

Episode 89 | What's up with Totogi: The public cloud is perfect for Africa  
Shay Assaraf, Totogi  
Released April 16, 2024

DR: [00:00] I'm DR and this is Telco in 20. Hey guys, it's time for another, What's up with Totogi?

Voiceover: [00:17] What's up with that? What's up with that? What's up with Totogi?

DR: [00:17] What's up? I'm going to the NOVACOM 1-to-1 Telco Summit in Diani Beach, Kenya from April 23rd to the 25th. And I can't wait to tell everyone how the public cloud is perfect for Africa. When I was CEO of a charging business back in 2018, we had several customers on the continent. They ran everything on-prem in their own data centers and had all sorts of insane business challenges like getting hardware into their countries and clearing customs took forever. And it's hard to find telecom software talent in some countries, and hard to get vendors to send their people to work on projects. And it's not exactly easy to set up your own data center because of the cost of fuel and electricity to run the dang thing. But you know what solves a lot of these problems? Duh, the public cloud. The landscape of the public cloud in Africa has changed so much in the last five years.

[01:16] There are now several hyperscaler regions on local zones across Africa, thanks to the billions of dollars of investment by AWS, Microsoft Azure, and Google Cloud. And in the last few years, several forward-thinking telcos have signed deals with the big three to start taking advantage of all that the public cloud has to offer. The public cloud is amazing at lowering TCO by a whopping 80% by eliminating the need for unused hardware capacity to handle peak traffic and disaster recovery.

[01:42] But the biggest reason the public cloud is a great fit for Africa is its ability to democratize access to the latest and greatest technology. Custom silicon chips, state-of-the-art databases, and killer software, you name it. African telcos can now get their hands on world-class tools they need to serve their ever-demanding customers. Today I am talking to Shay Assaraf, Chief Marketing Officer at Totogi, to dive deeper into how the public cloud is transforming African telcos. We're going to talk about why the African market is perfect for the public cloud, the misconceptions around African regulations in different countries, and how Totogi is helping one African Tier 1 MNO swap off their legacy Ericsson charger—boo—so they can innovate faster and save a boatload of money. So let's take 20.

[02:34] Shay Assaraf is CMO at Totogi. Hi, Shay. Welcome to Telco in 20.

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Shay Assaraf: [02:39] Hey Danielle. Thank you. Super happy to be here. So what's up?

DR: [02:44] I mean we are going to talk about a super awesome continent and customer of Totogi.

Shay Assaraf: [02:51] Yay.

DR: [02:51] But Shay, you've been with me since I first had this crazy idea about moving telco to the public cloud back in 2018. Now you're at Totogi as our new CMO. And since 2018 we've seen so much amazing progress in our industry. And so to start, I guess introduce you to our audience and tell us about your career in telco.

Shay Assaraf: [03:13] I've been doing marketing and specifically marketing in the telecom industry for most of my career. So my first grown-up job was 20-plus years ago. I worked in a communication service provider in Orange, and then I moved to a small B2B startup tech company that was very innovative and the first of its kind personalized one-to-one campaign manager. And we leverage AI and big data and there wasn't like a buzz around it yet, but it was a great experience and the company grew and then we were acquired by Amdocs and this is where I kind of saw and learned how to do marketing in a corporate big organization. And then I moved to Optiva and became the CMO and this is where I met you. And after a few years, I moved outside of the telecom to learn other industries, insurance and utilities, water and energy. It was cool, but I came back home and rejoined the telecom industry just lately.

DR: [04:16] You miss telco that much?

Shay Assaraf: [04:18] Yeah.

DR: [04:19] Dying to come back.

Shay Assaraf: [04:21] Yeah. Yeah.

DR: [04:21] So it has been rewarding and exciting to see the adoption of the public cloud over the last couple of years across the globe. I felt like I was pushing a big boulder uphill, and then all of a sudden the boulder moved and people started adopting it. And Totogi just announced a huge deal with the Tier 1 MNO in Africa where we will run charging for them on AWS. And so

we're super excited. It's so awesome. And I think that Africa is a perfect place for the public cloud, right?

Shay Assaraf: [04:52] Yeah.

