DR: [00:00] The key here, I think with network APIs is finding the developers.

Shkumbin Hamiti: [00:04] Exactly. I think that's the holy grail, if you wish. The developers are the real customers of the network APIs. We need to win their hearts and minds. We have to get the network APIs to where the developers are and the tool chains that they are using.

Announcer: [00:23] This is *Telco in 20*, a podcast that helps Telco execs achieve a competitive advantage with AI and the public cloud. It is hosted by Danielle Rios, also known as DR. Today we're talking to Shkumbin Hamiti, Vice President of Network Monetization at Nokia.

DR: [00:42] Hi guys. I'm DR. Network APIs are making big waves in telco. McKinsey & Company expects them to unlock $300 billion in new revenue in the next four to six years. Not surprisingly, telco's biggest vendors are racing to help operators grab a piece of the pie. For example, Nokia has launched Network as Code, treating network capabilities like cloud services with developer portals and sandboxes. Ericsson countered with Aduna, a joint venture where major operators like AT&T, Verizon, and Deutsche Telekom pull their APIs together in one massive marketplace. These two vendors are making radically different bets. Nokia is betting on being the behind-the-scenes enabler that helps individual operators plug into existing highly popular developer ecosystems like Google Cloud. Aduna is betting on creating one operator-owned marketplace where the biggest telcos sell their APIs as a collective. Whatever approach wins, the real challenge isn't building APIs or marketplaces or ecosystems. It's convincing millions of developers to change their habits and actually use these tools instead of whatever they're already comfortable with.

[01:49] Today I'm talking with Nokia's Vice President of Network Monetization, Shkumbin Hamiti about the massive opportunities and challenges around network APIs for our industry. We're digging into how the Network as Code platform is trying to solve the API puzzle, real commercial deployments that are moving beyond proof of concept to monetization, and what it'll take for telcos to unlock network APIs' game-changing potential. So let's take 20. Shkumbin Hamiti is Vice President of Network Monetization at Nokia. Hi Shkumbin, welcome to Telco 20.

Shkumbin Hamiti: [02:25] Hello, DR. It's a real pleasure to be part of this podcast.

DR: [02:29] It's going to be super awesome. We are going to talk about one of the biggest topics in the industry, network APIs and what Nokia is doing with that. And so let's talk about your Network as Code platform, which launched in September of 2023. And from what I understand, you've now grown it to over 50 partners. Operators are looking for ways to generate more revenue from their networks. So tell us a little bit about this product Network as Code and how it's helping operators shift to becoming more innovative platforms.

Shkumbin Hamiti: [03:01] Yeah, actually what you just talked about becoming an innovation platform is what we are seeing really happening. We are at the turning point for the whole industry overall. And I believe this moment of truth is very real.

[03:15] As you know, for many years, operators have been positioned as providers of connectivity, which is obviously essential, but recently has been commoditized. And what we are seeing right now is a fundamental shift. Operators are now beginning to reassert their role, not just as infrastructure providers, but as a platform for enabling innovation that you mentioned. And at the heart of this I think is the realization that the networks are now full of intelligent context and capabilities that if made available to various players out there in the industry, it'll unlock enormous value. That's our belief. And especially if you make them available in a way that the developers are really consuming them via API's, then you will create value for multiple players in the ecosystem, which will then drive the value capture opportunities for operators. And that's exactly what we've been doing with our Network as Code platform making these advanced network capabilities as easy to consume as cloud services. And in just very short time, we've grown to over 50 partners. And in addition to that, we've made what your mentor calls a brainy and bold move.

DR: [04:28] Hell yes.

Shkumbin Hamiti: [04:29] Acquiring an API specialist, Rapid, which have significantly accelerated our ability to scale. Rapid is a company that is a leader in the API economy, and through that acquisition we have now access to a platform that is now used to operate the world's largest public API hub. And that gives us that

technology base and developer insights, which is extremely valuable and currently unmatched in the telecom world.

DR: [04:56] Yeah, well, there's a lot of stuff going on in this area. Ericsson has, I'm going to say similar, but you're probably going to correct me, a unified network API platform that they've partnered with several telco operators called Aduna. And so how is what you're doing with Network as Code either similar or different from Ericsson's approach?

Shkumbin Hamiti: [05:15] Good. So first, I know everyone calls it Ericsson's approach, which is a little bit unfair to the CSPs because I know firsthand that that activity has been driven by the CSPs. The CSPs selected Ericsson as a partner in that endeavor. But the whole activity around Aduna proves that the telecom industry and CSPs specifically are very serious in addressing this opportunity. And this is very good news for all of us, encouraging overall business opportunities here. Our platform works on addressing what we perceive to be the real challenge for the industry, and that is how do we get the developers to consume these capabilities?

DR: [05:54] Using it.

Shkumbin Hamiti: [05:55] How do we work under their terms? And the network level integration from what I can see Aduna is working on solving is something that is, and I don't want to sound too simplistic here, but I think it's relatively easily solved, something we are doing continuously. So we are adding CSPs to our platform almost every week. We have exceeded the 30 CSPs as part of our partnership pool of CSPs. So the real problem is how do we get those developers to consume the capabilities that we are having here?

