# TRAILBLAZERS TALK

Ravi Kumar S.,
President, Infosys,
in conversation with
Shankar Arumugavelu, SVP and
Global CIO, Verizon

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**Ravi Kumar S. (RK):** Hello everyone, My name is Ravi Kumar, president at Infosys. Welcome to this new chapter of Trailblazers. I have a very distinguished guest today, the global CIO and Senior Vice President of Verizon, a Fortune 500 company, Shankar Arumugavelu. Shankar has been at Verizon for 25-plus years in a variety of leadership roles. And I'm going to talk to him about the future of the role of a CIO, what's happening on digital transformation and the 5G revolution, which is taking over the world. Thank you Shankar for talking to us at your beautiful campus in New Jersey. It's always a pleasure to talk to you. Let me tee up the first question to you. You know, Verizon, I would say is ahead of the curve working on this opportunity, they're seizing this opportunity on 5G. Tell us a little bit about what your team is doing to contribute to that cause.

**Shankar A. (SA):** Uh, Ravi, thank you. And it's a pleasure to be here with you. Absolutely, so at Verizon we are in this massive transformation. So we call it Verizon 2.0, and this transformation is much more than an organization change, if you will. So it starts with our network first and foremost being a leading service provider. So the whole idea there is how do we make network as a service? And we talk about this as intelligent edge network. And what we are doing there is, really rather than having these custom built networks for each of the business units that we have within Verizon, we have embarked on this journey to really build a single multipurpose network, that can support multiple business units and above and beyond the network from the business standpoint, we have reoriented the organization around customer segments rather than how we used to be structured based on technologies before. So we now have a consumer group, the business group, a media group, from a brand that is a massive transformation that we have going on to really be that responsible brand that represents trust and innovation, focused on process engineering for future flexibility and also a big emphasis on leadership and culture for the future of work. So a big focus for us is on 5G as you pointed out. Um, and if you think about the evolution, uh, with the previous Gs, if you will, right. 1G was all about voice. 2G was text. 3G was data and apps, 4G was video and speed, 5G and all these. The prior generations, I would say those were still incremental. 5G is totally transformational in terms of the new currencies that it brings to the table. So we talk about eight currencies that 5G brings in. One of the most, uh, important thing being there, the massive bandwidth, the speed that we get and the extremely low latency, uh, that opens up a plethora of use cases that we have not even, uh, seen in the market. [**RK:** And this is primarily in the B2B space.] Absolutely. So, so yes, there is a play for 5G in a consumer suddenly and again, and we have both on fixed wireless and mobility, but the big thing, big wave that we see with 5G is really on the enterprise segment. B2B. And I think we talk about this as the real-time enterprise and how 5G will usher in this fourth industrial revolution.

**RK:** In fact, I do believe that that will even propel digital transformation because digital transformation for large enterprises is all about sentient, real-time [**SA:** Absolutely] enterprises.

**SA:** Absolutely. So, and this is virtually every, every industry, every company, every enterprise is going through this digital transformation. I think 5G will be that catalyst [**RK:** Absolutely] that will be able to demonstrate the art of the possible. And in terms of specifically what we do as an organization, as a technology organization, all the way from planning, engineering, building out that network and being able to demonstrate these use cases that we can then monetize on. So we play a critical role throughout the spectrum.

**RK:** And, and I'm, I'm guessing what will happen is firms like, uh, Verizon would start, uh, building consultative layers around those use cases for adoption in large enterprises.

**SA:** Yes. And, and, and I think this is going to be first, understanding what are the problems and opportunities in each of these verticals. And then figuring out what is the value proposition that 5G brings to the table, those eight currencies that I talked about. And then how do you demonstrate the art of the possible with what 5G can bring to the table and then connect the dots to what the problems and opportunities offered to the enterprise.

**RK:** Thank you, Shankar. Switching gears and it's a little bit pivoted to what how we are doing transformation. The role of the CIO is changing significantly. Uh, you know, the traditional role of being a custodian of systems is switching to being a custodian of experience, the ability to take your products to the market at a rapid pace and the ability to contribute to the revenue versus cost. And I know you are a big evangelist of this. Tell us a little bit about how that is, how you think the role of the CIO is going to change genetically for enterprises.

