DR: [00:00] I've been sitting in these meetings and we explain our ontology and we explain connected intelligence and how we can connect to literally any vendor system. And the very first question that we get is, "What about an Amdocs system?" Famously can't access, famously difficult to migrate off of. So even Amdocs, Michael, you can connect to that?

Michael Walker: [00:20] That's one of the questions we get all the time and the answer is yes.

DR: [00:23] That's so awesome.

Announcer: [00:30] 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 Michael Walker, the head of enterprise AI deployment strategy at Totogi.

DR: [00:49] Hey guys, it's time for another, "What's up with Totogi?"

Announcer 2: [00:52] What's up with that?

[00:54] What's up with that?

[00:58] What's up with Totogi?

DR: [01:01] What's up? All right. You guys all know there's been an explosion of AI applications out there. Most of them take a horizontal approach trying to be everything to everyone across every industry. But MIT research shows that 95% of enterprise AI projects fail. And they fail for one simple reason. They don't have enough context. Without proper context, AI struggles to make the right decision. It doesn't have enough information, and so it leads to crappy results. Is your telco looking to be in the 5% that succeeds with AI?

[01:38] At Totogi, where I'm acting CEO. We believe vertical AI is the right approach for telco. Why? Because even though every operator thinks they're special snowflakes, you actually have tons of similarities. You all run networks, have subscribers and deal with the same headaches. Provisioning services, managing billing disputes, and keeping customers from churning. The vocabulary of our industry is pretty much identical across every continent. That's why we built something we call an ontology. Think of it as telco DNA that gives AI the context it needs to actually understand your business from day one. With an

ontology, it accelerates the building of AI applications so you get it right on the first try.

[02:25] Today I'm talking to Michael Walker who leads enterprise AI deployment strategy at Totogi. We're going to dive into why most telcos are stuck with AI chatbots when they could be completely transforming their operations. How Totogi's ontology approach eliminates the context chaos that's plaguing AI deployments everywhere, and how BSS magic can turbocharge even ancient legacy systems. Yes, even Amdocs, without expensive risky migrations. So let's take 20.

[02:59] Michael Walker leads the enterprise AI deployment strategy at Totogi. Hi Michael, welcome to "Telco in 20."

Michael Walker: [03:06] Hi, DR. Thanks for having me.

DR: [03:07] Yeah, we're going to have an awesome conversation and I'm super excited to talk about a topic I think is very important, which is context and context engineering. And so you were recently the CMO at SmythOS helping major enterprises like Unilever and the US Department of Defense deploy horizontal AI solutions at scale. And now you're at Totogi and focused on what we're doing, which is vertical AI specifically for the telco industry. And so you've seen both sides. What do you think are some of the pros and cons of a horizontal approach versus a vertical one?

Michael Walker: [03:42] So there are benefits to both, right? If you think of horizontal AI, you have a much more broad range of applications initially. So the AI that you can use can go across different departments and different industries, so you have a larger TAM and things like that.

DR: [03:56] Yeah.

Michael Walker: [03:57] What you don't have is that deep industry knowledge and context like you do with vertical AI. With vertical AI, it can speak a particular industry's lingo on day one. Fire it up, it's ready to go, customize it and do it your way. And so that's why I think there's a lot of advantage to vertical AI. And that's why I think the way we're doing it here at Totogi is so smart. It has that context and industry knowledge ready to go from day one, so it speaks your language fluently. You don't need to work so hard to add it later.

DR: [04:25] Yeah, I totally agree. And as much as telcos all think they're different, they're probably 95, 97% the same. And so we can put a lot of the processes, the lingo, like you said, the information, and then when we go to a specific telco, just add what makes them different. And so yeah, deployment becomes a lot easier and a lot faster. And so let's talk a little bit more deeply about context and context engineering. I recently wrote a blog about this because I think it's really important for people to understand it. And so why do you think context is so important to getting AI to work at scale?

