

THE TRIALS AND TRIUMPHS OF THE RISING NETWORK

Rakuten and Accenture Fireside Chat with Tareq Amin, Francesco Venturini and Tunc Yorulmaz

VIDEOTRANSCRIPT

Guy Daniels (<u>00:07</u>):

In 2020, Rakuten collaborated with Accenture to launch the world's first fully virtualized, cloud-native mobile network. A year on from the launch, what have been the key challenges and achievements, and what now lies ahead for their partnership? I'm Guy Daniels, Director of Content at TelecomTV, And we're going to discover more about this ambitious project from those instrumental to its success. So let me now introduce Tareq Amin, who is Group Chief Technology Officer of Rakuten, Francesco Venturini, who is Senior Managing Director of Strategy and Consulting, Communications and Media Global at Accenture, and Tunc Yorulmaz, who is Managing Director with Accenture. Hello everyone, thank you all for joining us today. Now, I'm going to hand over to Francesco and Tunc for our conversation with Tareq. Francesco.

Francesco Venturini (01:02):

So thank you, Guy, for the introduction and welcome once again to Tareq. It's a pleasure to have you here with me and Tunc. I think the last two years for Accenture, as Guy mentioned, have been a fantastic journey. It was a fantastic opportunity to collaborate with Tareq and Tunc in deploying the first of its kind 5G, fully cloud-native network. Tareq, I think what will be interesting for me, for Tunc, for audience is a little bit to understand how did you come up with your vision? What were the observations that you had on the market that led you to this breakthrough and this novelty vision about at first of its kind 5G network deployment?

Tareq Amin (01:55):

Thank you, Francesco. Pleasure being here with you today. So for me, personally, obviously this journey did not just start when I joined Rakuten in 2018, but this journey was started in the early days when I took on another assignment in Reliance Jio in India. I discovered the importance and the criticality of having complete hardware desegregation strategy and the advantage that yielded in terms of cost and efficiency. I discovered the importance of moving away from proprietary hardware to a completely software fabric into the network, and its implications in terms of agility and the ability to deliver on enhancements of the network, and then near real time compared to what existed before.

And in June 2018, I had the opportunity to meet the chairman and the CEO of Rakuten, and him and I talked about the dream and an idea, and the idea is let us push the envelope. Let us do something very unique, something that hasn't happened in this industry. Let us look at an opportunity to virtualize the entire telecom stack and VR and control the entire hardware disaggregation strategy.

But we also wanted to do something that hasn't happened in this industry. We wanted to push the envelope on the disaggregation of radio axis. And Francesco, you guys know why that's important. Today, north of 70% of cap ex spend in mobile operators go to the radio access. So it was a really critical vision, a critical strategy to completely demystify the secrets of radio access, push the envelope to move away from complex hardware upgrade cycles to have completely virtual network functions, and moving the baseband from proprietary hardware to a base band that lives in software on our edge data centers.

And one thing, Francesco, will share with you,

and I can't really tell you the reasons why other than when I started in Rakuten, I never thought that this project will fail. I never had the moment that I believed, oh my God, I got to look for a plan B. What I always had is the support of a large ecosystem, including Accenture and others that came in, that believed in the mission and believed in the timing and believed in the importance of the transformation that must happen in this industry to move us into a far more cloud-native architecture from what existed in the past.

So I would tell you this idea of no plan B and Rakuten have become infectious. And that is really, to me, a lot of the accomplishment that has happened, mobilizing the organization, hiring the right mentality, hiring the right talent, motivating them, empowering them to go deliver on such disruptive architecture was really one of the key things on how this strategy formulated.

But, again, I really will emphasize and probably tell everybody that I wasn't personally worried about failure. So what? But it was critical for me on my team to take on this step. We all felt that the timing was right, technology has matured and a lot of that technology stack is ready to be consumed to deploy such an architecture. And fast forward three years, and here we are launching the world end-to-end virtualized infrastructure that's highly elastic, fully automated and still scratching the surface about what is possible. So it's been really, really an exciting journey. And I think this is just the beginning of what's going to come in the next few months.

