DR: [00:00] I'm Danielle Royston, and this is Telco in 20.

[00:02] MWC24 is a month away, and we're coming up on a year since the GSMA announced its Open Gateway Initiative. What started out as a cohort of 21 operators has now grown to nearly 40, with the likes of AT&T, Telefonica, and TIM Brazil being part of the group. While I'm super excited about Open Gateway's potential, it's clear that the industry hasn't figured out how to monetize these network APIs to our full advantage. See, the key to monetizing an API economy is doing the hard  yards to build your own developer community. This isn't like the movie *Field of Dreams*—just build it and they will come. You have to actually do the work to attract coders—the users to your ecosystem. One problem I've seen is that telcos are already starting to see their advantage by depending on the hyperscalers to attract developers.

[01:03] While this will bring developers to use the APIs, it means that Telcos will give up the key strategic advantage of owning the community themselves. I fear we'll be commoditized once again like what happened with Twilio and A2P APIs. Who better to talk about this than McKinsey & Company Partner, Ferry Grijpink? He spends a lot of time with telco leaders talking about how to monetize their networks. Today we're going to dig into his thoughts on Open Gateway, his advice to CSPs on how to monetize network APIs, and whether or not it's important for operators to own the developer ecosystem. So let's take 20. Ferry Grijpink is a partner at McKinsey and the global leader of McKinsey's 5G service line. Hi Ferry, welcome to Telco in 20.

Ferry: [01:48] DR, thank you for having me back. Very exciting.

DR: [01:51] I'm so excited to have you back. A repeat guest is always super exciting. And the other thing that's super exciting is that we're all gearing up for MWC next month. And as I reflect on what happened last year, it's been a year since GSMA announced their Open Gateway Initiative. And if you recall, Open Gateway provides a framework of common network APIs to enable developers

to programmatically add connectivity to their services and applications. And so, my first question to you is what do you think about this initiative and how do you think it's going?

Ferry: [02:20] I think it's a massive deal, a really big deal. You saw the people they rolled out to announce it. It was the CEO of Telefonica, the CEO of Orange. We had the hyperscalers. We had Google. We had Microsoft actually commenting on it because, don't forget, we put hundreds of billions of dollars in the networks of last year, especially in 5G. And if you look, very little additional revenue came out of it. So finally, with Open Gateway developers, tech companies can control the capability of the network, and billions went into building better capabilities and now people can start to use it. So, we hope actually that a lot of the promise of 5G will materialize when Open Gateway scales. And I was one of those people in 2019 that said "5G could have one or two trillion of impact." Now hopefully with Open Gateway that impact really gets unleashed.

DR: [03:06] Yeah, that's the big question of the industry. Like you said, the hundreds of billions of dollars of investment and how we can get that ROI from investing in 5G. And so, my next question to you is you've been talking a lot about 5G monetization and you see a lot of opportunity in network APIs. So do I. So when you talk to telco execs about generating revenue from network APIs, what is your advice for them on creating a monetization strategy?

Ferry: [03:32] I think there are two ways to think about 5G monetization with APIs. So, number one is use those APIs to create SLAs, service-level agreements around network quality. Because some of these functions like drones or like cars which need to be remotely steered, those actually need SLAs and now they're not available. That's one area. The second area, you unlock a whole bunch of information of the network. Things like location, things like what type of SIM are people using. So in my mind, if you look at network API monetization, it's basically SLAs and it's basically that type of information you get. And the beauty for telcos of course is whatever way it's going to happen,

their additional connectivity generated by network APIs will always end up with them and they will monetize that even without doing anything.

DR: [04:16] And that's really different than say Twilio, which has been a pretty basic programmable connectivity. I think what you're pointing out there is a differentiation that the telco can bring, which is on the quality side that maybe you don't get out of an SMS. And that's really how we're bringing new capabilities to the APIs.

Ferry: [04:34] And maybe DR I think what is so interesting about the network APIs because the APIs alone are only 10% of the value. The reality is if you, for example, do an SLA on connectivity, a lot of the value will be generated by the connectivity. So, the higher speeds are more guaranteed speeds for lower latency. So, the person who will orchestrate the API will only get maybe 10-15% of the value, the rest of the value are for the operator of the telco. And I think that's a bit different than with CPaaS like Vonages, the Twilios, the Sinchs, where the SMS value is relatively limited. So, most of the value ends up with the orchestratoring.

