

DR: [00:00] I'm DR, and this is Telco in 20.

[00:14] In our industry, big annual events like MWC and TM Forum's, Digital Transformation World are where telco vendors go to strut their stuff. It's their opportunity to show off their wares, talk about their roadmap, and tell the world about their latest wins. Since GenAI came bursting onto the scene, there's been a flurry of activity in our industry with everyone scrambling to show how they're incorporating this amazing technology into their products. As such, these events have become the number one place to see who's doing what with this new tech. Industry pundits flock in droves to check everyone's progress, spot trends, and see who's really turning all the AI hype into reality, especially in the BSS space.

[00:54] Today, I'm talking with one of my favorite consultants in telco, John Abraham, an Appledore Research Principal Analyst and Leader of the Digital Enablement Practice. He's a regular at the big telco events and has his finger on the pulse of what's happening with GenAI and BSS.

[01:08] In this episode, we're going to unpack how vendors are applying GenAI to their products, what the major trends are in BSS, and how the cost of GenAI pays for itself when you optimize it to produce real business results. Let's take 20.

[01:26] John Abraham is Principal Analyst and Leader of the Digital Enablement Practice at Appledore Research. Hi, John. How are you doing?

John: [01:33] Hey, DR. I'm good. Very good to be here. Thank you for having me.

DR: [01:37] We last saw each other in Copenhagen at TM Forum DTW, and we got a chance to catch up on Totogi's latest advancements with our new product, BSS Magic, and I'm super excited to talk to you today on the podcast about what you're seeing going on in BSS, with generative AI, and just in the industry in general. And so, we go way back. I first met you when you were at Analysys Mason, and now you've moved over to Appledore Research.

[02:03] And so, what's your area of expertise? What space do you really cover and watch?

John: [02:09] I lead the Digital Enablement Research Practice at Appledore, and the program basically tracks the building blocks of the telco business applications or BSS platforms of the future. And I've been doing it for well over 12 years now. Two years at Appledore and before that, as you said, at Analysys Mason. And let me tell you, I've never seen it so active. Great time to be here.

DR: [02:33] Let's dive into that. What's the landscape? What's making it so exciting? And what are some of the big trends you're seeing with BSS?

John: [02:39] In general, there's a lot going on in BSS. I'll just call out the big three trends. The first one obviously is GenAI. And GenAI was quite timely from a telco standpoint because operators were already on the way to transform their customer touch points, their customer experience, and GenAI just amplified that in a far bigger way than they could ever have imagined.

DR: [03:06] For sure.

John: [03:07] By and large, the fundamental areas for GenAI today, as far as BSS is concerned, is to improve the experience, improve the revenue opportunities, and reduce TCO.

[03:17] The key to note is that most GenAI transformations today are focused on the assisted channel, enabling the agent to improve how they serve their customer, how they upsell, and so on. And in the future, I think we will see this shifting over to supporting unassisted channels, most likely beginning with non-voice and then finally with voice. That's the way I see this trajectory going.

[03:45] The other two big trends I would call out is ... One is B2B. B2B is booming right now, and it's my view that operators believe they are far better positioned today for addressing the enterprise segment than they were ever before. As you can imagine, there has been a lot of cross-pollination of ideas and best practices because of the movement of senior executives from the enterprise into telco. In fact, across this segment, we are seeing a lot of demand for systems and functions that would help ease that journey like CPQ systems. That's quite a hot market right now. Many operators are thinking about

transforming their old ordering and catalog systems and so on. All of this to support the big B2B wave that's coming up.

[04:29] The third point I would mention is what I call lean monetization, and this is all about trying to reduce the cost and complexity of legacy monetization systems. I don't need to talk to you about it, DR.

DR: [04:43] It's my favorite topic besides generative AI and BSS.

John: [04:48] Well, it's quite a complex legacy-oriented segment, but what is new and what is different is how much of an urgency operators have to address. They want to reduce the amount of money that they spend on these systems, and at the same time, they want to make these systems far more agile than they are today so that they can actually better support these emerging use cases.

DR: [05:08] I think one of the biggest topics in the industry is, how are you going to get the ROI on the CapEx we spend to build out the network? Certainly, Nik Willetts has brought it up last year. His code red alert.