**SA:** I think you're absolutely right. So traditionally the focus of the CIO has been more around optimizing for efficiency and risk, if you will. But more and more that role is changing to some, one of optimizing for not only efficiency and risk, but also for agility, speed and innovation in a big way. Right? So really when we think about digital transformation, CIOs are at the helm of digital transformation. Really being able to show what can technology do to be able to propel the business forward. And as you pointed out, the drivers are very clear, right? So customer expectations are changing. So because customers are expecting the high-quality digital experiences that they are used to in one industry, they expect the same [**RK:** Yeah] in, in uh, other companies as well. [**RK:** And those lines are blurring] Absolutely. So, and now when we think about employees, employees are digital consumers as well. So they expect the same experience when they come into the workplace. Yeah. And technology is evolving. And what we are able to do with technology today and the art of the possible there is huge. Plus in a hyper competitive environment, it all comes down to the agility and speed to market.[Yep] So, so clearly technology plays a big part and the CIOs play a big role in really bringing this vision to reality.

**RK:** You know, just on that thread, I was speaking to one of the CIOs yesterday and he spoke to me about the democratization of conjunction of technology because of the cloud, at a point of time CIOs were custodians of the infrastructure and that infrastructure is getting virtualized. And how do you see the role of the CIO when conjunction of technology happens in the functional groups? What do you see the role of the CIO to be in that journey?

**SA:** So, so if you think about, we used to have, even before the cloud, there used to be this concept of what was referred to as shadow IT. [**RK:** Yep] if you will. Right. Um, and the primary reason for that coming into being was when you have a central technology organization, where they are not able to keep pace with the changes in the clock speed of the business, that is when the business still has a problem to solve. So they go after solutions that others are able to provide either either as a service or other ways of delivering that. And what cloud has done is that has essentially been a catalyst for software as a service. So to be able to spin up solutions, they're able to do that in a much shorter time. So first and foremost, I think we, you know, stopping that whole thing, in my view is not the right way to move the business forward, but we need to make sure that there is a common architecture that the CIOs play a big part in defining and not necessarily everything has to be built in house. So there is a role for suppliers as well to play, but it's important for the leader of technology to know where the company's data, customer data, company data, employee data is sitting because that becomes like a first priority to make sure that we are protecting, safeguarding that data and more and more with the regulatory requirements that's coming up as well. Take, for instance, the California Consumer Privacy Act, etc. We have to make sure that there's an inventory of where this data is sitting. If you don't have that basic governance, then it becomes a wild, wild West. So from that standpoint, yes, I'm supportive of having these, but it's got to be aligned with a common architecture. And still there's gotta be some light touch governance at the central technology lab.

**RK:** And the ability to standardize wherever you could, the ability to have good bargaining power with the providers of technology and everything else, that plays a good role. In fact, the one other area, if you talk to digitally native firms and the roles the tech shop plays there versus large enterprises is the ability to build the innovation infrastructure so that you could constantly experiment. And I remember you telling me many times, how do we build that culture of innovation and actually building the innovation infrastructure at Verizon as well, which can constantly  be moved into the products, moved into your outlets where you're selling those products and everything else. What should be there on the innovation infrastructure, there's a big difference there between digitally native firms and large enterprise?

**SA:** Absolutely. Absolutely. Right. So see, the thing is if you talk about how our transformation that we are going through as well, we have been a big proponent of getting things right the first time. So that's our history, we are execution focused company. And when we put our muscle behind something, we get it done. I will also say the second order effect of something like that was to some extent, it stifles trying different things [**RK:** Being iterative]. Exactly right. Being adaptive, iterative, you know, testing and learning, running experiments, etc. What we're working on in our transformation journey is actively working on shedding that, shifting from being right the first time to more embracing an approach where you test and learn. So one of the things that we do, for instance in our digital space, we measure how many experiments we have running at any given time.

And that is a good barometer for us to really say because it's not that you can get everything right the first time when you're talking about providing services to hundreds of millions of customers and how their preferences are to interact with us. So we try a few things, few experiments, figure out what works, make sure that if it works, we are scaling that across. If not, then we learn from that, fail fast and move forward. Right? So that's a big thing.

