

Episode 109 | The power of Agentic AI with Appledore Research  
John Abraham, Appledore Research  
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John: [00:09] Right.

DR: [00:10] And so as an analyst that's been focused in BSS, how big of a problem is vendor interoperability?

John: [00:16] Oh, it's a huge issue. In our own research, we found out, specifically for monetization, that number was around the 70% mark. Which by itself is a huge number when you think that this is actually being spent on systems that do not necessarily have a future. This is just to support the ongoing maintenance of legacy.

Announcer: [00:39] 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 John Abraham, principal analyst at Appledore Research.

DR: [00:58] Hi guys. I'm DR. MWC25 is just around the corner and energy is building across the industry. Vendors like Totogi are scrambling to perfect their messages to the market, book meetings with telco execs, and get their butts to Barcelona. While previous MWCs were all about things like 5G, private networks, and network APIs. 2025 is going to be all about AI. And not just AI in general, but specifically AI agents.

[01:29] In case you don't know, AI agents are sophisticated pieces of AI code that can break down complex tasks, work together in tandem, and evaluate and optimize their own results. They can chain multiple steps together, reason on their own, and take action. Are AI agents poised to transform the way telcos run their networks, serve subscribers, and operate their businesses? Today I'm sitting down with John Abraham, principal analyst at Appledore Research, to talk about it. We're going to explore what makes agents different from traditional AI, dig into real-world use cases for telcos, and discover why Totogi's BSS Magic is leading the pack. So let's take 20.

[02:10] John Abraham is principal analyst and leader of the digital enablement practice at Appledore Research. Hi John, welcome back to “Telco in 20.”

John: [02:18] Hey, DR. Great to be back again on your podcast.

DR: [02:21] Yeah, I'm so excited. MWC is coming up here in a few weeks and I'm sure all the exhibitors are busy fine-tuning their messaging for Barcelona. And so from your chair, what do you think the big topics will be this year at MWC?

John: [02:35] Well, I'm quite optimistic for BSS at this year's MWC. There are three specific things I'll keep an eye out for. The first is the focus on enterprise. And that's where most operators today believe they are going to see a lot of potential for new revenues, new growth. And from a system standpoint, what that translates to is they need to have a new framework to solve that order-to-cash puzzle. Some operators have some sort of a system in place to support that, but it is far from the ideal mechanism to solve it.

DR: [03:08] Absolutely.

John: [03:08] But by and large telcos specific solutions are the way to go. So that's enterprise. The second one is monetization. API monetization is getting a lot more attention and beginning to attract investments. Obviously that comes off of the back of being able to monetize some of the network assets by exposing it. But it also ties in with the two big pillars within monetization. One is a charging function, which surprisingly has been on a good role for the past couple of years. And the second one is billing. Billing has been the largest chunk of spending within that segment and for good reason. One of the stats we have is roughly 70% of the total money that's going into these billing is to support legacy functions or systems that do not necessarily have a future. And part of the ambition here is to try and shift them into a modern architecture framework and better use that money. So that's the second point, monetization. And the third one is around AI or particularly agentic AI, which I'm sure we will be discussing in greater detail.

DR: [04:13] Yeah, I agree. I think the word agent and AI agents and agentic systems is going to be everywhere. I bet you it'll be printed on the side of every stand as you walk through the halls of the Fira. And so it's definitely the new and up-and-coming buzzword in the AI world. And so let's define it. In your opinion, what is an AI agent?

John: [04:33] Well, agentic AI really took off only in the last six, seven months. And you can probably track it down to the open model that OpenAI launched in fall 2024. And the big shift in that particular model was that it could actually reason. Not just generate content or identify patterns, but it could actually stop to think when you ask it a query.

[04:57] And coming back to your question about what is agentic AI, I see agentic AI as having two very distinct capabilities. One is reasoning, as I just said. It's having a rules-based engine, the traditional way of doing analytics on the left side and on the right side is a human-level reasoning that's probably considered to be what they call AGI, the most advanced form of reasoning. And we are probably somewhere in the middle. As of now it's quite a compute-intensive task and it's not that easily accessible, but that's where we are.