DR: [05:06] The software.

Ferry: [05:08] The software. So in its basic form, if you believe that quality on demand—what everybody's talking about—is the big use case for Open Gateway, operators will anyway get somewhere between 80% to 90% of the value because its connectivity, and the orchestrators, the Vonages, the Sinchs, the Infobips, the Twilios will only get 10% of that. If you look at those information KPIs, that's a bit different, of course, because much more of the value becomes by creating that commonality by the platform. So, when we talk about it, we believe there is about $200-300 billion of connectivity in edge computing in Open Gateway and only 10% of that will be captured by platforms that create that commonality, like a Twilio, like a Vonage, like a Sinch, like an Infobip.

DR: [05:49] Yeah, no, that's a really interesting point, the difference between A2P and CPaaS versus network APIs. And so, now moving on, it's actually quite interesting. I think that the key to monetizing the API set is owning the developer ecosystem, really getting those developers to use your code. Once your code is in their software, it's there forever and it just keeps expanding. I think that's the key, and so for network APIs are you seeing telcos working to build their own developer community?

Ferry: [06:18] Yeah, so we saw before of course, that the people tried themselves, they failed. I think now Open Gateway is a system and therefore CAMARA, which is the language they did together with GSMA and with the Linux Foundation, is a way to make sure that every developer can use the same, and therefore people are doing. You saw there was an announcement, one of the German telcos, were actually now offering some of these APIs and trying to develop a developer community together with a CPaaS player to build those communities. And I actually do believe that they want to, but it's not easy. Most Telcos are pretty local. They're country by country, and most developer ecosystems are globally, so that makes it actually quite difficult for them.

DR: [06:54] Yeah, definitely. I think a lot of people think about indie developers, but I think what's unique about telcos is that they have a long history of relationships with large enterprises, and inside large enterprises are IT developers. And so, I think it would be relatively easy for them to start to build out developer communities, not by trying to attract the mom-and-pop pizza stores to use it, but instead narrowing and segmenting the customer base they're trying to attract and going after large enterprises. That's the way I think about telcos building developer communities, focusing on large enterprises, and leaving the long tail of indie developers to do whatever they're going to do.

Ferry: [07:39] I think that's a very interesting point. So, any segment that use cases for network APIs, for example, there's an autonomous truck company that drives

autonomous trucks, but if the truck breaks down, it needs to have a remote operator driving the truck to a safe place. That is a 5G use case that requires network APIs to guarantee 20 megabits a second for that hour the remote drivers driving it. That, of course, is something that telco can develop. Similar for some of the banking use case because then you see, to sell to a bank, you might need to train some of the big Indian system integrators like Tata, Infosec, Tech Mahindra. Those are much easier for telcos to own.

[08:14] To your point, if you look at the large set of smaller developers, those are more difficult to own because that requires more community building, more dev support, SDKs, the whole shebang, to basically create a product like the CPaaS players have done. The beauty of the long tail, of course, they're more sticky and they're typically much higher margin because they don't have the purchasing power, and therefore you can actually make a lot of money there. So yes, I think people talk about developers, but there are large ranges of different developers and different ways to think about developers.

DR: [08:41] Yeah, well one thing that was a little bit concerning to me, I went out to MWC Las Vegas in September and they had an Open Gateway DevCon and I was in the audience asking about how they were planning to monetize this and how are they going to attract developers into using their network APIs. And they pointed to a slide that showed Azure building a common interface across all the Open Gateway APIs for the developers to use, suggesting that devs wouldn't directly use Open Gateway APIs by each mobile network, but instead, again, run this abstraction layer. So, I think the telcos aren't wrong. Obviously Azure brings a huge developer community and it's already built for them, but I still think that telcos need to own the developer community themselves.

[09:26] Otherwise, I think this puts their network APIs maybe in the same position that they're in with A2P APIs with Twilio, where Twilio's owning the developer community, is running over the top of the networks. And

again, the telcos miss out. Now your point earlier about the software is much smaller on the network API side versus the connectivity. That's where the split of the monetization might fall. So, I'm really curious in what you think about this. But I think they're potentially forfeiting this strategic component of the network APIs that's so critical to their future and may even lead to the commoditization of the network APIs. And so, I don't know if you agree with me, you think I'm wrong, what do you think about that?

