DR: [00:00] I'm DR and this is Telco in 20. Everyone in our industry is looking for ways to put AI to work in their business. Today I am talking with one of them, Canadian operator TELUS. Earlier this year, TELUS launched their AI-driven platform called Fuel iX, which taps into more than 100 LLMs to help both their internal teams and enterprise customers use and monitor AI across different systems and clouds. For example, TELUS uses the platform internally to boost their ability to predict network issues. The results, forecasting accuracy has skyrocketed from 69% to 89%, which means their field technicians can work smarter, and more efficiently and make the right fix the first time.

[00:52] It's also having a huge business impact, enabling TELUS to reduce their network operating costs by almost $15 million. Imagine doing the same for your telco. Today, I'm excited to chat with Jaime Tatis, Chief iInsights Officer at TELUS. We're going to dig into how the company is leveraging AI across its operations, whether or not the industry needs telco-specific LLMs, and the importance of having clean data and a strong data strategy for a successful AI transformation. So, let's take 20. Jaime Tatis is Chief Insights and Analytics Officer at TELUS. Jaime, welcome to Telco in 20.

Jaime: [01:31] Hello. Thanks for having me, DR.

DR: [01:33] Yeah, this is going to be great. We've done a podcast with a colleague of yours, Hesham Fahmy, the Chief Information Officer at TELUS. And we had a great conversation about all the work TELUS is doing with Google Cloud. And I'm super excited to talk to you today about what TELUS is doing with AI.

Jaime: [01:49] Yes.

DR: [01:50] So, I was doing a little bit of research on telcos and how they're applying generative AI. And TELUS came up in my research with a system you guys have built that you call Fuel iX. I think it's mostly an internal tool for now. I think you're starting to explore sharing it with your external customers. But to start, you used it internally, you did a ton of pilots, and it's projected to save about $5 million and actually increase revenue too. And so, tell me a little bit about that project and how it's going.

Jaime: [02:22] Of course. So, I'll just start by saying that in TELUS, we've been innovating with AI since 2006, 2007, in a number of areas such as customer service, customer experience, network, and engineering. And earlier this year in 2024, we launched Fuel iX. It's an enterprise great AI engine to help companies upgrade their GenAI pilots to production, scale, and do it in a safe and secure manner. We have used it as customer zero since 2023.

DR: [02:49] Yeah, awesome.

Jaime: [02:49] And we have been able to do great examples and enterprise use cases that I will be eager to talk about.

DR: [02:55] Yeah, yeah. And are you focusing in a particular function? Did you start supporting internal support queries for your IT group or is it more helping the IT department to code? What was the genesis of the use cases that got you guys starting?

Jaime: [03:12] That is a really good question. So, if you go back in time to the end of 2022 when ChatGPT came out, we faced a decision. What is the best way to embed this technology in a way that we can actually provide all team members a very accessible tool that they can innovate and learn about this technology? We knew this was going to be a game-changer. So, if you fast-forward now, we have at any day around 35,000 team members that are actively using this tool for all sorts of exciting things. They either are optimizing new models, writing code, generating images, analyzing complex reports. So, to your point, we initially start internally, because it's the lowest risk you have.

                [03:53] And one of the first use cases is internal IT. So, we call internal IT support SPOC, single point of contact, and the team reimagines how our teams access IT support. The joke I always have is no one wakes up in the morning really wanting to talk to IT support. No one. So, we needed to ensure that we found a way to have a help desk with GenAI power to provide seamless, speedy technology support, to get the answers, and enhance the self-serve options and ability to chat directly with a live agent only in one single, simple user-friendly interface.

                [04:33] Since we launched that, we've been able to have over 70,000 chats using that GenAI-powered solution. And actually, the coolest part is that we've been able to enhance the self-serve resolution by 49%, meaning that there's a 49%

increase on things that team members do not have to wait to talk to a live agent. They can get resolution directly on that chat. And in just the first 12 months, this solution is tracked to enable 25% cost in savings. And one of the main things for AI is that it has to be very targeted or what is the outcome and the transformation that you want to do from it?

