

DR: [00:00] I am Danielle Royston, and this is Telco In 20.

[00:14] The communications platform as a service market is booming. CPaaS is expected to grow from the approximate \$11 billion in total global revenue in 2022, to more than \$60 billion by 2030. As you know, CPaaS includes programmable voice video and SMS messages that are embedded in millions of lines of code in enterprise applications and are sent through operator networks. Telcos have invested big money into these networks, and I'm not the only one who thinks they deserve a big slice of this revenue pie. But, up until now, Twilio has been eating telco's lunch. It's gobbled up enterprise customers and revenue, growing wildly in the process, and now has a \$12 billion market cap and an army of more than 10 million developers using the platform every day. And, despite telco's efforts to fight back, they've been left with the burden of managing and updating the network while their revenue continues to shrink.

[01:10] But the industry looks like it's ready to take another pass at CPaaS. It has new weapons in its war chest, like the cloud native capability of 5G plus the collaborative API interfaces designed by the GSMA's Open Gateway initiative. Experts agree 5G is going to be about B2B and enterprise use cases, delivered through network APIs.

[01:31] Today, I'm sitting down with Yesmean Luk, Principal Consultant and Practice Lead at STL Partners. We're going to talk about what needs to happen for telcos to reclaim their share of the CPaaS market, how the Open Gateway initiative can help, and how enterprise developers may be the key to it all. So, let's take 20.

[01:46] Yesmean Luk is principal consultant and practice lead at STL Partners. Hi, Yesmean, welcome to Telco In 20.

Yesmean: [01:57] Hi. Thanks so much for having me.

DR: [01:59] Yeah, I'm so excited to have you on our podcast. And, the way I met you, just a little bit of a backstory, we were on a CPaaS Acceleration Alliance panel, I think they

## Episode 73 | Can telco compete in CPaaS?

Yesmean Luk, STL Partners

Released August 22, 2023

call it CPaaSAA, talking about all things CPaaS. And you're a CPaaS girl, I'm trying to be a CPaaS girl. And so I guess my first question and just introducing you, what got STL Partners and you to be more vocal in the CPaaS space?

Yesmean:

[02:25] Yeah, I guess as we know, the CPaaS space is nothing new. The whole topic of APIs is nothing new per se, and we've been writing about it for a really long time. But I think at the moment, we're sort of seeing this trend where I guess there is a clear opportunity with multiple things almost aligning in terms of the move to cloud native, with 5G and moving to more programmable networks, if you will. And so it really pushes this element of what the future telco looks like and what does it mean for telcos to really be part of an ecosystem, if you will. And I think the CPaaS space and the network API space is a huge area that we really need to get into.

DR:

[03:09] Like I said, I'm kind of new to this space personally. I recently bought a UCaaS CPaaS company, called Kandy. It was a bankrupt company. I bought it at the end of March. And since I've been sort of paying attention, like you said, there's been some recent developments. Open Gateway, which is the GSMA's CPaaS initiative, was announced at MWC23. I think over 30 operators have signed up to support this initiative. I actually was just in London interviewing Mats Granryd, the director general of the GSMA about Open Gateway. I think I saw a few weeks ago, Proximus Group acquired nearly a 60% stake in Route Mobile, which is also a CPaaS company. And then the big kahuna, Ericsson's acquisition of Vonage for \$6.2 billion. And so, when I look at this space, Twilio's kicking telco's butt for sure and Twilio's a 10 billion company. It has over 10 million developers in their ecosystem. I think telco really needs to take this to the next level and take on Twilio.

Yesmean:

[04:10] Absolutely.

DR:

[04:10] So, like you were just mentioning, the telco industry has a big challenge in front of it, which is how are we going to generate new ways to monetize our biggest investment, which is the network and building the network. The old

## Episode 73 | Can telco compete in CPaaS?

Yesmean Luk, STL Partners

Released August 22, 2023

ways are not working, and no one's really found that silver bullet that magically solves the problem. So, you were just saying you think it's a huge opportunity for telco. Why do you think CPaaS is a huge opportunity for telco?

Yesmean:

[04:35] Well, it's interesting because as I mentioned, there's a huge existing CPaaS market. I've seen numbers like 30, 35 billion by 2026 or 60 billion by 2029. And then RSLs, we've also modeled what we call the mobile network APIs, which are APIs that don't necessarily exist today, which could be around some of these 5G ones or MEC ones, or the quality of service on demand that the GSMA, Open Gateway is talking about too. And we've said that it will probably reach 20 something billion by 2027, 2028.