DR: [04:52] But we still get a lot of questions about whether the continent is really ready for it. And so let's educate everyone, start with the basics. What are the hyperscalers doing in Africa? What regions are there and where are they located?

Shay Assaraf: [05:05] Okay, it's a good question because many people might not know this, but the hyperscalers have been starting to invest in Africa. So they're putting more resources and they're opening more data regions in the continent. Five years ago, Africa was quite neglected when it came to data centers of the hyperscalers. I think it was back in 2019, Azure was the first entry into the continent. They opened their region in South Africa in Johannesburg and then AWS followed. They opened their region in Cape Town. And just in the beginning of 2024, Google announced their first region also in South Africa. And AWS also has what they call a local zone, which sits in Kenya and in Nigeria. And this allows them to bring more cloud services and cloud applications closer to their potential customers like the telcos.

DR: [06:00] And I think that's how it starts. Local zones are like little baby regions, they're not quite as big. They don't have the availability zones, and then they have maybe scaled-down services. But it's a great way for organizations in these countries to start experimenting and using the cloud. And I expect that to only grow probably in the north of Africa. And so it's going to be super exciting. And so, you know, one of the good proof points that telcos are beginning to adopt the public cloud are the partnerships that you start to see. And so can you talk about some of the modern telcos that are embracing this new technology and signing deals with the hyperscalers, and what are they doing with the public cloud?

Shay Assaraf: [06:38] Yeah, yeah. So you're completely right. Telco operators understand that the hyperscalers can be friends and not just foes. So they really understand how they can leverage that technology that those big tech companies bring to the table. And slowly they understand it's much more than just running an application on a different quote unquote data center. And we see great attention and great collaboration. So first example is Vodafone. Vodafone is one of the biggest network of operators

globally and they're very invested in Africa with their subsidiary Vodacom, and they kind of split their partnership through all cloud providers. So two months ago they announced a 10-year strategic partnership with Microsoft Azure to scale up their super successful M-PESA, the financial services that Vodafone are bringing to launch different complementing cloud-native application. And they're really trying to enhance digital literacy or skilling of youth people. They're also trying to see how to better help the underserved SME market.

DR: [07:42] Yeah.

Shay Assaraf: [07:42] Vodafone also announced a collaboration with Amazon around Kuiper low Earth orbit satellite.

DR: [07:49] LEO. Mm-hmm.

Shay Assaraf: [07:51] And the idea is to increase connectivity across Africa. And they also leverage Google and Microsoft GenAI initiative. But Vodafone are not the only one. MTN, another big group is working with Microsoft on some satellite monitoring. They're taking AI and mobile connectivity and cloud computing and providing critical early weather information for millions across the continent. They're also partnering with Google around customer experience with AI and ML-powered insight. And also Safaricom, a third big group of operators, they're doing some with AWS, some with Google. They're bringing cloud and AI and they're taking open APIs and offering it to developers. Last, but surely not least it's us Totogi.

DR: [08:40] Yeah.

Shay Assaraf: [08:40] As you said, signed a deal with the Tier 1 MNO in Africa. Super exciting.

DR: [08:46] Yeah, yeah. I mean it was an eye-popping project. The executives were just absolutely floored and shocked with what we did. And we'll talk about that in a second. But when we talk to different telco execs in Africa, they think they can't use the public cloud because of data regulations. The automatic response is, "...are highly regulated, they won't let us." But when we look into it, we have found that it's not just yes or no. Instead, it's more of a gradient. Most countries we found do allow it, but you might have to do a little bit of work, like show that the cloud is more secure than on-prem. The vendor might

need to get data certifications, or you might have to actually go talk to the regulator. And so what's our advice to executives who start with that mindset of, "I can't use the public cloud?"

Shay Assaraf:

[09:27] Yeah, so it's interesting. 70% of telcos would rank privacy and security as their top concern. And it's also getting raised a lot when we meet them in the field and they say, "Hey, but we can't". And we actually encourage them to learn and research. We connect them to the subject matter experts in AWS, and we see that nine out of ten times they were just wrong.

DR:

[09:53] Yeah, totally.

Shay Assaraf:

[09:54] Data protection authorities around the world are constantly exploring and learning and evolving the rules and regulation, and they allow you to move data within country for sure. But also almost any country in the world today have like a list of countries that you approve moving your data to.

