

DR: [00:00] Hey guys, I'm DR, and this is Telco in 20. Guess what, guys? It's time for another what's up with Totogi? [Music: "What's Up with Totogi?"] What's up? I'm super excited because today we have a Totogi customer on the podcast—mobile network operator 2degrees from New Zealand. 2degrees is turbocharging its wholesale business and relationships with MVNOs. Most operators shy away from the headache of supporting MVNOs because historically it's been hard and expensive to do.

[00:48] Previously, it required either sharing the MNOs' tech stack or setting up a separate stack to handle MVNOs, BSS, Charging, and Plan Design needs. That's why most operators have offloaded this work to mobile virtual network enablers that buy the software and amortize it across their MVNO customers. The downside of this approach for the MNO is that it adds a middleman when they could be collecting that revenue, and it puts the MVNO's experience in someone else's hands.

[01:16] As they say in Spain, "That is no bueno." But now, thanks to Totogi's multi-tenant charger, MNOs can have the best of both worlds. They can easily support MVNOs on their network, capture that revenue, and guarantee a great MVNO experience without disrupting their retail subscribers. Today, I'm talking with Chris Bradley, head of digital architecture at 2degrees.

[01:39] We're going to break down how easy it was to try out Totogi Charging-as-a-Service, the key feature that made them buy the product, and how 2degrees plans to use Totogi's AI-driven features to boost revenue and help their MVNOs win in the marketplace. So let's take 20. Chris Bradley is head of digital architecture at 2degrees. Hi, Chris. Welcome to Telco in 20.

Chris Bradley: [02:04] Hi, DR. It's really good to be here with you on the podcast today.

DR: [02:07] I am so excited to have you on our podcast. And if people can't tell from the accent, you're in New Zealand, which is literally my tomorrow. So you are, at least from my perspective, living in the future. And today we're going to talk about how you selected the futuristic tech of Totogi. But first, tell me about 2degrees and what the wholesale, and more specifically the MVNO market, is like in New Zealand.

Chris Bradley:

[02:30] Sure. Thanks, DR. In 2022, New Zealand's leading challenger communication companies, 2degrees, and Vocus, joined forces to form under the brand 2degrees. We are the third-largest full-service telecommunication provider in New Zealand. We offer broadband and mobile services covering 98% of places Kiwis live and work. We have an award-winning customer care team that we are enormously proud of, and we have a network of 58 retail stores across the North and the South Islands.

[03:00] 2degrees is second in fixed line and we're third in mobile, but it's a really even race and we're keen to move up those places. We've positioned ourselves as a challenger brand and that's something we're enormously proud of. We really like taking on the big guys. We want to bring the skill set that we have as an organization to our partners and increase the MVNO market. New Zealand's mobile market is made up of three very traditional MNOs, and we are one of those.

[03:27] Increasingly, there is network parity across all of the MNOs, which is unusual, but in the New Zealand market, it's not really a differentiator anymore. We have the same coverage, the same reach, 4G, 5G networks. In fact, MVNO is pretty immature, DR, in New Zealand, although we are seeing it evolve. Currently, MVNO only makes up 2% of the market compared to Australia where it's 10%.

DR:

[03:51] So 2degrees selected Totogi to modernize its wholesale offering to the MVNO and digital brand market. As you guys are looking at this project, what are the business goals that this platform is trying to achieve? And were there any features of Totogi that particularly stood out?

Chris Bradley:

[04:07] Absolutely. Our wholesale sales team's goals are to win the majority of the MVNO market in New Zealand. It's as simple as that. To make this possible, we needed a nimble platform that we could spin up and extend to our partners and to remove some of that legacy technical debt that we have in our traditional telco platforms. 2degrees has a long history and heritage in fixed line with national fiber assets. Leveraging that heritage is a real key differentiator for us as we look to extend that knowledge into the mobile wholesale space through investments in Totogi's Charging-as-a-Service platform.

[04:44] It's a key driver in our long-term commitment to achieving this goal. Totogi gives us the ability to be independent

of our core business and provides the tools to be nimble and ensure that we can react to those customer needs. We really love the fact that Totogi has an API-led approach. We also love the Plan Builder. It's just so simple to put together plans in minutes, not weeks, days, or hours. The other thing that we really like is that we don't have to rely on our technical teams to build those plans anymore.

[05:15] Traditionally, we've had to go to our tech teams to build plans, to take them through change control processes as we look to deploy things into market. We consider ourselves to be a software-defined company, so we really like the whole Totogi philosophy around API-first. We want to automate our user experiences, our customer journeys, and lifecycle events as much as possible, taking the friction away from the end user. And Totogi allows us to deliver all this and more.

