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Angelo Libertucci: [00:05] Yeah.

DR: [00:06] I've been advocating for telcos to move their networks to the public cloud forever.

Angelo Libertucci: [00:09] You have, yes, you have.

DR: [00:10] And so, tell me how this partnership came together.

Angelo Libertucci: [00:13] So this partnership with Ericsson is a significant milestone.

DR: [00:16] Yeah, for sure.

Angelo Libertucci: [00:17] So the big thing about the platform, it's a purely cloud-native, full 5G core stack that allows services to be deployed instantly, it narrows the gap between cost and revenue. So it's a perfect storm, the timing is right to actually bring these to market.

Announcer: [00:36] 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 Angelo Libertucci, Global Head of Industry for Telecom at Google Cloud.

DR: [00:55] Hi guys, I'm DR. Google Cloud totally knows how to run networks. It currently runs the largest private network on the planet, with more than two million miles of fiber laid around the world. It handles billions of users across search, YouTube and maps, with a fraction of the staff that even a regional telco would need. The secret, automation and AI-driven operations. And lucky for you, they're opening up their playbook and sharing their approach with telcos. For example, their new partnership with Ericsson brings a cloud-native 5G network core that runs entirely on Google Cloud. This isn't lift-and-shift migration. This is a new product that helps you build a mobile network from the ground up, designed for autonomous operations, all on the public cloud. This is a fundamental transformation, where AI doesn't just monitor networks, it actually runs them. Networks that can self-heal, self-optimize,

and deliver that always-on, always-performant, always-secure experience without human intervention.

[01:57] Today, I'm talking to Angelo Libertucci, Tuch!, Global Head of Industry for Telecom at Google Cloud. We're diving into how the Google-Ericsson partnership came together and why the timing is right, the real-world results from Bell Canada's autonomous networking deployment, and why this approach represents a big shift from traditional cloud migrations. So let's take 20.

[02:23] Angelo Libertucci is global head of industry for telecom at Google Cloud. Hi, Angelo. Welcome to "Telco in 20."

Angelo Libertucci:

[02:30] Hey, DR, how are you? It's been a while. Thank you for having me. I've finally arrived.

DR:

[02:34] I know, you're on "Telco in 20," it's amazing. We're going to have a great time talking about what's going on at Google Cloud. And so, you have a super interesting background, you were a professional hockey player, which is crazy impressive. And so, my first question, how did a hockey player become the head of telco at Google Cloud?

Angelo Libertucci:

[02:52] I was a professional hockey player in a previous life. I spent the most part of that career in Europe. I came home to visit family in the summers, as players normally do, and I met someone who took a liking to me and was adamant that I joined his company, and believe it or not, his company was a layer one distributor of Cat 5 and optic cabling.

DR:

[03:15] You were like, professional hockey or Cat 5 cabling, sign me up.

Angelo Libertucci:

[03:18] Yeah, how does that happen? So I was inside sales, and listen, I did have a bit of background, I went to school in the U.S. and physics was my minor, so I had a pretty good understanding of the technology, it was easy to grasp. But they gave me the telco vertical, and telcos buy a lot of Cat 5 and optic cabling, and things just moved from there. That was like 25 years ago.

DR:

[03:40] That's crazy. And so, one thing that caught my eye super recently, you guys announced with Ericsson a carrier-grade 5G

core-as-a-Service platform. I've been advocating for telcos to move their networks to the public cloud forever.

Angelo Libertucci:

[03:53] You have, yes, you have.

DR:

[03:55] And so, tell me the story of how this partnership came together.

Angelo Libertucci:

[03:58] So this partnership with Ericsson is a significant milestone.

DR:

[04:02] Yeah, for sure.

Angelo Libertucci:

[04:02] And it really speaks to the maturing, the understanding of how cloud can really transform the telecom industry that you've been advocating for almost the last 10 years. So we've been highlighting the benefits of public cloud for networks, scalability, agility, cost efficiency. We partnered up with Ericsson to really just try to meet the customers where they are today, addressing the industry challenges that they're facing, the CapEx pressure that even now has become challenged.

DR:

[04:28] Yeah, for sure.

Angelo Libertucci:

[04:28] We want to bring value to the partnership. So the big thing about the platform, it's a purely cloud-native full 5G core stack that allows services to be deployed instantly. So it narrows the gap between cost and revenue, so that speed to market, scalability, especially through autonomous networking, which we'll talk about in a bit, I think, would be of significant value to customers.