DR:

[10:14] Totally.

Shay Assaraf:

[10:15] So I think my advice would be really you need to check the regulation, you need to learn about data privacy, compliance, and you'll see that the hyperscalers are actually committed to very high standards that will reassure your regulation and compliance authorities. And last, understand the security measure. There's amazing encryption tools that the hyperscalers are putting on the data both in transit but also inside the data center. And once you'll do that, you'll educate yourself, you learn, you see that you can use the public cloud.

DR:

[10:50] Yep. We've done this where we've brought in security experts, both when we worked with Google Cloud but also with AWS. And usually when you sit them in front of telco execs and they tell their story about how they do security, within 30 minutes the telco execs are like, "way more secure than what our own data...". I mean it's like a joke. They're like, "Yeah, oh my gosh, this is totally good enough." We were working with a large telco group in Africa that has 14 or so OpCos. We have some of our third-party advice that we rely on. And 8 out of the 14 you could do. Only one was like really, truly no. And the rest it was just a little bit of legwork, maybe some certifications and things like that. And so like you said, do the research. Don't just assume. As the hyperscalers put more and more investments

into these different countries, the regulations are going to change.

Shay Assaraf: [11:40] Exactly.

DR: [11:41] And so I think the big reason why telcos in Africa should absolutely be using the public cloud is the cost savings, right? As we study different charging systems all over the world and we look at TCO after TCO of putting in a truly public cloud-native system, we see lots of big savings. And so how much money are you finding telcos can typically save when they use something like Totogi Charging-as-a-Service?

Shay Assaraf: [12:06] So Danielle, I've been doing this TCO analysis for six years now. The trick is to realize the big savings and that's what's amazing about Totogi is that you need to have a system which is truly public cloud native, with a true multi-tenant architecture, and with a software as a service model, a SaaS model. Having such a system is where you can see a massive saving in TCO and you can reach up to 80% savings on your total cost of ownership or your TCO. And what's TCO? It's the infrastructure that you need. It's the data centers you operate, or the hardware and the databases you buy, of course, the license that you are paying for the application, the ongoing yearly maintenance, the upgrades that you're doing every few years. And don't forget that it's all the consulting and CRs and the work associated with that.

DR: [13:00] Totally.

Shay Assaraf: [13:01] It's a lot of the manpower and headcount put into that.

[13:04] And when you move into a SaaS model on the public cloud, all of that is being reflected in one price. It's the price per subscriber. And I think charging is such a great example of how to save and how to demonstrate the saving. The need for an extra capacity to support spikes on certain times of the day or periods in the year where it's holidays or something's happening on the network. And instead of setting up your charging for the peak times, you just scale up. Pay only for the time that you're using it, and scale down when you don't need that in place.

DR: [13:45] And that's always our challenge is that people think, "Well how much does your charging system cost?" And they think of just maybe the license they paid, but maybe they paid that at the beginning. They might just think of the maintenance.

Sometimes they forget about the CRs. They're like, "Oh, the upgrades aren't every year." The other thing they always want to forget about is the hardware. And I'm like, "No, you're going to have to refresh that." And so it's much deeper than just the software cost, right? The labor, the data center, the electricity, and the public cloud is just so great at this specific example. We love it.

Shay Assaraf:

[14:14] Exactly.

DR:

[14:15] The other big reason I think the public cloud is perfect for Africa is access to the latest technology. And I think this is something that is actually very unique to Africa. The big software vendors like Netcracker, CSG, Amdocs, sometimes even Ericsson are challenged to sell in Africa because the ARPU is usually on the lower side in general. And it's also just a little bit difficult to do business in Africa. And so there's been a trade-off for the telco execs of like having substandard technology because of the economic challenges that their countries or their companies are giving the vendor. But because of the public cloud, companies like Totogi can leverage the huge cost benefits coupled with literally the latest and greatest technology, and we can provide this new option for African telcos. So let's get specific and talk about an African Tier 1 MNO that recently adopted the public cloud with Totogi. Let's talk about Zain.