[05:19] But just diving into generative AI. At TM Forum, it's largely a BSS show, tons of vendors displaying on the floor. I'm sure you spent your time walking around seeing these trends in action. How are you seeing vendors apply generative AI to their products?

John: [05:35] Well, between MWC and DTW Copenhagen, roughly three months or less than that, there has been a shift in terms of how both operators and vendors actually approach GenAI use cases. I would say MWC was more about exhibiting the flashy use cases, whereas Copenhagen was more about getting closer to reality. What is accessible? And how can it be done? By and large, the two particular user groups that most vendors on the floor are targeting ... One is the customer support agents. Different functions that can make their jobs simpler, easier, more efficient.

DR: [06:14] And I think that's a global trend.

John: [06:16] Exactly. In fact, this is one of the reasons why telco is also well on the way to getting this done because there's a lot of copying of best practices from what's going on outside of telco.

[06:27] My impression was that sometimes it gets a bit repetitive. I actually went through quite a few demos, both at MWC and at DTW, and the packaging is obviously unique, but the core proposition is more or less the same. In fact, I think I counted five or six vendors talking about the bill explainer, how you proactively reach out to the customers and try and explain why their bill is a particular amount so that they don't have the need to call in to reduce call center traffic.

DR: [06:57] It's a little bit of an extension of the customer support case because I think I heard a stat that-

John: [07:00] Exactly.

DR: [07:00] ... 60% of the questions into a call center are about the bill. "Why is the amount this amount?"

John: [07:07] The other team that is also receiving a fair bit of attention is the marketing team, and there are different types of use cases being created, like automated creation of offers, recommendation engines, and so on. The challenge is that none of this actually sounds new. I mean, we are even using the same phrases that we heard years ago. Segmentation, recommendation, engines, and so on. The key difference, obviously, is that it's a completely different LLM model that is actually being used to power these insights.

DR: [07:36] The technology that's driving it is a little bit different.

John: [07:39] Exactly. This is perhaps a bit behind the customer support agents, but one of the key takeaways I had is that most of the marketing examples are just in the demo phase right now, whereas the customer service examples are closer, and maybe some of them are even in live deployment.

[07:53] One aspect that was not present as much as we thought was about using GenAI for code generation, and I know you will talk about it too.

DR: [08:04] I think this is the big use case of AI, code generation. The copilots and the chat interface enhances productivity by maybe 20%, 30% of the human. We're really looking to create coworkers, autonomous agents, that do whole jobs for you, and it's just a bigger idea.

[08:21] And so, did you see any people really driving that kind of idea and using it the way that Totogi's BSS Magic is using AI for code generation?

John: [08:30] No, not at the event. And I agree with you. I think this is a really big deal. For me, this is the final frontier for GenAI, and probably the biggest that we can expect over the next two to three years.

[08:41] Now, let me just mention that there's going to be different phases of what that phrase, code generation, means. It could be just code suggestion or code explanation, whereas the full spectrum of code generation, you actually tell it to do something, and it creates code to do exactly what you said, which is close to what you're doing with BSS Magic.

[09:00] I am aware of some telcos experimenting with it. AT&T is actually using LLM models to help their internal staff to write and define code. But by and large, from the vendor community, this is something that is not addressed to any great extent yet. In fact, I actually had a few conversations where vendors were telling me what they were doing to ensure their teams are not using GenAI for code generation-

DR: [09:27] They're blocking it. Oh, my gosh. I mean, we're calling BSS Magic a CR killer. When you think about the telcos and the operators of the world, they want a customized BSS. They need to change it. They might want to add a new field or just give it a modern new look. It could be cosmetic changes all the way to core functionality.

[09:49] And so, a lot of the vendors, I believe, are professional services organizations masquerading as software companies. This really hits at the heart of their business models when I come out with my CR killer, which is literally designed to replace the need for CRs.

[10:08] I think where people are confused by BSS Magic is that, I walk into a customer, and they're like, "Here's the TM Forum map of functionality. Which boxes do you have? Which modules do you cover?" And my answer is, "All of them and none of them."