[04:50] So remember this, Ericsson is a longstanding leader in networking infra, they have very demanding requirements. So why now? So with the evolution of cloud-native technologies and the tool maturity and with the increased scale and distribution of hyperscaler infrastructure, now, the timing is right to meet those stringent demands. I'll give you an example. Six years ago, in Canada, I know this because I'm from Canada, we had one region. There's no way we could have supported 5G core in the entire country. Six years later, not only do we have two regions in Canada, we also have Google Distributed Cloud that now runs AI like Gemini, gives you the highly distributed data plane that might be required.

[05:29] So when we think about not only our distributed infrastructure that's now available to meet latency requirements

from 3GPP standards, for example, and with the advanced tooling, with our cloud-native infrastructure and tools that we have, when you marry that with the challenges that telcos are facing, it's a perfect storm, the timing is right to actually bring these to market.

DR: [05:47] One thing that caught my eye with the announcement was that this service was built with, you guys called it AI at its foundation, what does that mean, to have AI natively into a network core?

Angelo Libertucci: [05:58] So when you have AI natively built into the core, it fundamentally changes how it operates. So it means we're moving beyond manual configuration and reactive troubleshooting to a system that's actually constantly learning and self-optimizing. So at Google, we're building in AI across all of our platforms, across all of our products and tooling, natively integrated, and our goal is to enable the AI-driven telecom, that's really what our mission is. And it leads to really cool use cases, like autonomous networks, which is the killer use case for telcos in 2025. Clearly, without having AI natively integrated into cloud-native workflows, you cannot reap the benefits of something like autonomous networking.

DR: [06:40] Yeah, you're missing that boat. And so, I go all over the place talking about moving to the cloud in telco, and I still encounter a ton of telco executives who have concerns about moving core network functions to the public cloud. I do think the tide is changing. For example, I just interviewed Mallik Rao from Telefónica Germany about their cloud core project that's moving, they project 30% to 40% of their subscribers to a network, this one's running on AWS with Nokia. And so, I know it's early days, because you just had this announcement come out a couple of months ago, but are there any telcos starting to think about moving their network workloads to the public cloud with Google Cloud?

Angelo Libertucci: [07:17] So I will agree with you, that the tide is definitely changing, and we are seeing increasing momentum. While it's early days for core network-as-a-service with Ericsson, we do have other telcos pursuing network modernization and adoption with us. So earlier this year, we did announce our intent to enter into a partnership with O2 Telefónica in Germany, for example, to drive cloud transformation of O2 Telefónica's 5G network, collaborating closely with Nokia. So O2 Telefónica now is going to expand the collaboration, moving Nokia's policy control function to Google Cloud. And at the same time, we also

announced with Nokia that we're making it easier for telcos to run 5G core networks on Google's infrastructure. So there's a significant amount of activity from Ericsson, a lot of activity and engineering effort going on with Nokia, so again, we're extremely excited about what the future holds related to network workloads moving to cloud.

DR: [08:11] Yeah. And so, is Telefónica Germany diversifying their cloud vendors?

Angelo Libertucci: [08:16] Even if you're on-prem today, most telcos carry two 5G core vendors, it's very popular to give one region to one specific vendor and another region to another vendor.

DR: [08:26] In case something happens or negotiating leverage?

Angelo Libertucci: [08:29] Exactly, they want some diversity, they want to limit their blast radius. So my recommendation is, because we're still a little bit, I wouldn't say early, there's a lot of pilots and testing, that's happening as it relates-

DR: [08:42] Sure, but early-ish, yeah.

Angelo Libertucci: [08:42] Early-ish. What's become real in 2025 is the autonomous networking piece, and I've always recommended to customers that that piece needs to be figured out first. I think customers need to understand how their operation is going to transform with automation, leveraging AI, and what those pipelines are going to look like, and that's a very large strategic variable, is your automation and your operation.

DR: [09:06] Totally agree.

Angelo Libertucci: [09:07] Once you have that set up and you understand how that's going to be run and how the data pipelines are going to flow-

DR: [09:12] Yeah, that's a heavy lift, it's a big change. And so, I love to ask the money question, the biggest expense at a telco is building the network, it can easily cost \$50 billion, and so have you guys done any math at Google Cloud to estimate how much lower TCO you can achieve by using the public cloud for network workloads?