DR:

[05:10] Wow. Yeah.

Yesmean:

[05:11] So if you think about that, that's a huge opportunity and it's not just, I guess, in selling direct to developers or enterprises, but it's really about all the other things that enable it. It's a huge, not just "this is the size of the pie," but it's also expanding all sorts of other pies too.

DR:

[05:30] Yeah, super interesting. Like you said a little while ago that this isn't a new space, right? It's been around for a while. What's the difference now versus before? Do you really think it's like that cloud native piece and the hyperscalers that are starting to enable it to work maybe this time around for telcos?

Yesmean:

[05:46] Yeah, I think before there was often this very traditional thinking where it was, what's my slice of the pie, if you will? And we've had a lot of different initiatives and Telefonica's Bluevia, or Deutsche Telecom's Developer Garden, or even the GSMA OneAPI initiative. There was so much fragmentation, and often there was this notion of we think we understand what developers want, but even a simple example: developers were charged for access to the telco API platforms themselves, or they were charged for using relatively low value APIs. That was a big discouragement because an API is not a means to an outcome. It's not a thing that you buy in and of itself.

## Episode 73 | Can telco compete in CPaaS?

Yesmean Luk, STL Partners

Released August 22, 2023

DR:

[06:35] I think that's one thing that's been different, maybe, this time around with especially Open Gateway this time, they're agreeing at least across multiple mobile operators to the same API signature. They're now realizing that they at least need to partner and create some commonality for that developer experience instead of going at it with their own proprietary APIs. Again, building a walled garden, protecting what's mine, not really sharing. It's not just as simple as defining the API, right? I think a big part of it is building out the developer community, making that developer experience really easy and seamless. So, what are the problems that they still need to figure out for Open Gateway to work?

Yesmean:

[07:17] So, I think the key thing, as you mentioned as well, is you need to build network effects. That's the only way that you can scale. I think the issue is we often talk about the developer community as almost this homogenous group. But at the end of the day, there's so many different types of developers out there. Often, not all developers want the same things. Some want to go really deep in the weeds and they want that API abstraction layer. Others just want the application templates because they want to understand, "Okay, well what could this mean for an application that I'm building? But I'm still relatively early days in this space." So, I think that's a big focus at the moment. Will the GSMA, this community that they're building with CAMARA, are they going to be building in these tools and different types of tools and assets and documentation around it to enable all sorts of different types of developers to use them?

DR:

[08:19] Yeah, and I think what's really interesting is they're kind of attacking it in the way that TM Forum has attacked the Open API initiative that they have around BSS APIs in that each mobile operator is responsible for the guts of the API, the actual implementation, obviously connecting it to their network.

[08:37] But, what Twilio did that was really nice was they abstracted away from the developer having to know how telco networks work and that there's national boundaries between telcos. So, an application developer using Twilio just sends an SMS and doesn't really have to think about

which network that endpoint is on. Thinking through Open Gateway, as you guys look at what they're doing with CAMARA, isn't the onus still on the developer to be like, well, I got to think through who's going to receive this SMS or whatever the result of the API? Now, I'm still having to think like a telco, I'm still having to think about national boundaries and roaming cases, and what if this person's on multiple networks? Or, do you think the way that they're designing it's kind of going to work like a Twilio—you don't really have to care, and the messages will end up where they need to end up?

Yesmean: [09:28] It's quite early days. Recently, we've been speaking to quite a lot of the telcos who have signed up to this. One of the things they're already talking about is what we call application roaming. So, as you mentioned, if you're going from one area of coverage, from one operator to another, is that going to be as seamless as the application really needs so that the developers don't have to manage that transition in a very manual way? Because at the end of the day, they just care about, okay, well, what's my end customer's experience? Through the CAMARA and through the GSMA Open Gateway, if they can really nail down this point, then I think that can change a lot of things.

DR: [10:12] Absolutely.

Yesmean: [10:12] Yeah. The other thing as well is I guess what we're seeing particularly with some of these new network APIs that are popping up is the roots to market are quite different. Because if you look at things like SMS APIs for example, that's a very horizontal type of application, or it's applicable to all sorts of different use cases.

DR: [10:36] It's one of the most basic use cases.