Francesco Venturini (05:47):

I find that actually fascinating when you talk about the lack of a plan B, I find that absolutely fascinating because especially in an industry that is some kind of obsessed with having a plan B or plan C or a plan D. Now, having those other plans is almost the norm. Really the conviction around the vision, the fact that you have assembled the right talent, the right skills, the right support around you. And that I think a little bit probably that a broad maverick attitude that drives innovation and drives the ability of going out of the comfort zone, I think is probably, those are the drivers and some of the ingredients of this game changing moments that I think you and the team have driven and have accomplished, we can say by now, for our communication industry.

I think once you told me, or I must've read it, I

don't remember, the notion of the Rakuten Mobile Communications platform being the AWS moment of the telecommunication industry. I think you anticipated a little bit of some of the elements, but can you articulate and explain to us why is this an AWS moment for the communication industry?

Tareq Amin (07:10):

So, Francesco, here is part of the discoveries that we had during the journey. And this idea on the realization of the impact of this end-to-end virtualized software stack, of course, in the early days, maybe myself and others have never realized what could be the potential, not just for a Rakuten and mobile as in Japan only deployment, but the potential for a global ecosystem. Before I answer about this analogy that I have given everybody is equivalent to an AWS moment for IT industry, let's understand a little bit of the past, about how telecom networks have been engineered, architected and operated. If you look across the world today, most telecom network have existed on proprietary hardware implementation,

Tareq Amin (<u>08:01</u>):

... whether it is radio access that and any global telecom deployment, as they migrate from one generation of technology to the other, it's always about hardware lift and changing and removing hardware, whether it is removing of cabinets, changing baseband cards, but it's always about hardware. And then if you actually look at the core, up until recently, the core was also proprietary hardware. And in the case of Rakuten, when you start changing the personality of this network to virtual network functions that are highly elastic and highly orchestrated, you will discover that now the idea becomes really more of a practical, that if you build a cloud that is hardened for telco workloads, a cloud that is able to deliver on the ultra-low latency requirements that radio access needs, then one would ask why we could not turn what we have done in Rakuten Mobile into a platform.

And in the latter end of our deployment into Japan, in fact, that's how the Rakuten communication platform idea and the concept came about. And the idea came from realization that in fact, Rakuten have developed a substantial amount of intellectual properties. And these intellectual properties revolved around a cloud infra that has some unique characteristics to deliver the latency requirement that radio access needs, a entire OSS orchestration and BSS

that is fully automated to deliver on our goals and vision for autonomy. And if we deliver all the lessons learned that we had in Japan, the last three years, believe me, it was not simple. We made a lot of mistakes. We failed many times. But we always picked ourselves and move forward. So what happens if we packaged all these lessons learned into a cloud connectivity platform that enables delivering connectivity as simple as click, purchase, deploy. And in fact, this is now the journey of Rakuten communication platform is the industrialization of what happened in Japan into a global connectivity platform.

And by the way, I mean, this is the analogy I have given. I don't have the insight obviously to what happened maybe in the early days of creation of AWS, but I felt maybe this is the same feeling that Rakuten Mobile engineers had as we feel now that we truly have a differentiated connectivity platform, a differentiated architecture, and we have a uniqueness. The uniqueness around our automation platform and our OSS platform gives a big advantage to this connectivity architecture that we hope that's going to materialize, not only in Japan, but also across the world.

Tunc Yorulmaz (10:55):

Tareq, I mean, such a success. Almost within a year, you passed four million subscribers and thousands of base stations deployed to a new architecture up and running. And this has already proven by independent parties that performance is good. I would like to really ask what are the top three topics really you feel the most proud of? Really what are the things closest to your heart? If you can share a couple of perspectives at all?

Tareq Amin (<u>11:25</u>):

Yeah. So Tunc, to be very honest with you, I've always been an individual that is not obviously fascinated only about technology, but more fascinated about the DNA and the fabric of platform organization. So if I tell you the number one proud moment I had is the organization of Rakuten and what we have created in Japan. I'm not sure if many people know that I moved to Tokyo and 53 other nationalities moved their families, their children into Tokyo to work as full-time employees of Rakuten. So the composition and the diversity of the organization and its ability to leap frog in terms of thinking with no hindrance to worrying

about, oh, is this going to work or not, is really my number one accomplishment.