I'm also a big believer in innovation is something that it, that is at its best only when every employee in the company applies their discretionary energy towards the problems and opportunities that the company faces. So to that extent, what we have done now is really democratize this in a big way. Created a platform where to start flexing that muscle, we are giving out challenges, innovation challenges to the organization [**RK:** And this is grounds up?] Grounds up, like, you know, so, but to start off, we said we gave a challenge, to really start figuring out how do we have folks come out of their organizational boundaries, if you will, and collaborate across which otherwise they would not be doing because they are focused on their projects, etc. And have them really work towards that common cause to say, if this is the challenge, how can we come together and see what we can do? And very recently, like, you know, we had an employee experience challenge to see how we can take our digital workplace to the next level. 700 plus ideas came in within a matter of two, two-plus weeks. So now how do we systematize that whole process to really vet those ideas, having a committee that goes through that, figures the viability of those and the technology feasibility of those ideas as well. Uh, and then get back to the teams to say, here is what we want to do. So the whole objective here is how do we make it a grassroots movement? [Yep] And start having the team start figuring out, here are the new things that we can do.

**RK:** And do you at the finishing line, give them the venture capital needed to cut, culminate that into production.

**SA:** Exactly. So when we go through the whole process, we get the list of ideas, we vet them shortly, and the peers also get to vote on those ideas. That's the beauty of this as well. So those ideas that bubble to the top then get evaluated and we figured out which ones need the funding. We put the funding behind that and start working on productizing that. So that's a big emphasis for us at this point to really see how we can start flexing that muscle and get ideas. And in fact, we have a credo in Verizon, which is essentially a guidepost of how we do things. And we  very publicly talk about ideas live and die on their own merit, not where they are originated. So, so, this is something that we take to heart and encourage.

**RK:** Was cultural shift in bringing that kind of mindset a hard thing to do?

**SA:** Culture like you know, see, here is the thing, culture,... Going back to the point I made before, coming from an environment where we emphasized in a big way on getting things right the first time, there was no room for error. Absolutely. I will say that mindset shift was a big thing for folks to really say, wait a minute. If that was the focus before and now we're, we're being told to run experiments, take risks, we had to make sure that the entire value chain also changed accordingly. What do I mean by that? Take for instance, recognitions used to be where the emphasis was when we were focused on execution, we were recognizing results. Results mattered. Now we are putting more of an emphasis, yes results absolutely do matter at the end of the day. But also the teamwork, the effort and the process that goes behind that is also being valued. And we are actively, making, calling out, culling out those examples and showcasing them in you know, webcasts and other events, etc., even though it was not a big success. We wanted to put a spotlight on how we are changing the way we are working and how that, how, why that's an important thing for us to make that shift.

**RK:** Just a quick comment on whether you embrace startups around that ecosystem of innovation. Is that a part of your agenda as well? And how does, how is that going?

**SA:** So, so if you think about innovation clearly, we are also embracing this you know, getting rid of this 'not invented here' thinking as well, because we know, that is a lot of good work that happens in the industry. So take for instance, even 5G. [**RK:** Yep]. Uh, so the day we, earlier this year at the CES back in January when we, announced our plans for 5G, we issued a challenge, a boot on 5G challenge. The whole thing there was really, one, share what is the art of the possible with the technology, but also enlist the support of the ecosystem startups and other players who are in this space to see how they can take advantage of this technology and ultimately help us being able to login to come up with innovative use cases, how to, how to deliver the promise of the digital world. Uh, so that's a big thing. They're seeing several startups that have submitted their ideas. We also have innovation labs where we work closely with the startups who we bring into our facility, have the technology working, they are working, you know, essentially co-creating those use cases with us as well. So that's a big, big part of our innovation play.

**RK:** Great. So Shankar switching gears, you are a big evangelist of reskilling and in many ways we are getting into an era of lifelong learning where you have to be on a learning continuum. I've heard you speaking many times about how that is a big agenda for you, for your teams. And for scaling digital, the single biggest challenge in my view is repurposing human capital. Tell us how that is going and what do you think, what do you think is the future of reskilling in America?