Michael Walker: [05:05] Well, think about what the context is first. It's everything the system knows about you and your business and what you're trying to do at the exact moment that it's trying to make a decision, generate an answer or take an action. It's a combination of what you've told it and what it's stored from previous interactions and then all the external information that it has access to. It's really the brain of the AI. Without context, it's like you're meeting the AI for the first time, every time. So when you try to scale AI across an organization without context or with bad context, that's when you get what we call context chaos.

[05:42] Your AI's acting on old data or stale data, it starts to give answers that are incoherent, sometimes just flat out hallucinations. And it's because it doesn't understand the meaning behind the data. Where did this come from? Where does it need to go? So when you think about what people generally do with AI, they're kind of just doing AI for AI's sake. It's an initiative in the organization. It's something they need to do.

DR: [06:05] Their bosses told them they had to do it, so they're doing it.

Michael Walker: [06:09] Exactly. And what is AI good at at that point? Well, we know it's good at human augmentation, helping you write emails or doing board decks or working on spreadsheets, things like that. But what enterprise value does that have, right? Maybe you're able to work 20% faster, for example. If we want to truly derive enterprise value from AI at scale, that's going to come from automating the work, right? That's going to come from doing things in totality that typically humans have done. So if you are able to add the context to AI to be able to do that, you can do it at scale efficiently and get true value from the AI rather

than just automating a percentage of work that's done by humans.

DR: [06:48] Totally. I think the key to the value of AI is really eliminating work out of humans. And yes, you might need fewer humans in your organization, but I think you look at the flip side is you can now focus your humans on things that only humans can do. Building relationships with your customers and really thinking about things that are important and you never have time to do. And when I think about context, I think about it as putting the best person in the world, think of your best worker, think about the top person in a particular department, think about the best person in the industry.

[07:23] If you could get their brains into AI and now that person is making decisions for your telco, you wouldn't need humans to babysit it or quality check it. You could let it go. And so I think about all the best people at Totogi, how do I get their brains into our AI, so we're making better decisions as a company and I think telcos will be doing that as well. So we've been thinking about context. Obviously Totogi has this amazing AI product that we call BSS Magic. How do we add context for our customers in our product, BSS Magic?

Michael Walker: [08:00] We do it with an ontology. The ontology is essentially a framework for managing that context that we were just talking about. Something we realized pretty early on is that we're going to need a systematic framework to not only capture, but to manage that context to be able to rapidly implement AI at scale. So think about if you started to deploy AI across dozens or hundreds of different systems, right, this siloed AI. Well, those systems often can't really talk to each other very well. Which means that those agents or the AI that you deploy doesn't have the full picture of what it's trying to do.

[08:34] It can only access the data that's directly underneath it. Now imagine trying to do that across 10,000, 50,000, 100,000 employees who are using AI. The challenge operationally is huge. You have hundreds or thousands of agents with tens of thousands of employees, and now what if you need to update a piece of information across all those agents and all those employees? You add a new ultra VIP plan to your organization. Now you need to update all these systems and marketing and sales and network and tech, and how do you do that manually without one common framework in between? And so that's why the ontology is so important and that's where the Totogi

ontology comes in. Having that one systematic framework starting with the BSS that can manage all of your context in between.

DR: [09:18] Yeah, exactly what you said. You're like one or two agents, no big deal. But now when you have thousands of agents working in all these different departments, keeping them synchronized and up to date was going to be a very difficult problem. And the better that you could handle the context and management of the context, we put that into something that we call our ontology, the nouns and verbs of your business. And so they're built on top of this telco domain knowledge. Like I said, 95 to 97% of the telcos are all the same, and we just add that 3 to 5% that's different for you, and then now you're away to the races.

[09:55] So that's amazing. And so context is really important and a big part of it, but you and I both know how crazy the BSS ecosystem is at a telco. And so you've been learning about how all the underlying BSS data is sitting in hundreds of applications and databases. Deployed, integrated, customized, set up, it's a spaghetti bowl of craziness. And so we obviously need access to that data with BSS Magic. And so is Totogi asking our customers to swap to a Totogi product in order to make BSS Magic work? Or are we asking them to move their data to a data lake? How are we solving the data problem?