Yesmean: [10:38] Exactly, yeah. Whereas I think for some of the other ones, for example, Verizon's launched this hyper precise location API, and that may not be applicable to every single use case because you don't need to know where your Amazon package is to the centimeter. If that's to 10 meters, that's okay. But for example, if you're a drone company that's delivering medical supplies, or if you are doing something that's responsible for search and rescue,

then yes, maybe you do need that to the centimeter accuracy. But, the route to getting to that developer is very different than, for example, some of the SMS ones. So, I think it's down to the telcos to ultimately understand where are some of the areas they want to play in and also, what's that ecosystem that they need to engage with in order to maximize that value that the API can enable.

DR:

[11:34] Yeah. Totally agree. Now, how do you build out and attract and recruit developers to be aware of these APIs and use cases and actually start to use them? I keep asking telco executives, "What's your plan to do that, to build a developer ecosystem? Are you guys going to host some hackathons? Is it going to be more than that?" So, as you guys talk to different telcos, how are they planning to build out developer communities and attract the potential customers so they can monetize all this hard work that they're doing around Open Gateway?

Yesmean:

[12:08] Hackathons are funny because as you mentioned, there are quite a few being hosted and they aren't new, and to some degree, they're limited to those that are aware of what's going on and have that degree of interest. I think a lot of this is also in learning from others. For example, Telefonica have now made their APIs available in partnership with AWS, Google, Azure, Vonage, and Twilio if I'm not mistaken.

[12:35] So, it's like, well, there are other players who do this very well and who have engaged with the developer ecosystem very well. Can you leverage that ecosystem to recruit and attract developers? Also as well, it's trying to think of how you can demonstrate as a telco how these APIs can be used in practice. I think we wrote a case study quite a long time ago actually of Dialog, who they've actually built a platform and they've used those APIs for themselves, a number of different types of applications. But then also they found ways to offer these APIs for the long tail of developers to create an application using their own as an example of, "Hey, we've done this. Here's an application template. Why don't you go away and think about how you can use this too?"

## Episode 73 | Can telco compete in CPaaS?

Yesmean Luk, STL Partners

Released August 22, 2023

DR:

[13:26] Yeah, I mean, developers are finicky, right? They kind of approach the purchase and use of developer tools in a different way than a generic enterprise buys things. They're on places like Reddit. They go to your website and they just want to read your doc and get going. I see things like Telefonica is starting to build out the developer experience on their website. DISH, in the United States, is certainly doing that. They have a dev community as well. So, for telcos, they're not really known in the developer community as cool, valuable tools that are easy to use and state-of-the-art on a modern stack. I think everyone's attitude is like, telco is slow, boring and not hip with the modern times.

[14:10] Putting myself in the shoes of a telco executive, especially in charge of the enterprise group, I think the easiest on-ramp for them to build a developer community might be by leveraging the relationships telcos already have with their existing enterprise customers. These are deep, long standing relationships, but the revenue has been declining over the last several years, certainly being siphoned off by Twilio. Do you think a way to recapture this lost revenue maybe is through the enterprise IT developer versus a horizontal developer community with a super long tail that's really hard to break into?

Yesmean:

[14:49] Yeah. We think that the enterprise developer is going to be absolutely paramount in this equation because as I mentioned before, as we move to more almost programmable and instructable networks, there's so many types of applications that this can enable, whether that's around drones or around different, let's say, AR/VR use cases, around IoT, and so on and so forth. Some of these use cases can have really positive benefits on business outcomes for the enterprise and especially as well, if we start to think about edge computing. There's a huge discussion there around, okay, well what can this enable for the enterprise customer?

[15:31] But again, it's also recognizing that there are differences in what the enterprise IT developer can do. The more that telcos can provide pre-configured application templates, for example, or be able to partner with different ISVs specifically focused on some of these use cases that

## Episode 73 | Can telco compete in CPaaS?

Yesmean Luk, STL Partners

Released August 22, 2023

have an impact on let's say manufacturing or in the content and immediate entertainment market or in logistics, then you really have to focus because it's very different to, for example, the SMS and the CPaaS market that's out there today.

DR:

[16:09] Well, I think the bar has been set, you mentioned this earlier, by the hyperscalers and by Twilio. I think even enterprise IT developers, that's the bar in terms of how good the documentation needs to be, what the buying experience needs to be, how easy it is to test and deploy. They can copy, paste code or download an SDK, like you said. I think telcos need to develop all of that stuff. They're not software minded folks inside of a telco. They're not like Twilio or AWS or Google or Microsoft, but the bar has been set by these other vendors, and if they want new ways to monetize, it's got to match that level of quality of experience for the developer. You can't just go to the fence and be like, "Oh, the developers will figure it out. It's their problem."