**SA:** That's a big priority for us. And at Verizon we are focused on fostering this environment of continuous learning. And this is the difference from like you know shifting from that fixed mindset to a growth mindset, if you will. Right? Because there was a school of thought that, okay, intelligence is static, but really intelligence can be developed and that's what we want to embrace and make sure that the entire organization embraces that approach of continuous reskilling, up skilling themselves. So if I look at specifically, from a technology standpoint, what we have been doing, it starts with the architecture. So we, before we embarked on this transformation, the first thing that we focused on was to build a blueprint for what it is that we're going to do. Right? That became our North star. That architecture essentially helped in two ways. One, it helped us set up an organization that can bring that architecture to life. Second, it also helped us, informed us in terms of what are the directional technologies and [**RK:** And the capabilities] the skills that are needed for the future. And we have now an inventory of what are the skills we have as an organization. Because when it is technology, it's all about talent. So now we have a blueprint of skills we have today, skills we need for the future. How do we really bridge this gap? So what are the learning journeys that we need to see [**RK:** And you can see what the skills of the future are]. Absolutely right. So when it comes to technology specifically, there are areas where we have standardized on frameworks that we are using today. So that way we can better utilize our team members, our talent in an effective way. There are also technologies that we are placing big bets on, emerging technologies that we are placing big bets on where we will know that although we may not have the necessary skills today, what steps do we have to take to make sure that we can meet those needs of the future in those areas and then develop these learning journeys, if you will. So we have rolled out what we call the learning portal 2.0 here in Verizon and the excitement around our employees embracing this and the number of the hours they are spending learning and getting these certifications, etc., has been very refreshing to see the big, how this whole learning portal 2.0 has become a catalyst of the culture change.

**RK:** Awesome. In fact, that's a fascinating point. What you just mentioned, the ability to identify skills of the future and where you are able to build that bridge. I had two questions, one serious and a light one, I'll end with the light one.

What would be those blind spots in digital journeys you would ask or you would actually recommend your peers to be watchful about in the industry?

**SA:** I think, and again, I'll say as much when I talk about in this whole digital transformation, , we subscribe to the approach of, you know, digital transformation requires a wholesale reinvention of every aspect of the organization. And what do I mean by that? It is, you know, it impacts technology. It is process. It's people, it's culture, it's leadership and it only works when it all works, right? It's not that you can just focus on one and ignore the others. So that's one of the big things that I would say as well to make sure that in your digital transformation agenda, there is equal emphasis being given on this whole thing. If there's one, if you ask me to pick out of the five, out of experience, that's been the most challenging, I would say is culture. As much as a technology organization and all the work that we do. Uh, the critical area of focus is really on that.

**RK:** And you front load that ahead of, say, transformation?

**SA:** I would say, you know, to make sure that to, because when we talk about this whole transformation, we first need to make sure we have a clearly stated goal. We are communicating that very widely and have a good rallying cry behind that because transformations are successful only when you make that a grassroots movement, which means every employee, every team member, every colleague believes in that and is re-committing themselves to that transformation. Only then it is successful. So as a leader, it's an important role for us to make sure that we are setting the right tone for culture and, you know, culture. When you talk about culture change, it is hard because culture change happens one individual at a time. It's not something you wave the wand and say, okay, now I'm changed. And as leaders it's the, you know, we play a big role in defining what that culture is. I'm a big believer in culture change happens only two ways. One, the organization sees the actions the leader takes. Two, it is through the experiences that the leader creates because at the end of the day, if you think about this results pyramid,

experiences is really at the bottom of this pyramid, if you will, right. Experiences foster a belief system for people and the belief system influences the actions and actions produce results. So for a culture change to be effective as a leader, we have to make sure we are deliberately providing, creating those experiences which challenge the orthodoxies of the employees to say something is changing for the better. So they, it will force them to really check the old belief system and start embracing the new, which will then automatically influence the actions they're going to take and ultimately provide the results.

**RK:** That's it. That's an excellent framework. On a lighter note, and I'm going to put you on a spot on this, what's a little known fact about you? I've met you for one, maybe a year now, and I don't know about it? It will be interesting for everyone else to know. And if you were not a CIO, who would you like to be?

**SA:** Uh, I would like to be a playback singer.

**RK:** A playback singer [**SA:** Yeah]. Okay. And that's in any language?

**SA:** No, specifically you know my mother tongue is Tamil. So I'm a big fan of SPB as well. Uh, SP Balasubramaniam, so that's a, that's been a passion of mine for a long time. Completely lost touch now. But there was always someone, he is always someone I like.

**RK:** You want to be a playback singer. And what's a little known fact about you?

**SA:** Uh, I'm a good, a very competitive racket ball player.

**RK:** Wow. [**SA:** Yes] Playback singer and a racquetball player. That's two distinctive parts of the spectrum. Thank you so much, Shankar. That was so wonderful talking to you. Always. I get insights from conversations with you. Thank you for your conversation today. I have to say that I, you know, I meet a variety of CEOs, CIOs across industries, you are one of the most dynamic, enterprising and bold CIOs in corporate America.

**SA:** Thank you so much.

**RK:** Thank you for your conversation today.

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