DR: [05:11] Yeah, no, I totally agree. We did something similar, though we did it with our external customer support and we talk about it like training wheels on, very guided AI, human watching, make sure that the answers are correct, and then we call it training wheels off, like a bike. We kind of let it go. And then the last stage, "Look, ma, no hands." And the whole idea there is to have it be completely autonomously driven, no humans involved, with a goal of how high could we push it to be able to support our customers, get a resolution with one single interaction. And north of 65% of all of our customer requests are answered autonomously, and now only 35% are escalated to a human. And now the humans are working on harder cases, more impactful things.

Jaime: [06:00] Totally.

DR: [06:01] And we've been rolling it out to finance, to sales, to engineering, expanding all the use cases similar to what it sounds like you guys have been doing at TELUS. Pretty amazing.

Jaime: [06:10] Yeah, indeed. And the other thing is it's all about a journey. So, initially, we started with internal use cases. When we got more confidence, we started to go to external customers. And we ensured that we did it in a very respectful privacy-adhering manner. And when we launched that external-facing solution, it's one of the first in kind in the country and it was the very first in the world to receive a privacy-by-design certification.

DR: [06:34] That's awesome.

Jaime: [06:35] And actually, this tool helps our customers, once again, to self-serve and get quicker, more intuitive responses to their questions without the hassle of long wait times, navigating through complex menus.

DR: [06:47] And that's all the customers want. They want an answer, right?

Jaime: [06:50] Yes.

DR: [06:50] They want it to be resolved as quickly as possible. So, again, reading in the news of what's going on around AI in the telco industry, there's a set of telcos in the world, SK Telecom, Singtel, Deutsche Telekom, e&, SoftBank, that have been investing heavily in partnering with Anthropic, the makers of the Claude LLMs. And their idea is they're going to build a telco-specific LLM. More specifically, SK has announced at least a $100 million dollar investment. So, they're putting real money into this effort and an LLM is not cheap to build. And so, what are your thoughts on that? Do you think telcos need to build their own LLM?

Jaime: [07:29] So, I personally don't believe building such a specialized model is necessary for just the telco domain at this stage. And I know there's many different opinions and views about this. For one, developing and maintaining an industry-specific LLM can be very costly and resource-intensive. And the ROI might not justify the spends at this moment. I'm not saying that not in the future, but at this moment. On top of that, the AI technology is advancing so fast that keeping a telco-specific LLM up to date with all the latest advancements is going to be a challenge.

DR: [08:05] Yeah, I agree.

Jaime: [08:05] Instead, what we're doing is actually adapting existing and more general-purpose models that meet specific requirements. These general-purpose LLMs are already highly advanced and capable of handling a wide range of tasks. They can be fine-tuned with specific data sets to meet needs of telcos without having to build and maintain one from scratch. And our focus always will remain on being practical, and scalable, and create applications that can deliver immediate value rather than building complex customized models at this stage.

DR: [08:38] At Totogi, we're still trying to be very flexible in terms of being able to switch and try different LLMs. The advancement that's happening, even just in the last maybe six months, Claude's come out with 3.5, GPT's come out with 4.0, they came out with 4 Mini. And so, how are deciding on one LLM with it changing so fast?

Jaime: [08:59] Yes.

DR: [08:59] When you're building AI applications or just simply prompting, a big part of making sure that AI systems are very effective is the quality of your data.

Jaime: [09:08] Totally.

DR: [09:08] I always say garbage in equals garbage out. If you don't have clean data and good input, then the quality of the output from the LLM will suffer. And telcos historically have had a ton of siloed applications, own databases, sometimes proprietary, tons of legacy systems. And so, how are you at TELUS overcoming the data challenges and getting your data ready for ingestion by AI applications?

Jaime: [09:32] DR, this is one of the questions I always love, because it's one of my favorites to talk about. So, the importance of having a strong data strategy and data-driven culture are critical. AI cannot be successful unless, to your point, you've got high-quality data. That is the real fuel of AI. The key to a successful strategy is to have the right foundations, because without them it's not only difficult, but it's almost impossible to scale the value of analytics and AI. So, back in 2020, we partnered with Google to kick off our data transformation journey and modernize our data stack. It was not a lift and shift. To your example, garbage in, garbage out, garbage on-prem, garbage on the cloud, it's not going to change it.