Episode 121 | Building AI-driven autonomous networks with Google Cloud

Angelo Libertucci, Google Cloud

Released August 5, 2025

Angelo Libertucci:

[09:31] So when you do embrace cloud-native approach with Google, they can expect significant reductions in total cost of ownership. All the use cases are different, but just based on initial conversations with customers, and we've already secured some that I can't announce yet, we are incredibly optimistic about what the results are showing. And the cost comes from several areas: lower OpEx costs due to increased automation and efficiency, faster time to market to launch new services, which directly impacts revenue. This is a big one, the ability to dynamic adapt when changing market demand, so you avoid over-provisioning of hardware, which is usually the case. So let's say if your network utilization is lower than a certain number for a specific use case, call it 50%, then anything below that 50% would probably be cheaper in-cloud. If you're actually running your network really hot and you're up to 80%, 90% utilization, then it might be cheaper on-prem.

DR:

[10:22] Less saving, yeah, yeah.

Angelo Libertucci:

[10:23] But I don't know who runs their network at 80% or 90%, so...

DR:

[10:26] No, they don't. The numbers I always see are 30%, 33%.

Angelo Libertucci:

[10:29] Exactly.

DR:

[10:30] They're scared of the spikes. They don't want to be the guy that ran it hot and then some event happens and you're like, our network is down.

Angelo Libertucci:

[10:36] Yeah. So that's exactly why, when you really look at how they're running their networks today, we are extremely energized by the financial modeling that we're doing with customers.

DR:

[10:45] Oh, it's super awesome. I've been talking forever, I'm so excited. And so, you've mentioned this a couple of times, the killer use case in telco is autonomous network, and you guys just made another announcement about this autonomous network operations framework, and so describe what that is and are you guys seeing early traction with operators?

Angelo Libertucci:

[11:04] Yeah. So let me start by giving you a view of where this all stems from. So Google, as you may or may not know, runs the largest private network on the planet. We have over two million miles of fiber, we have billions and billions of customers, running services like search, YouTube, maps, et cetera, so pretty

demanding network and performance requirements. And we do this with a fraction of the people that even a regional telco would have, and the reason is because we automate everything. We've done a great job over the years at leveraging the tools that we have and building autonomy into the network, and we've decided to give our telco partners a glimpse into this playbook.

[11:44] We've created this framework that we leverage and use on our own, and it integrates Google Cloud, AI, analytics and infrastructure to really help them build intelligence, and it starts with the products. So let me just talk about the core and the heart of the product, because one of them is your love. Back from 2018, you were on LinkedIn, you were touting Spanner, and I'm like, what is she talking about?

DR:

[12:08] Yep. Who is this person?

Angelo Libertucci:

[12:10] Who is this person? And here we are in 2025, and once you understand autonomous networks and the TM Forum and level four/level five autonomy, you really can't do that without a real-time digital representation of your network, and that is really the value of Spanner. It's built to maintain that comprehensive digital twin of the network that mirrors the inventory, the topology, the services, the state, and when you look at its capability, it's really the only platform out there that supports both graph and relational data. So you get this multilayered view of the existing layers that are in your network, services, physical, logical, et cetera, so when you combine that then with BigQuery for analyzing vast amounts of data and you're doing the AI through Gemini and the graph neural network models that we're going to make available, it's really just an integrated solution that has really elevated autonomous network capability to the surface, and a lot of telcos have jumped on it this year.

[13:07] Secondly, the components and this framework are all designed for smooth integration, so it accelerates time-to-value by reducing engineering efforts. It really quickly allows you to pilot, launch and expand AI initiatives, enabling automated problem resolution in days. Also, there's partners as part of this that we announced, Amdocs, Ericsson, Nokia, they're building and offering their own autonomous network solutions as a SaaS model built on this framework. And then, we have folks like Accenture and Capgemini who are going to help us scale, so if you want to work with them, they can help you build specific network deployments or specific use cases. And then, obviously,

we have Google Cloud Consulting, which really is going to give you that opinionated point of view of how we do things ourselves, and we can help talk through data pipelines, predictive maintenance, closed loop automation and things like that.

[13:55] So we've had a lot of public announcements this year in this space. One was Bell Canada, we worked with their wireless network AI Ops program, that's all built on Google Cloud, and the results were really transformational. And again, I'm going to stress, even though the network is running on-prem, we're really bringing that data into the cloud so we can provide value today, even with your existing infrastructure, you don't have to have network functions in-cloud before we can add value is what I'm saying.

DR:

[14:21] Yeah, that's cool.

Angelo Libertucci:

[14:22] So through automating the RAN anomaly detection, they reduced customer calls by 25%, they reduced network alarms coming into the NOC by 75%, and they increased software productivity by 75%. This was all done in months, so it's immediate value that we can land with help.