Ferry: [10:05] I would never dare to think you're wrong.

DR: [10:09] (laughs) Too nice.

Ferry: [10:10] Because so far you have always been right, even on cloud. So, my sense is the following, number one is of course, like I said, 70% to 80% of value will anyway end up with them. So, the worst thing that could happen to them is Open Gateway fails. So, even if it only succeeds with hyperscalers, they still get maybe 70% to 80% of the value. I do actually believe, and I'm with you, that it'll be much better for the operators if they have a much bigger stake into the network APIs, especially since it's not clear to me that you dump them on an Azure or an AWS or Google Cloud store and people start consuming them. You need to do actually real work for people to do it. And talking about this Developer con on MWC, I was thinking about, and at McKinsey, we have resources and we have developers and architects so, I thought, “Shall I make for fun an application using Open Gateway to demonstrate the value?”

[10:59] And I must admit, I've been thinking under the shower drinking wine to think what would I build? And it's not trivial. So, I think it's actually quite hard work for the Telcos to also help people envision where to use it beyond the SLA and connectivity, which is quite valuable, but pretty boring. But how can you actually create value and start demonstrating the value of these things? So on one hand, you're right, potentially they will be commoditized. But secondly, is there's also a risk that the hyperscalers have trillions of dollars, other opportunities in banking and

insurance and healthcare—will they really spend the time it takes to get developers and people to understand the values of the APIs, even if it all goes via the hyperscalers? I still think telcos, GSMA, Open Gateway need to educate the market on this value. And if I, as an expert, don't necessarily immediately have an idea of what I could build, that is actually a bit of a red flag. So, I think there's way more communication needed, way more conversations with industry, banks, yes.

DR: [11:58] Well, way more business ideas, like you said, valuable problems to solve. I mean I'm sure we can come up with robotic surgery and drones, but in reality there's not huge demand. I mean we need to come up with these wide use cases that a lot of people can use. And again, I would focus it on the manufacturing, the fintech. I think there's tons of financial service stuff that we can do. Your card is presenting, as present, at a location and your mobile phone is in your hometown or at your house. That's probably fraud. And you could combine these two things together and really reduce fraud and it could be super powerful.

[12:34] But yeah, I think owning the developer community, again, from a software perspective, once your code is inside a code base, it's never going to come back out. Even if you start with the Azure APIs and you're like, “Okay, that was good, but then we're going to switch later.” Getting those developers to go back into a working application to change working code, they're just not going to do it. And so, I think we're at a crux right now where, again, friend or foe, you might need to collaborate a little bit to say, "Hey, together we need to solve this problem and build our own developer communities and not just concede it to the hyperscalers to do it for us because it's another missed opportunity." And I definitely feel super strongly about that.

Ferry: [13:16] I think you said a couple of very important things and the one I want to latch on is showing value, because again, we all like to talk about exciting stuff, robotic surgery, but also for example, gaming. We do a lot of

coordination with gamers and they would love to have it, but their willingness to pay is pretty low. So yes, it sounds on paper that gaming is the big use case for low latency, but the reality is that, that is most likely not an area where you can make a ton of money. While this company would drive self-driving trucks, and these are not self-driven by 5G, they're just self-driven. But regulators say if there's a problem, there's a 20-ton truck on the highway, you better have a fallback system. And that fallback system could be with 5G and those companies are saving a lot of money in drivers and fuel and therefore can spend tens or hundreds of dollars on that solution and therefore there's real money.

[14:01] So, what we're noticing is that the boring stuff is where there's a ton of value, and that is what we need to train people on to say, "Hey, what are real actual use cases?" And the other silly one is higher-quality video conferencing. You and I discussed it last time. I would be willing to pay a ton to have a better conversation, a better quality. So, where are these small nuggets of relatively boring stuff, people like you and me are willing to pay for, enterprises or banks or insurance companies, and then monetize that instead of looking at the super sexy stuff like drones and games, which will take a long time. Also, require network investment and core networks, but also how much are consumers really willing to pay? Are you really willing to spend $200 more a month to do better gaming? Unclear to me. Are you willing to spend $200 to make sure your truck never gets stuck? Oh yes, I'm willing to pay that.