Number two is something I would say for the larger ecosystem is the creation of a collaborative environment in which many partners... And the strange thing, some of the partners at Rakuten have mobilized to work together, to collaborate together. Outside of the geography in Japan, they're actually competitors. But inside Japan, somehow this idea of creating a new platform architecture has become infectious, and infectious in the essence of trying to really mobilize a new energy, collaborate, partner. And at the end of the day, the business model worked beautifully well for everybody. Everybody was able to monetize and everybody was able to meet goals and objectives.

And third, which is really an important one and I can't underestimate this, is the important to society transformation. So if you say about proud moment, you look at what happened in Japan pre and post-Rakuten Mobile launch. Japan used to be one of the most expensive countries in the world in terms of data consumption. I think I have seen a report a couple of weeks back published by MIC showing now Japan is in the top three lowest data consumption countries in the world. I mean, what an amazing story. If anybody is looking obviously about what to do in terms of adoption of new digitization into the fabric of their society, creating new opportunities for revenue beyond just connectivity, please come look at Japan and see what has happened here. I personally could not be prouder of the work that we have done and accomplished. But it's not just about me personally, but we have a very large dedicated group organization that is also motivated to push this change, of course, in Japan, but also to deliver this change across the world.

Tunc Yorulmaz (14:23)

What is your perspective, Tareq, in terms of the future, what will be some unique business ideas that will be implemented in Rakuten or Rakuten Communications Platform on our CP (communications platform)? Which uniqueness you are planning to introduce going forward when it comes to business?

Tareq Amin (<u>19:41</u>):

I mean, one thing I want to emphasize, and I think you've hit on, is one of the primary reasons that I joined Rakuten and I was intrigued about the company is the fact that the company is not a telecommunication operator. A company that really doesn't understand telecom whatsoever, but it really

understands software very well, understand cloud extremely well, and has operated 71 internet facing internet services. And to this extent, I thought it would have been brilliant to see how I could harness and mobilize this synergy, especially around software, and the skill sets that exist in this company. So, the dream for us, when we think about what is the really big aspiration? So I'll give you two big aspiration. One is about the network platform and the other one is about product and service.

In the network platform, I would love nothing else then the world celebrates telecommunication platform fabric in the same way they celebrate autonomous cars. I want to drive autonomy into the fabric of the telecom network. Autonomy, which meaning a level four autonomous network. That is self-healing, self-organizing, self-optimizing. I always say that it's no longer a white paper. This is really a practical reality with such a platform architecture. So this is now our constant work as we progress, is how we improve the operation through software and deliver on infrastructure as I could, with one objective in mind, 24 months from today, we want to get closer to that idea of autonomy and the fabric of every node in this network. Enabling auto healing, auto scaling, and elasticity, and every single node that we deploy on our cloud platform. And in terms of services and products, I cannot be more excited about the synergies that Rakuten is building around its ecosystem.

It is no secret that our business model is not just revolve around connectivity. Of course, connectivity is important, but that is secondary to the bigger objective. The bigger objective is synergizing the value of cross selling a mobile to the other ecosystem of Rakuten. So for example, imagine today I have a mobile customer that enjoys the benefit of our ultra-low cost plan, one plan, but at the same time, this customer could enjoy, through our points, reward loyalty systems, a much larger fabric in terms of ecosystem. They could enjoy these points as they become a Rakuten bank customer. They could enjoy additional points as they go to purchase goods and transact on e-commerce, and they could enjoy points as they go to and have a Rakuten credit card, Rakuten Travel, and many other services that they need into their day to day activities.

And as such, I think for us, the next disruption that we're going to do is the continuation of the enablement of Rakuten Link, which has become far

much bigger than voice video messaging, RCS platform. It has become an ecosystem enablement platform, development of our mini app platform, integration of Rakuten ecosystem. Delivering of this convert services to our customers is our next big aspiration in terms of service differentiation in Japan. And hopefully we can take these flack from also outside of Japan. There's a lot of innovation that happened inside that connectivity platform and a lot of innovation that's happened also on the product and services that we have launched in Japan.

Francesco Venturini (23:51):

Tareq, we covered the technology aspect, we've covered the business aspect. I have one last element that I'm really curious. I would like to hear from you. It is a little bit the human aspect...