[10:24] And I think the key about BSS Magic is that it's not a new stack and a new product to swap to in the traditional sense of a new product. It's different in that it's a wrapper on your existing BSS, and it doesn't matter what vendor it is. We have this really innovative way that is harmonizing the data structure based on TM Forum's standards, which many people will put many hours into thinking through. And it's all about at the data structure level, that once you understand the system you're talking to and that whole ODA interoperability, now you can generate code against any BSS system.

[11:04] We're not there yet, but the vision is that a business user can interact with the BSS Magic system and tell it, "Hey, please add this new piece of functionality." And against your existing BSS ecosystem, it's changing it.

John:

[11:18] I actually remember being quite surprised when you showed me the demo, and so I can relate to some operators not fully appreciating what's going on behind the scenes. This is a radical departure from that traditional approach. I think I mentioned to you, between Barcelona and Copenhagen, there has been a big leap in terms of BSS Magic. Almost made it feel like we have gone from Gen One to Gen Two in a matter of three months.

DR:

[11:45] Well, you should see it now. I mean, it's just moving so fast. Literally every four weeks, it's a new product with new functionality, and we're now working with customers and using it. I think that's the nature of generative AI. You begin on the journey. And as you start using it, you literally have a new idea every day of, "Wait a second. We're not thinking about this right." There's a deeper use case. We're trying to use it in everything that we do in all of our products. It is literally peeling the onion. And the thing is that, as you peel it, it keeps changing. And I've never worked with a technology like this. You're just like, "Oh, my God. I just had an even better idea." And so, I kind of feel like Neo in The Matrix. It's just like, "Whoa, I just learned jiu-jitsu. What the heck?"

[12:31] And so, it's been really hard for us to talk about because everyone's kind of chasing the copilot and the customer support, and we're like, "No, no, no, no. We're going to generate code." And people are like, "Wait. What? How are you going to do that?"

[12:43] And so as you walk around the show floor, how do you see people structuring their pricing for GenAI capabilities? Is it pay by the token and recharge you for your usage? Are you seeing people just defaulting to, "Hey, we're going to keep our same pricing model. We're just going to charge you a little bit more by the subscriber or by the user."?

John:

[13:01] Well, I think the jury is out on that one. Pricing has become more and more of a topic of conversation, and the two key questions that are being asked is, "How will this be funded by operators?" I actually spoke to some operators. And when they take this up to the board level, because obviously there's no GenAI fund exclusively for investing in GenAI. You need to move money from some other buckets, and the proposition was that we can offer to save maybe 2% to 3% of CapEx. So, mostly an efficiency play and the board thinks that's a fair statement, but we also need to see some new money. We also need to see this actually helping us move into new segments or generating new revenue which was not accessible before.

[13:46] The second question that I was asked a fair bit is, "How much will it cost us?" Right now, most of the vendors have adopted a usage-based approach, and the challenge with that is you have no literal controls of how many tokens, which means it's going to be a difficult prediction to say, "This is precisely how much money you have," and so on.

[14:08] I did see some vendors who are experimenting with a capacity-based approach. "If you are supporting X number of customers, this is the cost you will pay, and we will take care of everything in between." Again, this is still early days in this particular conversation, but by and large, the operators I spoke to want to have some clarity on how much their budget should be rather than, "It all depends on tokens, and we can really tell you after the fact."

DR:

[14:36] Yeah, I would love to be invited to these boardroom conversations because I have a great answer for this. Number

one, if you're doing cloud right, your cost should be going down, and you should be saving money. And either you can take that to the bottom line, or you should be investing in generative AI.

[14:51] Number two, focus your generative AI use cases on areas that are generating business value. And while this is a sensitive topic to talk about, it is impacting jobs. You just need less people. And so, the price of a token to autonomously answer, let's just use the easy case, support tickets, allows you to shrink your support department by as much as 50% in terms of people. Now, this is stuff that people don't like to talk about out loud, but it is true, and it is happening. Customer support is a complete cost center. The cost is all the people. I mean, a little bit systems, but it's mostly people. You can cut that in half. And some organizations are spending ... I saw a stat. It was 2% to 3% of revenue on their call center or some big ridiculous number. And so, I'm like, "Oh, my God. You can save so much money there."