[05:32] And the second one is about action. So in the past, the failure mode was, let me hand it over to a human, the copilot wave was all about-

DR: [05:41] Yeah, absolutely. Human intervention or quality check.

John: [05:42] Exactly. And what agentic AI aims to do is shift from a copilot to an autopilot where there is no option to hand over to a human. Why? Because the agent or the agentic AI is capable of managing it. To make that happen, you actually need a system to do codegen on its own, and that's going to be a huge leap forward.

[06:02] A couple of other things that actually come into play. One is that these systems are going to be highly autonomous and they don't need to be given a prompt. This is the problem, what you think is the answer? Like we engage with ChatGPT today, these are far more proactive, not reactive systems. And

the other thing which in my view is far more important is that they can exist in a dynamic multivariable environment. And what I mean by that is typical software systems, even some of the more modern AI systems, they exist in environments where the variables around them are predefined and usually contained or predictable. But if anything breaks, then the system breaks because it is not tuned to support that scenario.

[06:45] But in an agentic AI world, the agent is equipped to actually negotiate with that change either by creating new code or by reasoning and designing some other path. So I think altogether, agentic AI is probably something that gets closer and closer to thinking like a human. So that's the way I would put it.

DR: [07:07] Yeah, I totally agree with that description as a really good framework for people to really compare it to what it's not. It's not a workflow that stops. It reasons, as you said.

[07:17] And so I imagine as an analyst, you're constantly bombarded with pitches about AI agents, agent AI, all sorts of AI claims. And so I bet it's super hard to discern what's real and what's fake as you're listening to different vendors' pitches. And so what tough questions do you ask to figure out whether a vendor is a real deal?

John: [07:37] Well, firstly, let me clarify, I haven't received any pitches at all on agentic AI.

DR: [07:42] That's shocking.

John: [07:43] Some of the folks I actually had to reach out to say, "Hey, what are your thoughts?"

DR: [07:47] What's your story?

John: [07:48] And some of them just told me, you need to wait until MWC, it's going to be the big reveal. And goes back to your point DR about there's going to be agentic AI splattered all over the show floor, at least that's what I'm anticipating.

[08:01] So given that I haven't heard what many of these vendors are planning to do, I think it's too early maybe to call

out explicitly what are the things to watch out for per se. But maybe there's a couple of things that I'll just mention right now. One is you need to have a framework with AI or generative AI at the center, what we call AI native. You just cannot have it off to the side. It has to have AI at the heart of it.

DR: [08:28] Absolutely.

John: [08:29] And the second thing, which is a little bit more leading edge, and I picked it up from some of the other industry verticals, which is actually grappling with this, it is about the shift to maybe an outcome-based pricing. And I think it was Sequoia Capital who actually said it's moving from selling SaaS, software-as-a-service, to something like service-as-a-software. Which is another way of saying that we are not aiming for the software industry, but we are aiming for the entire services industry and what do you need? And we are going to sell you that particular outcome and we price you by outcome sort of thing. And it goes back to the confidence that the agentic AI, by itself is capable of doing these things. So again, it might be a bit of a journey down that particular road before we get to that. But I think these are probably a couple of the early things I'll call out now.

DR: [09:20] Well, yeah, I think the services industry is a prime target for AI because if it's human intensity, it's a lot of human bodies doing a lot of work on keyboards. And now with the ability to reason and make decisions. And then you mentioned earlier the generation of code, you can now take whole swaths of the Tatas and Tech Mahindras of the world and take out 10 for one replacement on coders with AI. I know no one really wants to talk about the human impact here. But absolutely jobs will be eliminated. I think in services it's a prime target. I think new jobs will be created because of AI.

[09:58] So over here at Totogi, we are not like that. We're figuring it out. Wait till MWC. I wake up every day feeling behind on AI. I'm not kidding. I am like, we're not moving fast enough. What are we doing with AI? Ship, ship, ship. And it's crazy. And so, one of the toughest questions people ask is, "What do you use these agents for? What are the use cases?" And so at Totogi, we kind of flipped the script and we really wanted to start with a

big business problem that the telco industry was challenged with and then figuring out how we could apply AI to that problem.