Michael Walker: [10:36] This is probably one of the biggest myths in enterprise AI, is that you have to move all of your data into one big data lake before AI can work with it. That's the old way of thinking and the old way of doing it. What we do is we use a process called connected intelligence. It's just a fancy way of saying, you don't have to move anything. We'll connect directly to your data sources, so your billing system or CRM or OSS. Everything's used in place and in real time. So no migrations or data syncing or years long data projects. It's just instant access to the truth. It's like plugging directly into the grid instead of trying to build your own power plant, there's no need for it. And so that's how we handle it with the connected intelligence approach at Totogi.

DR: [11:19] Yeah, I've been sitting in these meetings and we explain our ontology and we explain connected intelligence and how we can connect to literally any vendor system. And the very first question that we get in those meetings from telco execs is what about an Amdoc system? Famously closed off, famously can't access, famously difficult to migrate off of, and so everyone

wants to break out of Amdocs jail. So even Amdocs, Michael, you can connect to that?

Michael Walker: [11:46] That's one of the questions we get all the time. And the answer is yes.

DR: [11:49] That's so awesome.

Michael Walker: [11:51] And I get it, right? Amdocs is a really locked down system. It's not as open as other ones. Some systems are really easy to get data from and some are more difficult. But the idea, the premise is exactly the same. We connect to a source system, we read the data, and then we translate that data into the common schema model, in this case the Totogi ontology. And then our AI layer that sits above that is able to act on all the data that it has access to from all those systems. So the agent or the deployment layer will decide which data is relevant, which data do I need to use, and which data do I need to act on in order to be able to execute?

DR: [12:26] Yeah, it's amazing. And so now that you have access to that underlying data and the ontology gives you context, what can you actually do with it?

Michael Walker: [12:35] Anything you want. Once you have the context, you have the ontology, you have the data, this is where magic happens. This is where you get superpowers for your telco. So the very first thing you can do is you can talk to your data directly. So you can ask it something like, "Show me my top churn risk customers by ARPU." And you'll get the answer instantly. You don't have to wait for a report to be generated, make a request and get it back. You can migrate systems, right? And do it in weeks and a set of years. You can build any agent that can act with full context across the organization. You could vibe code against the ontology.

[13:08] And this is where a lot of customers start to say, "Is this really true? You can do this in this amount of time?" As an example, we have a customer that we flew to see about a month and a half ago. They were looking for a sales agent that could analyze calls, from a recording. It could make a transcript. From that transcript, it could recommend the proper products, and then it could do pipeline health evaluation and predictions. They were looking at a couple out of the box tools, but they couldn't integrate those tools with their existing environment.

And I said, "Hey, we could build something better than what you're looking at right now in four weeks or less." Right?

[13:42] And they told us, "Michael, you sound very confident, but that's"-

DR: [13:44] You're crazy.

Michael Walker: [13:45] Not possible.

DR: [13:46] They were super skeptical.

Michael Walker: [13:47] Exactly right. They said, "We've never seen anything like that before."

[13:50] And so we'd said, "Look, give us a shot. We'll do a proof of concept, give us four weeks and let's see if we could build something."

[13:56] And when we did the final demo for them, all they said throughout the entire demo was, "Wow. Amazing."

[14:02] This is kind of the holy cow moment. And they told us at the end, "We didn't believe that you can move that fast."

[14:08] And that's the power of vertical AI, right? Because we have the ontology, we have the telco knowledge already rooted in. Now all we have to do is work at the AI layer where we build the use case. And we're able to do that much more quickly than anyone thinks is possible because of it.