DR: [10:16] You moved your garbage to the cloud, it didn't help you at all.

Jaime: [10:16] Exactly, exactly. So, instead, we radically transform the way we leverage data, taking the opportunity to clean up our dataset. So, we actually had a joke internally. We used to call our old data lake the data swamp. And actually, when we did the modernization of it, we ended up deprecating more than 30% of the datasets in our legacy platforms because they were obsolete. It was experimentation that somebody forgot to delete. So, we build the data pipelines using new modern standards with SRE principles by design, that reduce the time to deploy them, the cost to operate them, and enhance the reliability through self-healing besides many other methods that we put in place.

[11:03] So, effectively, we broke down data silos and we were able to consolidate all our data into a single enterprise data hub,

where the curated information and insights are available to team members on a very strong privacy and security by design construct that effectively allows to democratize all these data at a scale and allows our team to leverage the power of our data through self-serve, or going through more specialized teams we have that can put AI resources to actually create solutions that are going to transform the way we do business.

[11:37] And that has been a journey. Many people ask, "Were you able to do this in 6 months, 12 months?" "No, to do this right takes a little bit more time, but it's doable." We completed it and it's so rewarding when you're done. And it's not only the data piece, there's so many things, how you manage data quality programs, metadata management, data governance, there's a bunch of other things that go tied to this to really make it happen and bring it to life.

DR:

[11:59] Yeah, it's so much work. Another telco that's done it in the world is Vodafone. They have 20 plus OpCos around the world. They deprecated 600 Hadoop servers and moved it all, like you guys, into Google Cloud. And they're like, "It was hard, but I wish I had started years ago." Because it's so worth it from the insights that they're getting, the value of it paid for itself in terms of the project. So, pretty amazing.

[12:23] Let's talk about your results. A few weeks ago, and you mentioned it when you were talking about your Fuel project, but I wrote a blog about the key to making AI work and making sure you get the ROI on all the investment that the effort to do all this work is worth it, is making sure you're receiving business value. And so, what are some of those metrics that you're getting from your Fuel iX program that you can share with us that showcase the business impact that AI is having on TELUS?

Jaime:

[12:50] Sure. I'll give you two examples. I already talked about internal IT support, so I'll tell you about two others. One, and this is a really good example because this is something that actually came from the ground up from the business itself. So, there's this solution that we created called the Neo Assistant. And that is an AI-powered solution on how we make it easier and we increase the efficiency of our network technician resources on the field. So, just think about all the thousands of events of work that need to happen in the network. We have thousands and thousands of cell sites. And you actually have to forecast small events, weather-related equipment failures, maintenance, you name it.

[13:35] So, we use machine learning to enhance the forecasting accuracy, and it went from 69% to 89%-

DR: [13:42] Yeah, huge.

Jaime: [13:42] ... improving the resolution by a huge factor. And actually, we created a device-accessible solution so the technicians can access this on their device. It's a GenAI solution that actually helps to guide technicians to complete different tasks. So, we found that the knowledge domain is very similar in many cases. And just by being able to guide technicians for certain jobs can increase drastically the efficiency of the different jobs that they can do. And the cool part is that there's a 75% adoption by the field technicians themselves. This is not a push. This was more of a pull. And the main outcome here is that we have a far more efficient workforce that are focusing on more higher-value jobs. And because all these different solutions put together, we've been able to reduce the cost of the operations of the network by over $20 million.

DR: [14:32] Wow, that's real money.

Jaime: [14:33] Yes. I'm just going to give you a totally different example. In Canada, we have French and we have English. So, when you communicate officially, you have to do it in two languages. So, we worked on how we can make it easy for team members so they don't have to write something, put it into translation services, wait a couple of days, it comes back. So, we found another exciting opportunity that we piloted internally and it's an AI-powered translation tool. Now anybody can say, "Well, I can go just now to any LLM and say, translate something."

DR: [15:02] Correct.