[10:29] And we decided to focus on the BSS vendor interoperability problem. And so we did some research. We found a TM Forum study that showed telcos spend 80% of their IT budget on integration and customization, which leaves only 20% for innovation. And so as an analyst that's been focused in BSS, how big of a problem is vendor interoperability?

John: [10:52] Oh, it's a huge issue. In our own research, we found out, this is specifically for monetization, that number was around the 70% mark. Which by itself is a huge number when you think that this is actually being spent on systems that do not necessarily have a future. So this is just to support the ongoing maintenance of legacy.

DR: [11:10] Just keeping up.

John: [11:11] Yeah. So I see there are three fundamental issues about interoperability, especially in a telco environment. One is the challenge of the initial setup. Multivendor environments inevitably means you need to have customized interfaces, which means you need to have a third party, like a primacy coming into play or some sort of a professional service provider. All of which increases the cost. But that is still okay when you compare that to the next, which is the ongoing maintenance, that is really a big headache. Especially if one of the different vendors decide to upgrade their software out of turn, there is a very high probability. The others break the integrators or the interfaces will need to be redone again.

[11:51] And then there is a third issue, which in my view is not talked about much, but it's actually the biggest of all, which is having an interoperability issue sort of changes operator behavior in the long term. What that means is every time the operator needs to add something like a function or a capability, they are very well aware that they have an interoperability issue. So what do they do? They go and put an adjunct system to the side.

DR: [12:16] Because it's quicker.

John: [12:17] Exactly. It's cheaper, it's faster. But in the long term, you're just adding another silo to your framework and it takes far more money to bring that back into the overall architecture. Now, I'd also say this, that having too many integrations actually is an impediment for adoption of new technology like AI, even some parts of cloud-native compliance solutions because the integration sort of kills the benefits of all that. So overall, I think that's a great one to target because it's a huge problem in general for operators.

DR: [12:46] Yeah, I don't know how you add AI to a big pile of spaghetti, right? It's really hard.

John: [12:51] It is.

DR: [12:52] It's one of the biggest problems we have in the industry. And at Totogi, we really like to aim on the big problems. We're trying to figure out how do we really help operators. Now, I think TM Forum's done a great job at defining the open APIs and the open digital architecture to help solve this problem, but I wanted to give you my pitch about BSS Magic and see what you thought.

John: [13:09] Sure.

DR: [13:09] So I think the last time you looked at BSS Magic was at DTW, The TM Forum show back in June in Copenhagen. And to be honest, I think we've rewritten BSS Magic about six times. We have it, we're on our way, something new comes out, DeepSeek, you're just like, "Oh my God, this changes the way that we're thinking." And so I think that's the way AI goes. You got to build while it's moving.

[13:32] So here's my pitch for BSS Magic to John Abraham, who actually is our analyst, we work with you all the time. BSS Magic is an AI platform that makes your entire telco stack work as one system. And here's the key. We built it on TM Forum's open digital architecture and APIs, not some proprietary Totogi system, but the standards the industry has agreed on. Now, I know what you're thinking, "DR, Amdocs, and every other

vendor is talking about AI too." Here's the difference. When they build an agent, it only works with their system. And worse, it's still locked into their proprietary way of doing things, which telcos must get away from.

[14:10] BSS Magic infuses the entire tech stack with a layer of AI intelligence. We built on top of TM Forum's standards and created an AI-powered universal translator that speaks fluent telco. It doesn't just connect the systems, it understands them. It knows when your billing system says subscriber and your CRM says customer, they're talking about the same person. And because it's built on industry standards, it works with any vendor systems, not just Totogi's. This is a game changer for telcos. You don't need 15 different proprietary AI agents all siloed in individual vendor systems. You need one intelligent layer that understands your business and can make everything work together based on standards operators want to use. Operators are in control, not the vendors.