DR: [06:23] Yeah. Well, I do agree that that is a big key to network APIs. I'm going to use the word network, not in the sense of a telco network, but you have to have the APIs. They have to be easily usable. But then the other side of the network is the developers that are consuming them. So if you have APIs that no one uses, they're useless, right? They're not monetized. So the key here I think really is developers, we'll talk about that in a second. And so you said you had 30 CSPs that are coming onto the platform, so it sounds like you're getting real traction with real operators starting to use it. So can you share some of these

stories and what are the use cases that are really driving that adoption, the early traction that you guys are seeing?

Shkumbin Hamiti: [07:04] Yeah. First of all, just as you point out, this whole space is at an early stage. We have gone through a range of proof of concept deployments, which we invested time and effort together with CSPs to show the art of possible. And we have moved beyond proof of concept from experimentation to monetization. Take Deutsche Telekom as an example, we have an agreement with them to expose a couple of APIs, SIM swap and number verification APIs, which are critical in industries in FinTech, digital banking and e-commerce for fraud prevention.

[07:38] These are not hypothetical use cases. They solve real problems and problems that unfortunately enterprises are facing today. And by offering those APIs to such vertical industries, they can directly integrate them as part of their risk and identity management workflows. That's why we are moving on to the commercial deployments. But take another example with Globe Telecom, we are enabling banking grade APIs that integrate with financial institutions in the Philippines. Again, a high value use case with direct ROI, lower fraud, better compliance, improved user experience.

DR: [08:14] Perfect.

Shkumbin Hamiti: [08:15] Yeah. We've also demonstrated some really cool use cases working with a company that is a leader in remote vehicle solutions. The company's name is Elmo. We demonstrated how the quality of service on demand plays a mission-critical role for enabling remote driving. We demonstrated that in Mobile World Congress, you could drive a car from our booth. The car was in Malaga and then in the GSMA booth, the car was in Espot and they were all going through the Network as Code platform.

DR: [08:44] Cool.

Shkumbin Hamiti: [08:44] So these are some of the use cases that we are doing, but there is still a part from the POC to the revenue. There's still many steps that we need to take and that's what we are working within our industry to move along.

DR: [08:55] Well, let's talk about the revenue. My buddy Ferry Grijpink over at McKinsey is totally into the network APIs and they put out a report that says the network APIs could unlock up

to $300 billion in connectivity and edge computing related revenue for operators while generating an additional $30 billion of revenue from the APIs themselves. And so when you guys look at this opportunity, do you think it's a $300 billion market? Is this a big idea that's going to translate into real revenue for operators?

Shkumbin Hamiti: [09:24] So look, there's always a range of these kinds of forecasts when we have these new markets developing, but let's not lose track of what is really important here. The Telco industry needs to take those first steps to open up networks, educate and engage developers in various verticals and continue building those capabilities based on the feedback that we receive from the developers. If we do it right this time, the change itself will open the door to capture a much higher proportion of the value that connectivity technologies inherently create. So I think it's really important that yes, we can go and look at all kinds of reports out there. We can reach a consensus on a number, but I think we are missing the point because if you don't do the steps that I'm talking about, the opportunity will disappear.

DR: [10:11] Well, I think what we were talking about in terms of this network concept is that obviously the APIs have to work and you have to offer a great experience in a way that they're used to consuming them. But the key here I think with network APIs is finding the developers. So Twilio spent more than a decade. They have 10 million developers. Vonage, I think there were a million developers. And then when you look at some of the hackathons that we've done, they've been very small numbers. So the key is how do we bring in the developers to write code in enterprise applications that get locked away for decades, forever?

Shkumbin Hamiti: [10:46] Exactly.

DR: [10:46] And so I think for the telcos, one of the key things is really breaking it into the enterprise developer community. Every time I go talk to telcos, they're like, "We don't know how to sell this." And I'm like, "Well, you better figure it out. You guys are betting a lot of money." And so who's building the developer community? Who's responsible for that? And every time I ask someone, the vendors are like the operators. The operators are like the hyperscalers. The hyperscalers are like, "Well, if we do that, we'll just keep the revenue." That's the key. And so how are we going to get the developers for this?

Shkumbin Hamiti: [11:16] Yeah. And exactly. I think that's the holy grail, if you wish. The developers are the real customers of the network APIs, just as you say. We need to win their hearts and minds. Otherwise, the model doesn't scale. But what we think is really important is we will not be able to move developers from one ecosystem to some telco ecosystem. I think we have to do the opposite. We have to become part of the digital ecosystem creation, get the network APIs to where the developers are and the tool chains that they are using and not ask them, "Oh, please come to the-"

DR: [11:54] A new place.