DR:

[05:45] Yeah. What's so great about it, when I talk to MNOs that are doing what you guys are doing, which is building a platform for MVNOs. And it's this wholesale platform that allows you at a very low cost to one time integrate it to your network, and then many times spin up tenants for the MVNOs that are opening up for business in your country. And this is a risk for MNOs. You're not in control of the MVNO. They might be wildly successful and grow very fast, and then how do you estimate the capacity needs for that, or they might fizzle out and not be successful at all.

[06:20] The traditional vendors, they make you invest in the entire platform and predict what the needs are going to be. And so what's great about the Totogi Charging-as-a-Service system is because we're built in the public cloud, any sort of scaling or dynamic changes of capacity are all handled and then we just charge you guys as you use it. And so it's just a completely different approach, and I think it works really well in this setting where you guys want to provide this really great experience, but maybe we don't want to build out this huge investment for retail.

[06:54] You're like, "I'm not really sure how this is going to play out. I don't know how many they're going to be. I don't know how fast they're going to grow." So, I think that's one of the great things that I see you guys thinking about as you evaluated our tech.

Chris Bradley: [07:05] Absolutely, DR. It's a key differentiator for us as you talked about. As we look to grow the MVNO market, we don't have to introduce multiple platforms. We integrate once with Totogi, but we can spin up multiple tenants. It reduces the risk to us as a business and allows us to onboard and scale with the demands of our customers.

DR: [07:24] In typical MVNE, someone's taking that risk and it used to be the MVNEs who were trying to recruit lots of MVNOs and amortize the cost. And now with the cloud and with multi-tenancy, you don't have to do that anymore and that's really great. And so Totogi is software as a service, which is, I think, a fairly new concept in telco. People play with that definition. There's a technical definition of SaaS and then there's also a weaselly way, like commercial approach, to SaaS, but we're really a platform. And so why did buying a SaaS product make sense for 2degrees?

Chris Bradley: [07:56] It didn't really to begin with, DR. The whole charging in the cloud is like, why would we do that? There was definitely some traditional sentiment around that "we can't give out our crown jewels", so to speak, to the cloud.

DR: [08:07] I believe it.

Chris Bradley: [08:08] But 2degrees is innovative. We like to keep across emerging technologies where we can benefit from it, as well as our customers can benefit from it. SaaS isn't foreign to us and it's not new to us either. We use SaaS platforms on a regular basis in order to complement our core systems. Back to that point, we are a software-defined telco these days where we build our own BSS systems, but we partner with partners like Totogi to innovate and complement our offerings to customers.

[08:36] And we see that as a key strength. Totogi allowed us to accelerate our wholesale journey and, again, remove some of those dependencies on our legacy systems and to actually allow our wholesale part of the business to become autonomous around how they start providing services and offers to our end customers. So when we were doing a market scan, Totogi just happened to be there at the right time and it fitted our brief. It was like this is actually super interesting—someone looking to be different, innovate.

[09:04] And I love the fact around that whole multi-tenancy approach that we can integrate it once to our network, and we

love the fact that we could spin up the free tier and try before you buy.

DR:

[09:13] And charging's like this really interesting problem in telco because it really is suited well for the public cloud. But what telcos have traditionally done is they pre-provisioned all the capacity they need for five years in advance and most of that hardware is not being used. It's not a great use of dollars. And so charging has been this really great use case for the public cloud. And we get a lot of pushback on that idea, but I think modern telcos like 2degrees, we're starting to see more and more telcos who are embracing—do I really need to own the stack top to bottom?

[09:51] Is that really critical? In some cases, it's really important that you own the whole stack, but there's other cases where it's not as important, and letting that go doesn't make you less of a telco. It just means that you're focusing your resources on what matters. And so SaaS is a really great commercial approach because you're not owning it. The usable value of it decreases, so commercially it makes sense, but the technical side, which is we're managing that platform for you guys, and so we're putting new features in and it's not this huge upgrade project, right?

[10:22] You're constantly getting new features. And I think even during the project when you guys were trying us out, you pointed out, "Hey, this is missing," or "This doesn't seem to be working right," and you guys would go to sleep and wake up and it would be changed and working. And so it's just a completely different way about delivering software and working with technology.

Chris Bradley:

[10:42] Yeah, agree.

DR:

[10:42] So back to charging, a question we get all the time, how can you run charging in the public cloud given the latency requirements? We always planned that Totogi would run in a select number of regions around the world, but we wouldn't map one region per customer or even one region per country. We plan to run billions of subscribers per region. And so 2degrees will be using our newly opened Singapore region. How did you guys get comfortable with the latency of the public cloud when it comes to charging?

Chris Bradley:

[11:13] That's a really good question. Being able to do the PoC was a big part of giving us some really good comfort about that.

