

Danielle Rios: [00:00] You've been here before, 3G to 4G, 4G to 5G, and every single time the decision was made the same way. This time, things will be different. That's because 6G will be the first network generation decided with AI in the room. So will you use it? Better question, can you use it? Those two questions are going to change the way you think about this decision.

Announcer: [00:34] 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, she has a message for the telco industry. Telcos have always made this decade's biggest capital decision without knowing the unit economics behind it. Now, thanks to AI, they don't have to.

Danielle Rios: [00:58] Hey, guys. It's time for another "What's Up With Totogi".

[01:03] What's up?

[01:12] Every decade you make one decision, whether or not to move to the next G. It sets your position for the next decade, and every time you make it, you have to decide if the ROI is worth it. The whole case rests on usage, capacity, and maybe a consultant study done on profitability. Then you make the call and bet billions on the answer. So why is it so hard to determine the profitability of a cell? That number lives in pieces across your systems and none of them speak the same language, so nobody's ever put it together. One operator in Bolivia finally has, thanks to the Totogi Ontology.

[01:52] Earlier this month, I delivered the keynote at TelecomTV's AI-Native Telco Forum in Düsseldorf and showed a room full of telco execs what their systems have never been able to produce, and how they could have that number at their fingertips anytime they want it. So I'm dropping my talk right here on the podcast. After you listen, ask yourself one question; when you write the biggest check of the decade, will your AI be able to see the money? The video version of this talk is on YouTube. There's a link in the show notes, so check it out and let's take 20.

[02:29] Once a decade, this industry makes one decision. You decide to move to a new G. It's an irreversible bet. It sets your cost base, your architecture, your competitive position for 10 years, costing nearly half a trillion dollars across the industry,

chasing revenues that haven't moved since 4G. You've been here before, 3G to 4G, 4G to 5G, and every single time the decision was made the same way. This time, things will be different, that's because 6G will be the first network generation decided with AI in the room. So will you use it? Better question, can you use it? Those two questions are going to change the way you think about this decision.

[03:23] Every tower you own has two numbers, how busy it is and how much money it makes. Before AI, this industry could only see the first number. Capacity can be measured site by site, real data, but the money side was always a forecast, somebody's model of what someone someday might pay, what the ROI could be, because the unit economics per site, per customer is the one number your systems couldn't produce. Half of every 5G business case was data and the other half was hope. Nobody in this room got that wrong, the analysis was as good as the data allowed. So the real question isn't whether AI will be in the room, it's whether your AI can see the money. Right now yours can't, but let me show you one that can.

[04:19] In Bolivia, there's an operator that's making this decision differently. They can see the traffic, but they also can see the money. They used to have systems that never spoke to one another, now they have one model that can see their business. They can see all the sites, all the cells, ranked by the money they make. For every site upgrade, the return is known before the first dollar leaves the building, not via a consultant study done once a year, anytime the CEO wants to see it. This is what he uses now. Not a PowerPoint about the towers, the answer anytime he wants it.

[05:01] Everything AI promises this industry is efficiency. Run the network you already built cheaper. Guys, efficiency is the small price. The build you don't get wrong is the big one. This is a decision this industry has never been able to make, and right now the most sophisticated capital decision in telco is not being made in Dallas, or Bonn, or Tokyo, it's being made in La Paz. So what do they have that you don't? Not a better model. They buy the same models you do.

[05:37] Take one of your towers, how much money did it make last month? To answer that, you walk a chain. Which cells are on the tower, which subscribers used that cell, which plans they're on, what they paid, what share of it belongs to this tower, minus

the fuel, the rent, the back haul. Every link in that chain lives in a different system and at every link, the words change. The network calls the subscriber an IMSI. Billing calls it an account. The CRM calls it a customer. Many names, one subscriber. Your systems don't know it's the same person, that's why the question is unanswerable. The data exists, the meaning doesn't. Nobody ever wrote down how it all connects.

[06:28] The layer where that finally gets captured, what everything means, how it connects, and what AI is allowed to do about it has a name, we call it the Totogi Ontology. Now, you might be thinking, "Just write it down, make the dictionary, tell the systems it's one subscriber." This industry has tried for 40 years. The integration programs, the data warehouse, the master data project, they all died the same death. You run hundreds of systems. Mapping one means finding the people who still know what its fields mean. Now do that hundreds of times. And while you're mapping the last one, the first ones have already changed. The dictionary was wrong before it was finished.

[07:21] The ontology is not a dictionary. It is a map of your telco drawn on TM Forum's own standards that rebuilds itself every night. No human team can do that. That's not a criticism of your teams, it's math. AI changed the math. By having AI read your systems, it learns what every field means and it never stops. The map stays correct, because the map maker never sleeps. And once that map exists, something strange happens, questions you never asked become free. Which customers are about to leave, and which are worth saving? Where is revenue leaking between provisioning and billing? Which promotion actually made money? Same map, no new project. The network decision is just the first question, it is not the last.

[08:18] So can you use AI to make the decision to move to a next network generation? The best operators on earth are trying to build something like the ontology, Telstra, Swisscom, Verizon. Telstra's Mark Sanders, their chief architect, one of the best in this industry, says telco needs a shared language, an ontology of how a telco works. Swisscom is building one. Their CTIO was on my podcast this year describing telco-wide semantic consistency to replace their legacy estate. Verizon is building one too, their own architect calls it a permanent business practice. Three of the best operators on earth building the same thing separately.

[09:06] Remember, in mobile networks, a subscriber is a subscriber, in Zurich, in Khartoum, in Seattle. 90% of this map is the same map for every company in this industry, so why is everyone drawing it alone? This thing they're all trying to build, you just saw it a few minutes ago, Totogi has it and it's already running in Bolivia. So you could build your own ontology and spend years on the 90% that's the same for everyone, or start with the Totogi Ontology and spend your people on the 10% that makes your telco unique.

[09:43] 5G had an alibi, your systems couldn't see the money, nobody could have decided it differently. 6G has no excuse. For the first time in the history of this industry, you can know the return before you spend the first dollar for every single site, which changes what a G decision is. 5G was one check written in advance on faith, 6G doesn't have to be. It can be thousands of checks, one per site with its own receipt written where the return shows up first. Spending blind used to be a limitation, now it's a choice. So before you write the biggest check of this decade, ask yourself, will you use AI to make this decision, because now you can.