DR:

[14:41] That's an interesting point, you don't have to move your network workload to the cloud first and then you get these benefits, today. And again, this is one of those ways where you can start to experiment with these tools before you make a huge commitment and see those real business benefits and say, okay, how do we peel this onion and take it to the next level? And then, maybe then, you start to take on Ericsson's cloud core and then move the network into the public cloud.

Angelo Libertucci:

[15:06] Yeah. So that's what I think is the natural progression of this. We're going to look at a specific use case with telcos, can we do something in the fixed core of my network, fixed wireline? Someone else may want to look at in-home Wi-Fi experiences. All these functions run on-prem today, and we're building a pipeline into the cloud just to demonstrate the value. Then you scale that autonomous network operation across all the different parts of your network because we know we're adding value.

[15:33] That's why I mentioned before, once you set up that autonomous network operation, then you basically decide,

where should I run my network function in the future? When that compelling event arrives, if I have to do refresh of hardware or if I'm expanding into a new region, if I continue to run it on-prem, I still need to have my on-prem data clusters who are going to pre-process all the data, I still have to set up an interconnect to the cloud, I have to worry about security, I have all that additional effort and cost that I wouldn't have if I was running the network function in-cloud with native data pipeline integration into my autonomous networking framework. So I think the considerations change in the future once you set up your framework.

DR: [16:17] Awesome. Well, we mentioned that you were a professional hockey player, I play tennis and now pickleball and try to compete at a high level, and so my question to you is, do you think being previously a competitive athlete makes you a better leader?

Angelo Libertucci: [16:33] I think early in my career, when I was selling data cabling and fiber optic cables to telcos. As I moved into management and leadership, I didn't have any formal training. I think over a 20-year hockey career, you get to see a lot of examples of leadership by action. I think you understand that everybody has a role and they're all equally important or else you can't succeed. I think there's a discipline that's involved for consistently producing high quality. So when you look at all of these things that you learn subconsciously, they all relate into the teams and the people that I work with-

DR: [17:14] The workplace, yeah.

Angelo Libertucci: [17:15] ... in business. So yeah, it shaped a lot of who I am today, and basically, my 20-year hockey career was probably my MBA.

DR: [17:23] For sure.

Angelo Libertucci: [17:23] I just learned through a different mechanism.

DR: [17:25] Well, Jensen Huang, the CEO of NVIDIA, was interviewed, and he was like, "I wish suffering on you, that's what makes great teams and allows you to perform and achieve great things." And I think there's a lot of suffering in sports, like the two-day workouts or pushing yourself further than you think you can or your legs are burning and you don't think you can keep going. And so, I love sports, I do think it makes me a better leader and I'm always excited to meet other athletes that are

high achievers and leaders. And so, Angelo, this was an amazing conversation about what you're doing at Google Cloud and wish you guys tons of success, so thanks so much for coming on the podcast.

Angelo Libertucci:

[18:07] Thanks, DR, great being here.

DR:

[18:08] Yeah, awesome.

[18:14] 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.

[18:24] Most telcos think moving the network to the public cloud is an all-or-nothing decision, that either you're running everything on-premise like it's 2015 or you're making a massive bet and moving core network functions to the cloud. But that's a false choice that's paralyzing the industry. Angelo just shared a really smart approach. You don't have to move everything to get the benefits from the public cloud for your network workloads. His idea starts with an analytics wedge. Keep your network functions exactly where they are, but add an AI-driven analytics layer by piping that data into the cloud. Bell Canada did this and cut network alarms by 75%. Imagine your NOC getting 75% fewer alerts while your network stays on premise, all achieved in months, not years. Amazing.

[19:12] But here's the real genius to this approach. These wins build unstoppable momentum inside your organization. Your network team see the public cloud providing value, your executives see real ROI, and excitement for the public cloud builds and builds. Suddenly, the move to the public cloud doesn't seem so risky anymore. Really, it's change management 101, small wins create organizational confidence for bigger risks. So stop waiting for the perfect moment, start with an analytics wedge, prove the value, then scale. If you're ready to explore how the public cloud can boost your telco, let's talk about Totogi. Send me a DM on LinkedIn or X @telcodr so we can set up a time to chat. In the meantime, tune in to more "Telco in 20" episodes, like and follow, and leave us a five star review. Don't forget to sign up for my awesome newsletter on telcodr.com, and check out our rock star YouTube channel, now with 3,000 subscribers. Later, nerds.