Shay Assaraf:

[15:08] So Zain looked to ensure an uninterrupted service and business continuity. They came to Totogi to explore using our charging as a service on AWS for their disaster recovery purposes, a very specific use case, and a very specific need. We successfully and honestly quite easily integrate our charging solution with their network. And created what we needed to run on the cloud with some plans and promotion, custom rates for friends and family, roaming, balance management, et cetera. Their eye popped out. Seeing the system live, working, blew their minds off and created the opportunity to swap out their legacy Ericsson Charging system with Totogi's modern platform. They saw something they have never seen before. You get 100% business continuity complying with your regulator, you get a building disaster recovery with one-tenth of the cost. They saw the ability to configure quickly, easily new plans and new tariffs, and they saw how we deliver this agility and flexibility and ultimately when they looked on the cost, they also saw a critical reason why they should completely swap off Ericsson and move to Totogi.

- DR: [16:31] Yeah, they were just amazed at how easy it was. And this is primarily a 2G network, right? We're not talking 5G or 4G, right? This isn't, you have to be on the latest technology in order to use Totogi. This is a 2G network, mostly voice, a little bit of data, but for them to get access to this kind of technology, never. Never in their wildest dreams. And when they asked us, "Can you do it in three weeks?" I was like, "The world's biggest technology vendors in this industry, they couldn't do it, but we can. We're going to show you and it was pretty amazing." And I know it's early days, but, Shay, as you start to look at how much we could save them, we'll publish a case study on this. But kind of ballpark, what are you thinking that we'll end up saving them?
- Shay Assaraf: [17:17] Yeah, so I think completely we can help them save up to 70%, 80% on their total cost of ownership. We're doing the math and we're doing the calculation and it's not that easy and straightforward to get all of the cost implication on your legacy system. So it takes a little bit of time to really capture it and log it and understand all of those components of your total cost of ownership. But when we do that, we can see up to 80% saving on their total cost of ownership.
- DR: [17:44] And I think the big win, like I was saying, access to new technology, this is a 2G network. We're starting to talk to this customer about using AI. And so not only are they saving huge money, we actually have ideas for them to go capture new revenue, more revenue. And this is one of the biggest problems in the industry of like, "Where are we going to find new revenue for 5G?" Here we are on a primarily 2G network and we're going to grow their ARPU and it's going to be with all the AI. It's going to be amazing.
- Shay Assaraf: [18:14] Amazing.
- DR: [18:15] So we're so excited. And anyone else out there have a crappy Ericsson charger that's on some old version that they're trying to upgrade and it's going to be a bajillion dollars? Totogi's your girl. We can totally do it. We're on a rocket ship and it's super exciting.
- Shay Assaraf: [18:30] Yeah, exciting times.
- DR: [18:31] So, thanks so much, Shay for coming onto the podcast and talking to me about this great project and how African telco should absolutely be adopting the public cloud.



Shay Assaraf:

[18:40] Thanks, that was super fun.

DR:

[18:42] 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.

[18:52] Shay just pointed out that a lot of telco leaders think of the public cloud as infrastructure, but its real value is the ability to deliver game-changing software to operators of all sizes and revenue levels, from big CSPs and high ARPU nations to those running older networks and low ARPU parts of the world. Totogi is a perfect example. We work with telcos that are still on 2G networks, a technology that emerged way back in 1991 all the way up to new MVNOs launching on 5G networks. Totogi connects all kinds of networks to the public cloud and infuses them with the power of AI. And because Totogi is a multi-tenant platform, it goes stronger and better as more customers join leveraging great economies of scale. This is in stark contrast to other telco software vendors that deploy single-instance solutions one customer at a time.

[19:40] It's hard for those vendors to make the math work when you add up their software fees coupled with their heavy consulting model. So in some cases they just skip Africa completely, but not Totogi. The more operators that come on board our platform, the merrier, that's to Totogi's advantage and it's why Totogi is perfect for Africa. I can't wait to talk more about this at the NOVACOM 1-to-1 Telco Summit running April 23rd to the 25th in Diani Beach, Kenya. If you'll be there too, DM me on LinkedIn or X at TelcoDR, and let's catch up. 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 newsletter on TelcoDR.com. And be sure to check out our awesome YouTube channel and click that subscribe button. Come on. You know you want to do it. Just do it. Later nerds.