But we have seen that there's also a significant shift in technological advancements and billing methodologies. And what I mean by that is we are now providing customers with unlimited data. We are providing bigger data volumes to our customers and our MVNOs are as well, which is reducing the need to call back to the charging engine as frequently as we used to do in the past with like prepaid type packages and so forth.

[11:49] So that shift is a real substantial change for us and it means that urgency of calling back diminishes, easing some of those concerns over latency. And back to that PoC, we could actually test this as well, DR. So being able to quickly put Totogi into our pre-production environment and hook it up to our RAN gave us really good confidence that we weren't seeing latency that would impact the customer experience.

DR: [12:16] Yeah, this is pretty typical. We get pretty deep into a sales cycle and it invariably comes up on the network side. "Hey, we've never done this. We've always had charger in-house. Now it's going out on a line, out to the region. Is it fast enough?" And we obviously are very prepared for this question. We get it all the time.

[12:34] So we have these tools to test it. What you guys did is always best. We just install it. We can connect to core in usually a couple of weeks, usually a couple of days, and then hook up a phone to it. So easy. And people, they're like, "Oh my God, that's totally acceptable. Let's keep going." And it just totally diminishes those concerns.

Chris Bradley: [12:52] It does. Agreed.

DR: [12:53] We're a US company. We're obviously on AWS. You guys had some sovereignty concerns that I think was the bigger part of the issues with maybe using Totogi.

Chris Bradley: [13:03] Yeah, and sovereignty is I think important for a lot of countries. And not just for us as an organization, but for our customers. We need to obviously protect their data, our data. The Singapore instance allows us to do that. We run loads across other countries as well. Singapore is similar in terms of our legal requirements, our privacy laws, which give us a lot of comfort around that sort of sovereignty aspects. So we had zero concerns when Totogi said, "Hey look, we're going to do a Singapore region." It was like, yeah, let's do it.

DR: [13:35] Yeah, yeah. I think what people don't really realize when you look outside of New Zealand, almost every country has a set of countries that they are comfortable sharing data, and almost always, most countries have some friendly country where there's an AWS region. And if there isn't, there's one planned or coming soon. Saudi Arabia is a little bit tricky. There's no AWS region and they really don't like their data to leave. And so there's a couple spots here and there, but every day there's either a new region open up or rules and regulations are being relaxed.

[14:07] And so we feel that on the arc of time that there'll be a region for every single country to use. It's just a matter of time. So that's very useful. And so you mentioned a couple times here that one cool thing about Totogi has been you can try before you buy. And so what was that buying process of Totogi like compared to the usual RFP process? I have to be honest, my goal is to kill the RFP process in telco so that no one ever does it again.

Chris Bradley: [14:33] Yeah, look, it was amazing. We had the PoC up and running in next to no time. It allowed us to do that real-world testing of the Totogi platform on our network in weeks. We're not talking months, in weeks. It gave us quick confidence that aligned with our needs and our customer needs. Also, gave us a real understanding of what the risks were around the platform. Not a paper-based exercise with PowerPoint decks, but we actually could see for ourselves the outcomes and how Totogi was performing.

[15:02] So those expectations were easily set and we could take those to our key stakeholders as well, showing them that this was a viable option for the 2degrees wholesale team. We were supported all the way through the PoC by an amazing team of sales and technical experts considered at the top of their game.

DR: [15:20] Yeah, thank you.

Chris Bradley: [15:20] They really understood us as a business and what we're trying to achieve. So that's also a key part of that process as you're going through the PoC that the investment from Totogi around understanding what we are trying to achieve as a business, not only that it's a platform, but how it can accelerate our outcomes. The fact that we are a challenger and Totogi is innovating in that space, I think it was just two organizations

with a common mindset looking to achieve a common outcome. It was quite evident in that process.

DR: [15:50] Yeah, and I think what was interesting about your approach was a lot of people really love our plan design product, which is the user interface that helps people design tariffs and plans. And it's WYSIWYG, what you see is what you get. It's type it in, drag and drop. We've added a copilot that we call Plan Sidekick that you can literally, like with ChatGPT, design the plan and then it spits out marketing materials and legal blurbs and really is accelerating all that stuff.

[16:18] But you played with the APIs. You actually got down and dirty with the code. And I think that was one of the key things for you guys in terms of it's a very open system, which is not usual for most telco software. They're like, "Hey, our consultants will do it for you. What do you need? We can do it for you," and charge you a penny for that. We just said, "Here you go. Here's the documentation. Go ahead and play with it."

Chris Bradley: [16:38] Yeah, I actually played with the APIs myself, not just the teams.

DR: [16:41] Yeah, no, that's what I'm saying. You did it.