[15:42] But the other thing is I wouldn't be focused on the price of the tokens and the calls today because we are all benefiting from the massive AI wars that are going on. I mean, just in the month of July, we've seen two or three massive models dropped. Llama, a new version of ChatGPT-4o mini where they're getting faster, they're getting better, and they're just getting cheaper. And so, as they continue to cut their prices by 90%, we don't need to, as users of this technology, to be worried about the price and be optimizing now. We just need to use it in the most effective way and build applications that can switch. I mean, talk about no loyalty, which the telcos have dealt with forever. SIM swapping. Going wherever the cheapest price is. We're doing that with the models. Just go wherever it's cheaper.

John: [16:33] That's actually a good point. I think over time we would expect some of the pricing to stabilize.

DR: [16:39] But not for a while. I mean, we're years away from it stabilizing.

John: [16:43] But hopefully it'll better suit some of the budgets that operators have.

DR: [16:47] AI is going to pay for itself. Now, if you're dabbling and jacking around, and you're using it as a copilot, and you're only getting like 20% improvement, and you're not actually starting to see the impact where you need less people, and you're trading out the cost of a person for the price of the token, then yeah, you're not going to see the impact. But I think you need to be bold, and you need to make the business case, and you need to make sure you go hit it. And I'm seeing it in my organizations and the organizations I work with. People are just, "Oh, my God. This is massive."

[17:16] But speaking of being unique and having a unique point of view, at Totogi, we really work hard to have cool, fun, unique gifts at our events. And at MWC23 last year, I brought Totogi-branded Yeti mugs. Yeti is a company based in Austin, Texas. At MWC23, I was explaining to you that the product's original purpose was for hunters. It was coolers and thermoses to help keep hot food hot and cold food cold. And so, it's kind of bulky. Sometimes people don't like to take gifts from MWC because they got to put it in their bag, and I convinced you to haul a mug back to London.

John: [17:59] That's right.

DR: [17:59] And then when I saw you this year, you mentioned, "Hey, you were right. That mug is pretty amazing."

John: [18:02] It is.

DR: [18:02] My question for you is, what do you put in your Yeti?

John: [18:05] Well, it's coffee or tea, but let me tell you something. I never knew about Yeti. I have since, in the last year or so, bought four Yetis.

DR: [18:13] Oh, my gosh.

John: [18:14] All four of them to fit the car's bottle holders. Even when I'm driving, I take my coffee in that bottle. But thank you for that gift. It was a great introduction to this brand. I'm loving it.

DR: [18:25] I mean, you should see it in Austin, Texas. It's everywhere. I actually put oatmeal in mine. Like you said, it fits

in the cup holder, and it keeps my oatmeal warm while I'm driving to a tennis match or something. But, John, this was an amazing conversation about what's going on with BSS, generative AI, how different people are applying it, all the open questions about this massive technological shift that's happening in our lifetime. We're so lucky. And so, thanks so much for coming onto the podcast.

John: [18:50] Thank you, DR.

DR: [18:50] 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.

[19:01] John talked about how most vendors are doing just the basic stuff with GenAI, but very few are pushing the boundaries the way Totogi is. That's because we don't use AI to create copilots or chatbots. Our BSS Magic solution uses AI to produce real software code. That's right. BSS Magic generates the changes you need for your BSS on the spot. Team members from across your org simply tell it what they want in natural language, and it produces code to modify the system, change a screen, or add new functionality. No more change requests. No more waiting weeks or months for coding and debugging. Even better, no more spending millions of dollars to get the features you need to run a great telco.

[19:40] But here's the real magic. It's not a whole new stack. We layer BSS Magic on top of your existing BSS solution. It works with what you already have. It understands your current BSS solution from whichever vendors you're using and modifies it in place. Give it a try on a system that's out of date, end of life, or that your vendor is forcing you to upgrade to a new version, or even worse, doubling or tripling the price to support it because it's an older version. We call it the CR killer. It's going to eliminate all that wasted spend on CRs and give you the speed you need in return. So, give it a try.

[20:15] Send me a DM on LinkedIn or X at TelcoDR, and we'll set up a demo that will blow your mind. 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 seriously amazing, totally free e-mail newsletter on TelcoDR.com. And be sure to check

**Episode 97 | 3 Big Trends in BSS, with Appledore
John Abraham, Appledore Research
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