DR: [14:46] Yeah, the key there is enterprises have tons of money and they're willing to invest in those kinds of things to have an edge on their competitors. But again, I think it's the boring stuff. And so, one of my last questions is GSMA Open Gateway launched with eight network APIs. They're pretty obvious, so I'll read them to you. SIM swap, Quality on Demand, Device status, Number Verification, Simple Edge Discovery, One Time Password SMS, Carrier Billing–Check Out, that's a little bit vague, and then Device Location. And so, of those which one do you think is going to be the breakout API?

Ferry: [15:25] And DR I really want to say Edge location because it's so exciting and Edge computing everything, but the reality, most likely it's going to be location because the use case is like, “okay, I'm paying with a credit card. Is the person actually here?” Or, “I'm opening my door, is the person actually here?” Or, “There's an insurance claim being done. Was that person actually there?” And therefore you and I can easily come up with 20 ideas where on how we'd use locations while for the others it's more difficult. So, while I wish it was Edge Compute, or Quality on Demand, it is much more likely location. And then hopefully in two or three years if we talk again, we see QoD and the other things coming up.

DR: [16:00] I totally agree. I ask people all the time, I'm like, “Name it. Which one's going to be the breakout star that really starts to bring developers into using Network APIs that they can't already do with Twilio?” One Time Password SMS, that's already done. I would kill that. That's stupid. I mean Device Location, though, you can't really do it very well the other way. And like you said, ubiquitous, tons of different use cases. Again, I think you're going to win monetization on volume here versus Simple Edge Discovery, I think is a little bit further out there. But once the developers are in, they start exploring and doing different things, they might want to check Number Verification and Device Status and they start to expand.

[16:37] And so, we really got to think about and help those telcos, and you as McKinsey Partner, you're in those conversations advising them on how to start. And I just saw some news from December about three more Brazilian telcos joining the Open Gateway Initiative and they started with SIM swap, Number Verification, and Device Location, the quote, "boring ones." So, I think that's how it's going to evolve and Ferry, as always, you're such a great guest. Thank you so much for coming back into the podcast. I had a great conversation with you today, so thank you.

Ferry: [17:09] I see you at MWC. Looking forward to that.

DR: [17:11] Yeah, it's going to be great. See you soon. Go Barcelona.

Ferry: [17:13] Thank you.

DR: [17:15] 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.

[17:25] There are three ways operators can offer their network APIs to developers. Number one, go straight to the developer. Number two, make them available through a service aggregator like Vonage or Infobip. Or number three, go through the hyperscalers using their developer community and allowing the BFCs to own the interface between the developers and the telcos. I think the only option that has telcos' best interest in mind is the first approach. Telcos have to build their own developer ecosystem. Let me tell you why. Once developers add an aggregator's or hyperscaler's API to their code base, that code is never coming out. They will continue to use whichever APIs the aggregator or hyperscaler adopts, and the relationship will expand. Even worse, the aggregator or hyperscaler has the power to switch out your APIs for another alternative, taking all the developers away and leaving your APIs in the dirt. That's why it's critical that you go directly to the developers. You need to own this community. You do not want to be vulnerable to this risk.

[18:25] This is why Totogi designed its new A2P product, Whoosh! to help you build your own developer community. It's a drop-in replacement for Twilio, allowing developers to change one line of code to swap a code base from Twilio to Whoosh!. But we're not a Twilio competitor. Instead, we give you our software and run the platform for you. Why does this help you? Because the world has already decided Twilio APIs have won. Enterprises have already adopted this. But by giving telcos away to easily swap code bases from Twilio to Whoosh!, you instantly gain a developer community. No need to go through anyone else to get developers. Once you have developers, you can expand the relationship to network APIs. Will it work? Well,

I think so. And you heard what Ferry said. I'm always right. Want to talk about this more? Come see me at MWC 24, which runs February 26th through the 29th in awesome Barcelona.

[19:24] Totogi has a stand in Hall 2. Yes, that Hall 2, that will blow your mind. Stop by to see all of our awesome demos and have some scrumptious food on me. Also, I'll be giving one of my epic talks at the MVNO Summit on Wednesday, February 28th. Totogi is a platinum sponsor of the event and will be throwing an iconic party afterwards for attendees. DM me on LinkedIn and on X at TelcoDR for details and an invite. In the meantime, tune into more Telco in 20 episodes. Like and follow and leave us a five-star review. And don't forget to sign up for my rockstar email newsletter on TelcoDR.com and be sure to check out our awesome sauce YouTube channel. Later nerds.