DR: [14:21] Yeah. And I think it's the power of vertical AI, like you said with the ontology. It just gives us a leg up. I'm not saying horizontal AI doesn't work. It absolutely does, but you have got to add that context at some point. And you can either add it after you buy the product and build it up, but you've got to think about how you're going to keep it all in sync across many different agents. Or you can take the BSS Magic approach where we add the context to the core. And I think you've walked through a couple of great examples. A lot of businesses are interested with interacting with the data. Give me five ideas to improve my plans, give me five new revenue ideas in this area.

[14:55] And they've never been able to interact with disparate systems like this in this way. It's always like, "I've got to wait for the data to go to their warehouse. I've got to wait for someone

in IT to generate the report." And then you're like, "Okay, I want the report changed." And it's just this very slow iterative process. And now executives can sit there and ask the questions they really want. And then like you said, migration has been this big problem. No longer is it years and the risky part of the project. We can move people in weeks and months.

[15:27] And I know it sounds unbelievable, even out of systems like Amdocs, even out of some of these locked down older systems, it's just a new world and AI is really enabling that. And so we're really excited about that. And so one thing that I'm really excited about is that you are about to be a new parent. You're expecting your first child in a couple of weeks. And I remember when I was going to be a first-time mom, everyone wanted to share parenting wisdom and old wives tales. And so you're an American that lives in Sweden. What's the craziest piece of parenting advice you've received?

Michael Walker: [16:02] Yeah, so we're expecting our child in October, which is pushing winter here in Sweden. And if you didn't know, winter in Sweden is cold, very cold-

DR: [16:12] Super cold.

Michael Walker: [16:13] And dark. And so it makes me nervous about the idea of not only having to keep myself warm, but now a baby warm. But I was told many times not to worry and in fact encouraged to leave the baby outside in the cold. Yeah, leave it out there so it can breathe in the cold air and build up its immune system. So they say, just go to a cafe, have a fika, which is a coffee and a cinnamon bun. Leave the baby out in the stroller and it's going to be fine.

DR: [16:40] I can't even imagine leaving my baby outside unattended, much less in the freezing cold. But Michael, I will be talking to you about if your baby's immune system is insanely strong. And I just want to thank you so much for coming onto the podcast to talk about why context is so important, how Totogi is approaching it and all your wisdom from your experience. So thanks so much.

Michael Walker: [17:02] Thank you, DR. It was a pleasure.

DR: [17:03] Awesome.

[17:09] 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.

[17:20] Michael and I just talked about what it takes to make AI work at scale, but most telcos are still playing in the kiddie pool with chatbots and basic agents when they could be diving into the deep end of complete business transformation. What operators can create with a system like Totogi's BSS Magic and its telco specific ontology is insane. It's virtually limitless. You can migrate systems, build new interfaces and design applications all without ripping and replacing a thing. Just connect it, model your business rules, and start getting real AI results. For example, the other day I was talking to a telco that's still running Siebel CRM. Siebel, a system we haven't talked about for 20 years. Even that ancient relic can be turbocharged with BSS Magic.

[18:09] Its old creaky system still exists underneath, but with BSS Magic, it fades from view. With an ontology that models your business rules and understands the underlying data structures, even your old and busted systems become AI superpowers. This isn't just about escaping the vendor prison that Amdocs and Oracle have kept you trapped in for decades. It's adding AI capabilities while keeping everything that actually works in place. No massive migrations, no million dollar change requests, no moving data to a data lake, just a path to AI that works. Want to see what's possible when you start thinking big?

[18:48] Come witness the magic at TelecomTV's AI-Native Telco Forum in Düsseldorf, Germany on October 23rd and 24th. Totogi's an associate partner, and we'll be showcasing a BSS Magic use case that's going to blow your mind. Connect with me on LinkedIn and X @TelcoDR and let's set up a time to share a beer. It is Oktoberfest after all. Until then, tune into more "Telco in 20" episodes, like and follow, and leave us a five-star review. Don't forget to sign up for my awesome email newsletter on TelcoDR.com and check out our amazing YouTube channel and hit that subscribe button. Later, nerds.