Chris Bradley: [16:43] No, that's right. I'm not quite a tech dinosaur yet, but the reality is they were super intuitive. I was really impressed from the outset how intuitive that they actually were and easy to use. And the fact that they're modern APIs built around GraphQL allow us to rapidly integrate and only query the information that we needed. So that also gave us a comfort around how we could tailor those API's responses around producing overhead and enhancing performance.

DR: [17:09] We really want to focus on business outcomes because we really want our customers to be successful. We want you to accelerate revenue. We want you to get MVNOs onboarded, and we want you to do what I'm about to talk about next, which is you don't buy Totogi for the charging engine.

[17:22] You buy it for the AI vision, and the AI vision is all about optimizing revenue and helping telcos realize more revenue for their huge network investments. And so what are your plans to use things like our revenue optimization features to help you guys differentiate as an MNO in your market and with your MVNOs?

Chris Bradley: [17:41] We've 100% bought into the AI-driven vision. I think telcos in general, we're looking to use AI not only in charging but other aspects of our business as well to boost revenue and productivity. But, Totogi's vision around AI is something that we are following very carefully and closely. We're keen to use the new features as they roll into the platform. And again, that's just one of the benefits of it being a CaaS is as the features are available, they're there for us to consume.

DR: [18:08] Yep. You can use them.

Chris Bradley: [18:08] It's awesome. We're looking to pass on that capability to our partners, the MVNOs, to help boost their revenues and sales and understand their customer's behaviors better as well. And that becomes a key differentiator for us as well. It's not just about 2degrees. It's around those partnerships and the partnerships benefiting from what AI can provide to them as well.

DR: [18:27] Yeah. I mean, I think the MNOs are looking to build a sticky product. And so what's your differentiation? I mean, obviously your network is a differentiation, but you mentioned at the beginning that there's a lot of parity across the networks in New Zealand. So now what are we going to do? And so this becomes a service that you can charge your MVNOs for. We're up to the point in our ML model where we're predicting churners six weeks in advance. And so imagine the different experiments you could run as an MVNO when you have six weeks' notice.

[18:56] You could try two or three different offers to make them stay. And so we think that's hugely valuable. We think that's differentiating for you guys as a MNO, and we're really excited to do that. And we are so excited about this future and this project with you guys. And you shared a lot of compliments about our team, but the 2degrees team has been amazing. Super responsive, easy to work with, easy to negotiate with, which you don't always get to say at telco.

[19:21] And so looking forward to the results and hoping I can come back to talk to you on another podcast about what we're doing with AI.

Chris Bradley: [19:30] Yeah, we look forward to that too, DR. It's super exciting times as we go on this journey together.

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Chris Bradley, 2degrees
Released February 20, 2024

DR: [19:32] Yeah, it's great. So thanks so much for coming on the podcast, Chris.

Chris Bradley: [19:35] Yeah, thanks for having me.

DR: [19:36] Awesome. 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. It's so awesome to hear how excited 2degrees is about Totogi. Like I mentioned, you don't buy Totogi Charging-as-a-Service just for the charger or the awesome Plan Design. You buy it for the AI capabilities. Because their charging engine creates EDRs in a standardized format in the public cloud, it's super easy for us to add AI in the form of machine learning to optimize your revenue.

[20:10] And we're spending millions of dollars to build the best ML model in the industry. Here's how it works. Your marketing team sets a goal. Are they trying to stop churn or increase ARPU? Then, the AI gets to work, searching for cohorts to target and crafting personalized offers for subscribers. We use generative AI to create SMS text messages to entice subscribers to accept their offer. Only once a subscriber accepts the offer is the new plan created all through Totogi's APIs.

[20:38] And you heard Chris, Totogi APIs are a dream. Just sit back and watch the revenue roll in. Give it a try. We'll be showing it off at MWC on February 26th through the 29th. Totogi has a stand in Hall 2. Yes, that Hall 2, that everyone will be talking about. Meet me there. DM me on LinkedIn or X @TelcoDR and I'll hook you up with a demo. I'll also be showing off Totogi's killer AI tech during my keynote at the MVNO Summit at 4:00 PM on Wednesday, February 28th in Hall 8, Theater 4.

[21:11] It's a hike. Expect at least a 30-minute walk from the south entrance. So strap on your trainers and get there on time. The theater holds 350 people and GSMA has told me 350 people have already registered to attend. I'll be providing some yummy snacks and drinks when you get there, so I promise it'll be worth it. After the event, Totogi will be hosting an iconic party for our attendees and we have buses waiting right outside Hall 8, so you don't have to walk all the way back to the entrance.

[21:39] So get your steps in and I'll see you there. Until then, be sure to listen to more Telco in 20 episodes, like and follow, and leave us a five-star review. Sign up for my awesome email

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newsletter on [TelcoDR.com](https://telcodr.com) and check out my YouTube channel where you can watch my keynote on February 28th. Be sure to like and subscribe. Hasta later, nerds.