[14:54] Here's why we are different. We're not selling a proprietary AI band-aid. We're not here to replace your systems. We're here to make your vendors' walled gardens irrelevant. We're extending TM Forum open standards, no vendor lock-in, no proprietary protocols, just pure standards-based integration. The industry has been held hostage by complexity for too long. BSS Magic will have your entire tech stack working as one unified system speaking the same language without replacing everything you've built. That's not just innovation, that's a revolution.

[15:24] So what do you think about that, John? Do you have any tough questions for me as a vendor?

John:

[15:28] I think it's quite impressive. Having that codegen capability was quite significant, but what really was standing out for me is the fact that you can actually have this on top of any system or any number of vendor systems and actually have that do it. Overall that's going to be quite an important distinction to have, especially as you have more deployments rolling out.

DR:

[15:52] Yeah, I think it's really interesting because we're definitely using this with our own deployments. Obviously we



bought STL, which is a BSS system. We bought CloudSense. We obviously have our own Totogi deployments and we already are using it. And the team is having these crazy ideas for a North American operator, we needed to move from one billing system into another one, and the one billing system was like \$250,000 a year in maintenance, and they wanted to move to a smaller biller because it was just a simple use case, \$70,000. But as my team was working, they're like, "You actually don't even need a \$70,000 system. We can use AI to generate the code for just this very simple billing case, and it'll be basically free." And so in a matter of weeks, we went from replacing 250 with 70, with replacing 70 with 0. And I think that's going to happen over and over again as you realize that these back-end vendor systems are really just really expensive databases.

John: [16:50] Well, looking forward to seeing a demo of that at MWC DR.

DR: [16:54] It's going to be exciting. Well, I'm definitely eating vendors for breakfast and probably everyone hates me, but we're going to all go to Barcelona soon, which is a foodie city and amazing restaurants and so many fun places to visit. And so my question for you is what's your best Barcelona hot tip or favorite place to go eat?

John: [17:11] Oh, well, I love the variety that Barcelona offers. The one place that really stands out for me was place I went last year. It's called Atempo. It's actually a Michelin-starred restaurant.

DR: [17:22] Nice.

John: [17:22] Mostly Spanish cuisine and owned by a guy called Jordi Cruz. He's quite a celebrity in Spain, I'm told.

DR: [17:30] Yeah, yeah.

John: [17:31] So a great place. And I've really enjoyed their food and it's as close as it gets to local cuisine is what I'm told, at least. It's worth checking out if you're there this year.

DR: [17:41] Yeah, I'm a big foodie and I really like going and enjoying Michelin-starred restaurants as well. And there's been an up-and-comer called Disfrutar, which means in Spanish, to enjoy. And you should have seen my eyes when they're like, "We have two tasting menus, one is 19 courses and one is 28. Which one would you like?" And I'm like, "I'm going to go with the 19 because 28 sounds insane." It was delicious. It's amazing. It's really hard to get in. And so my recommendation, if you're a foodie to go check out Disfrutar.

John: [18:12] I will keep that in mind. Thanks, DR.

DR: [18:13] John, always an enlightening conversation about BSS and AI and agents. Thank you so much for coming on the podcast.

John: [18:20] Thank you. Thanks for having me.

DR: [18:21] Yay. 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.

[18:37] That was a great conversation with John Abraham. But I really want to make sure you heard my description of Totogi's BSS Magic. So your assignment for today, hit the rewind button and go back to minute 14, and listen to me explain BSS Magic one more time. You're going to want to understand how game-changing this new approach to BSS is and how it will unlock agility for your telco. Go do it and listen again.

[19:03] After you're done, come visit me and team Totogi at MWC25 where you can see BSS Magic in action at our stand in Hall 2. Don't forget, I'm giving one of my epic talks on how to build an AI-first telco at the Gen AI Summit on Monday, March 3rd at 10:30 AM in Hall 6. And be sure to DM me on LinkedIn or X @TelcoDR to grab an invite to Totogi's exclusive VIP party on March 5th.

[19:28] 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 rockstar email newsletter on TelcoDR.com and check out our awesome YouTube channel. Next up, Barcelona. Later nerds.