Francesco Venturini (24:00):

This has been, by now, we fully recognize it, an ambitious and demanding project, and there was a lot of capital investment, but it was also a lot of human resources investment.

I'm actually curious, how did you and your management team deal with a little bit of stress and the uncertainty that some time these very novel vision carry with themselves? Do you have any secret sauce that you can share with us?

Tareq Amin (24:40):

Francesco? I think the secret sauce that I would tell everybody is I've always been a big, big believer on diversity. Whether it's diversity in culture, diversity in gender, and diversity in any aspect that you do in your life.

To pull through what we have done, we recognize clearly that this is not just about technology breakthrough. Of course, it's important. But I've always thought it's secondary. It is really about building an ecosystem. And this ecosystem started from evangelizing, mobilizing, and creating this massive enthusiasm into our employee base about this opportunity. They really, as much as I hate this word, but it actually makes sense. They have become fanatics. Fanatics around the concept of the creation of the world first cloud native platform. That's the employee base.

The second element, I mean, look, you guys are not a far partner to us. Accenture has been a very close

partner to Rakuten. Just think about also the transformation that we have done together, bringing the best of what Accenture could do the best of what Rakuten could deliver, to create the industrialization that we needed, such that we're not able, we don't look at this as a human intensive operation, but actually a highly scalable replicatable model that could go easily outside of Japan to the global market.

I think this is really the essence of it, is just ensuring that you furnish a fertile ground for innovation and disruptions, and I would say your employees will be utterly delighted. Give them the opportunity to fail, because a lot of people are very worried about this. They say, well, look, if open round doesn't work, it's a disaster. You should never think this way. You should always believe that we as human beings are far more capable sometimes than we give ourself credit for. This mobilization, Francesco, of talent, resources, and partners, really been part of the secret sauce to enable the disruption that we have done in Japan. And I'm using the same secret formula, frankly speaking, as we look at globalization of Rakuten communication platform outside of the border of Japan.

Francesco Venturini (27:22):

It's incredible and pushing the comfort zone and not thinking about failure, but remaining positive with a clear vision I have, and the right talent supporting you. And the fan base is a very, very interesting concept.

Just in closing, the last question. I mean, it's evident by now that all the eyes are on Rakuten, everybody has been talking and still talk. We are talking today about this incredible journey. You've raised the bar, your team raised the bar, Rakuten, I think, raised the bar in the industry.

Where do you guys go from here? What is the next big ambition? What is the next big disruption? If there something that you can share with us?

Tareq Amin (<u>28:12</u>):

Yeah. I mean, I think Francesco, I think in the coming months and hopefully much sooner even, is the formalization and announcement of Rakuten global connectivity platform. We've discussed publicly that we want to materialize RCP and present it as a credible alternative, as a software cloud native connectivity platform, that is agile, deliver on elasticity, and have auto healing implemented in its fabric to deliver on ultra-reliable services for our

future customers.

We have a huge desire to enter this platform business, and a huge desire to disrupt, and a huge desire to partner, and a huger desire to co-innovate, co-develop, and reimagine the new connectivity architecture that is based on software. We remove any proprietary hardware from its fabric and DNA. Implement automation on every element into this network, and deliver into this dream of autonomy, an autonomous network, into its fabric. I would hope that in the next few months, you will hear some big announcements as we reach closer to Mobile World Congress about our aspiration and our products that we're going to go to market or global markets with. We're looking forward, obviously, to our continuation of our partnership to enable this disruption outside of Japan.

Francesco Venturini (29:54):

Thank you for sharing that. I mean, in all honesty, I wasn't expecting anything less from a Rakuten organization. But thank you for sharing that, at high level, the plan.

Tareq Amin (30:06):

Thank you very much. Thank you.

Guy Daniels (30:08):

Yes. Thank you, everybody. Absolutely fascinating discussion on how you enabled the cloud native network and also pioneered the Rakuten communications platform model, virtualizing the entire end to end stack and opening up new opportunities for all operators, no matter where they are. We look forward to seeing what comes next, as you, as you say, Tareq, as you drive autonomy into the very fabric of the telecoms network and open up even more e-commerce capabilities.

Well, for more information on the collaboration between Accenture and Rakuten, please visit the Accenture website or click on the links below. For now, though, thank you very much for watching, and goodbye.

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