[16:55] So, I think it's great. We're making some great progress with common API signatures. It's really cool to see the opening up of the network and not being such a walled garden and even the sharing across multiple operators, but the bar has been set by the software industry, and I think telco has to rise to that challenge to recruit developers to use their APIs.

Yesmean:

[17:17] Absolutely. Some folks see it as, okay, it's us versus these aggregators, if you will, whether that's some of the hyperscalers or a Twilio or Vonage. But at the end of the day, it's inevitable that you work with them as well. It's trying to figure out, okay, well what are the different routes to market to providing some of these APIs to whoever that end customer is? That mindset is changing. A lot of that has been from learning from past initiatives, if you will. But again, that's only got to continue.

DR:

[17:48] Yeah. Well, I think telcos look at this revenue that's maybe been lost to the CPaaS, horizontal players like Twilio. They're like, "Wait a second. That should be our revenue." And so it's a little bit of a comeback story. Now, the comeback is you don't think of telco as the underdog,

## Episode 73 | Can telco compete in CPaaS?

Yesmean Luk, STL Partners

Released August 22, 2023

but they kind of are, so I realize that you are a big sports fan. So am I. I love comeback stories. Since we have this commonality around loving competition and loving sports, I wanted to ask you, do you have a favorite comeback story?

Yesmean:

[18:21] So many. You've got the Celtics in the '08 NBA finals against the Lakers, and you've got some pretty epic ones as well with Liverpool, but at the moment it's the Women's World Cup. In 2017, I remember there was a game, I think it was a Tournament of Nations, but I think the US Women's team scored three goals in under 10 minutes against Brazil to win four to three in the end. That was pretty epic.

DR:

[18:49] My favorite comeback story is also in 2017, maybe this is an epic comeback year, but Tom Brady, who's a famous quarterback in the United States for American football, was leading the New England Patriots against the Atlanta Falcons. I think it was like 28 to 3, down by 25 points. I think the statisticians, a live look on who was going to win, it was like 99.8% going to go to the Atlanta Falcons. He led the team to score 25 points and tied it. Then, American football goes to overtime, and they end up winning. So, it was like the biggest comeback ever in American football and Super Bowl history.

[19:30] I think telcos have their work cut out for them. They're designing these network APIs. We kind of have this attitude, if we build it, they will come. I think there's still a lot to figure out in terms of how we get developers excited. The bar has been set by the software vendors, and so this is an exciting time to be in telco, and I am so excited to have you on the podcast and talk about all things CPaaS.

Yesmean:

[19:52] Thank you so much.

DR:

[19:53] Awesome. Thank you. 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.

[20:05] Telcos need to develop a strategy to recapture lost messaging revenue from Twilio. So sales guys, I'm talking

## Episode 73 | Can telco compete in CPaaS?

Yesmean Luk, STL Partners

Released August 22, 2023

to you. Here are the three steps you need to take to beat Twilio. First, refocus your strategy for selling connectivity to enterprises by embracing the fact that the future of telco is network APIs. Second, you have to concede that Twilio has won the first round. Any future messaging solution you offer to enterprises must be compatible with Twilio. That's because they already have tons of lines of code that are deployed and using Twilio APIs. A swap to your APIs needs to be easy-peasy, lemon squeezy. Third, once you have a Twilio compatible solution in your product arsenal, you can go into Twilio enterprise accounts and offer your drop-in replacement compatible APIs at half Twilio's price and get better margins than your current Twilio wholesale deal. Once you execute these three steps, you'll be the hero of your telco. You'll be able to recapture that loss to enterprise revenue and put a stop to Twilio's expansion.

[21:10] And, here's some good news. Totogi is working on a new product that can help you out. I'll be dropping one of my legendary DR talks about it in two weeks, on September 5th, as part of TelecomTV's Cloud Native Telco Summit. It's definitely must see TV. You're not going to want to miss it. You can find the link for more information in our show notes. So shoot me a DM on LinkedIn or X me, @TelcoDR for more details. Then go listen to more Telco in 20 episodes, like our last episode with Mats Granryd from the GSMA, which is all about Open Gateway. Don't forget to hit that follow button. Share our podcast with your colleagues and leave us a five-star review. Subscribe to my rockstar YouTube channel and then sign up for an awesome email newsletter on the new telcodr.com. It's time to take down Twilio. Let's do it. Later, nerds.