Shkumbin Hamiti: [11:55] "... holy world of the telecom and then consume our network APIs." It'll be difficult, not impossible, but very difficult. So that's why we understand that we need to drive CSPs to act as platform companies, not as just some B2B infrastructure provider. And we understand that bridging the gap between telecoms and software developers requires a fundamental shift in the way we deliver those network APIs. You mentioned hackathons. We have been investing quite a lot in hackathons. In Mobile World Congress, we drove the biggest hackathon, which was running on all three networks in Spain on a live network.

[12:28] And the investments we are making, both educating developers, but at the end of the day, we need to attach to where the developers are. And that's what we are doing actually with our Network as Code platform. We have a partnership with Google Cloud. Our APIs are on the marketplace of Google Cloud. We have a partnership with CPaaS vendors, with Infobip notably in promoting APIs and network APIs to their developers as well as to our developer base. So we have to just be part of where the developers are. And as you pointed out, eventually an enterprise developer utilizes a network API that gets part of some manufacturing process that no one dares to touch for decades.

DR: [13:05] Forever.

Shkumbin Hamiti: [13:06] That's the beauty.

DR: [13:07] And that's the key. And that's super hard, but there's thousands if not millions of developers, at least for now before AI disrupts everything. And it's a global effort that the telcos need to work together on. It's not a telco-by-telco thing, but I

think the strategic asset for telcos are the developers. And I don't know that I would give that up to a hyperscaler to own that group. You want the developers writing our code and helping the telco industry advance. This is the one time where I'm like, "Don't help the hyperscalers. Help yourself and own the developer relationships, and you're going to have to go talk to enterprises and figure out how to sell APIs. You don't know how to do it? Go figure it out."

Shkumbin Hamiti: [13:47] Good point. And also when you talk about being cloud-native, it requires a strategic and cultural shift. It's not only technology.

DR: [13:55] Yeah. I mean, everyone sort of talks about how telco moves so slow, and we're in our comfort zone if we know how to run networks this one way on-premise or a closed network that's not open. And then at the same time, we have this big problem of our revenues being stagnant to shrinking. What are we going to do? But again, it's hard work. I wish it was the easy, awesome days of 1990 where we just had rakes with money and it was awesome, but that's not what it's like. And so I found out that you love to play tennis.

Shkumbin Hamiti: [14:26] Oh, yes.

DR: [14:27] I'm a crazy tennis player.

Shkumbin Hamiti: [14:28] Okay.

DR: [14:29] I'm going to tie it into the network API thing a little bit, which is I don't think people realize how hard tennis is in that it's a little bit like chess because it is super mental. You're alone. There's no timeouts. There's no coaching in your ear. There's no subbing. There's no rest. Chess, it's a mental game. So is tennis, but then tennis adds in the physicality. And we just saw one of the most amazing matches at Roland Garros with Sinner and Alcaraz.

Shkumbin Hamiti: [14:59] Oh, that was incredible.

DR: [15:02] And so I think again, with network APIs, we're going to have to go do hard work and it's not going to be pleasant, but you got to go out on the court and go fight for it.

Shkumbin Hamiti: [15:12] Yeah, I agree. And what I find when playing tennis is that you've got to put your mind a hundred percent into that.

DR: [15:20] Totally.

Shkumbin Hamiti: [15:20] Otherwise, you'll immediately see that you're going to lose a point if you are thinking about something else. Here, we have to think developer-first.

DR: [15:28] Absolutely.

Shkumbin Hamiti: [15:29] We have to serve them like they are the most precious customers. That's keeping the eye on the ball. Don't get distracted.

DR: [15:36] I think that's a perfect ending to this conversation, and I'm going to leave it with that. I totally love this conversation. Thanks so much for coming onto the podcast.

Shkumbin Hamiti: [15:44] Thank you, DR. It's been a real pleasure speaking with you.

DR: [15:47] Awesome.

[15:52] Stick around. We end each podcast with a *Telco in 20* takeaway. I've got two minutes to tell you something you need to know. You heard Shkumbin. The key to network APIs is building a large developer network, the user base that adds API calls to their code and generates revenue. But building a developer network is a grind. You need millions of developers, not thousands. And even if you find them, you've got to convince them to adopt your APIs instead of whatever they're already using like Twilio. That's expensive, time-consuming, and frankly, super hard. But I have a breakthrough idea for you. Instead of chasing human developers, target their AI coding assistants. When AI writes code, it pulls from whatever has the best documentation and examples available. I'm talking about GitHub repositories, Stack Overflow and killer documentation. It doesn't respond to marketing campaigns or have brand preferences. Dominate those information sources.

[16:54] So when developers ask AI to add SMS functionality to their coding project, it will automatically suggest your APIs. Talk about a win. Now, do I have this all figured out? Not yet. Find the secret sauce and you can have millions of lines of network

API code being generated and generating revenue in no time. Guess what guys? This isn't the only billion-dollar idea I have. Want to learn more DM me on LinkedIn and X @TelcoDR and let's chat it up. In the meantime, tune into more *Telco in 20* episodes. Like and follow, and leave us a five star review. Don't forget to sign up for my game-changing email newsletter on telcodr.com and check out our awesome YouTube channel and hit that subscribe button. Later, nerds.