Jaime: [15:02] Yes, it will do it, but it's not going to be able to understand all the lingo of your company. It's not going to understand the tone that your company talks like. So, this is a lot of training that you need to do to ensure that actually the model will learn to talk.

DR: [15:17] Your style, your quality.

Jaime: [15:18] 100%. So, this is the part that is really cool. So, the translation copilot had an 87.5% accuracy rate compared to

professional translators. So, when this was tested, we actually had hundreds of different sentences that were translated. And actually, we had it testing a benchmark of team members and they were testing the quality of the translation, not knowing if this came from a professional translator or from the bot. And it was 87.5%.

DR: [15:46] That's amazing.

Jaime: [15:46] It's crazy. Now the other thing is the significant cost is not only of the cost for a professional translator, but it's the time.

DR: [15:54] I was just going to say that. It's instantaneous, is the difference.

Jaime: [15:57] Yes, totally.

DR: [15:58] It's not only better, but it's instant. And so, right there in the moment where you need the translation, the speed of business is just now instantaneous. And it's so helpful to your business and the people in the field, and I'm sure your customers and subscribers are super excited to see the speed and feel the speed from TELUS.

Jaime: [16:15] Yes, indeed.

DR: [16:16] Yeah. So, you're Colombian. I have been to Medellín, which is a beautiful city.

Jaime: [16:21] Excellent.

DR: [16:21] It's in the valley between mountains. It's summertime and a lot of people in the Americas usually go to Europe. But I had a question for you, which is being from South America and knowing this area much better, what are your top three favorite travel destinations in that part of the world that you would recommend to a friend?

Jaime: [16:40] So, my first answer is going to be a biased answer, because I was born in the Caribbean Coast of Colombia, so I love going to Cartagena. I love the warm sandy beaches. The food is amazing. There's a lot of history. The second one is I love the fantastic nature and beauty of Patagonia.

DR:	[16:57] Sí, yes.
Jaime:	[16:57] One of the best moments that is just a funny moment is I remember driving there on an open road with no other people or cars anywhere in sight, and we see across the window a family of South American ostrich running next to our car. It is just those moments that you will remember forever in your life. It was amazing. And I'll say the last, I've only been there once, but I'm really eager to go again is Isla de Pascua, Easter Island. So, it's full of mysteries, many unanswered questions about how the Moais were transported and put in place. And for people that haven't been there, this island is one of the most isolated inhabited islands on the planet. It's 2,000 miles from Chile. There's nothing else around it, it has beautiful beaches, so much history, and that would be my top three.
DR:	[17:44] The Easter Island heads, I think they've dug into the ground and they're actually deep. They're like full bodies. It's not just the head, it goes underground. These crazy things.
Jaime:	[17:55] Yes, indeed.
DR:	[17:56] Well, Jaime, I've learned so much about what's going on with TELUS. And so excited for your projects and all the business impact that AI is driving for your organization. And so, I just want to say thanks so much for coming onto the podcast.
Jaime:	[18:06] It is my pleasure. Thanks for having me.
DR:	[18:08] Yay. 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. Jaime just highlighted the key to making AI work. It all depends on the quality of your data. Many telcos are sitting on a mess of siloed and obsolete information that's trapped in legacy vendors' databases. It's unstructured, not clean, and as a result, not ready for ingestion by your AI applications. You can't just lift and shift that junk to the public cloud and expect miracles. You're going to have to roll up your sleeves and do some hard work.
	[18:46] To truly leverage AI, you need to go through some radical data transformation like TELUS. It took time and effort, not to mention the help and scale of a hyperscaler, but the payoff was huge. It's time to stop pretending that you're closed off legacy data stores aren't the root cause of a lot of your

problems. If you're ready to turn your data swamp into an AI-ready oasis like TELUS did, I'm here to help.

[19:08] Let's use the software services, scale, and frankly, world-class data tools of the public cloud to get you in position to kick ass with AI. DM me on LinkedIn or X @TelcoDR to set up a time to talk. 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 super awesome email newsletter on telcodr.com and be sure to check out our killer YouTube channel for more telco insights. Later, nerds.