretty well known one, the JEDI contract from the Department of Defense and that was like a pretty big battle. Can you just like, describe what that was about

Speaker 0 00:13:48 This contract was for the joint enterprise defense infrastructure, which, you know, JEDI coolest acronym ever.

Speaker 1 00:13:56 Yeah. Star Wars. They caught my eye because it was Star Wars.

Speaker 0 00:13:59 It's really a contract to deliver, you know, all the latest advancements in enterprise cloud to the DOD. It was priced at over \$10 billion. Um, one of the largest, if not the largest single cloud contract that that's ever been issued, if you think nothing else, if DOD thinks that Azure is scalable and secure enough for all of its, you know, mission critical and highly classified workloads, I think it's pretty fair to say that hash is going to be sufficiently secure for the carrier workloads that we normally handle.

Speaker 1 00:14:30 I was just on a panel last week with that was the first question of like, is it secure enough? And I'm like, guys, banking's using it. The US government's using it, you know, banging my head on the wall. I was in a meeting, it was one of the last trips I went on before COVID hit, someone said, well, all the public health vendors are American companies. And we're concerned about the geopolitical risks of moving our stuff to the public cloud. I don't know that our government is really helping us on this. For example, the Tic Tok deal, um, you know, the very public Huawei ban. I sort of think it's a little bit dangerous. Like where do you draw the line where government is kind of intervening with these like private sector businesses

and telling them who can own them and who can run them. And so, I don't know if you have a point of view on that.

Speaker 0 00:15:23 I mean, I'd even add the Patriot Act to that, right. That's really caused some fear across some telcos outside of the US, I mean, I'd have no specific expertise or knowledge around that. However, I think it was broadly reported that we did meet with the White House related to alternatives to Huawei. One of the largest technology companies, what can we do to ultimately help basically have a national sponsor for these types of workloads? Our legal department has been, you know, a voice for privacy and for sovereignty of data, uh, working with governments outside of the U S ensuring that again, we will protect that data as their local laws require us to do. We've actually sued the US government already, related to some subpoenas that were issued for data outside of the U S. So, you know, we are actually fighting on behalf of our customers there, uh, and we don't shy away from that battle. Right. And we've made it very clear that we are the number one company with regards to security and privacy, and that will continue to be the case.

Speaker 1 00:16:26 Yeah. And I think that's really important for people to hear that you guys are fighting those fights. So that's awesome. So you've been awesome today. Thank you so much for coming onto the podcast and sharing your perspective of how Azure is trying to win over telco. Like I said, our audience is telco executives, and so someone listening, wanting to get a hold of someone at Microsoft or Azure, what's the best way to do that.

Speaker 0 00:16:51 So most of our enterprise customers, most of our telecom customers are assigned an account executive, but you can also reach out to my team telcoindustry@microsoft.com. Uh, we'll certainly connect you with that account executive. If, uh, if you don't know them directly, always happy to answer questions and to have these kinds of conversations, you can find a lot of information on our website, Microsoft.com/telco. That's an easy one. We do have a lot of news that, that are published, uh, daily on, on our Twitter, the handle is [@MSFTtelecom](https://twitter.com/MSFTtelecom).

Speaker 1 00:17:20 Yeah. We'll put those in our show resources so people can click on those links. That was super awesome.

Speaker 0 00:17:25 Thanks for having me. This was a great, great session. And again, thanks for the invitation.

Speaker 1 00:17:33 Thank you so much. Stick around because we're ending each podcast with a telco in 20 takeaway. I have 20 seconds to tell you something you need to know. So I just

published a *Time to Go Public, the essential steps for complete cloud control*. And in it, I described four steps for moving to the cloud. You need C Level buy in. You need to set your Objectives, Upskill your team, and just Do it. I even turned it into a mnemonic. So make sure you check it out on my website at telcodr.com. So I want to give a huge thanks to Rick and thank you to all of our listeners. Don't forget to hit that subscribe button, share our podcast with your colleagues and let's connect on LinkedIn and on Twitter at telcodr.com. While you're there, sign up for our email newsletter@telcodr.com. That's T E L C O D R.com ... In case you haven't noticed, I really want you to sign up for my email newsletter. We've included a link in our episode resources, and you can text me too at 925 telco dr. Later nerds.