**Public Sector Future podcast**

**Detail: Episode 19 -- Abhishek Singh (Part 2)**

**Olivia Neal [host]**

**Abhishek Singh [guest]** CEO MyGov; President & CEO NeGD; MD & CEO Digital India Corporation (DIC) at Govt of India (which leads the digital transformation of the Indian Govt)

**OLIVIA NEAL:** Hello and welcome to Public Sector Future. This is a show for anyone who cares about using digital approaches in the public sector to deliver better outcomes. I’m your host, Olivia Neal, and together we explore stories from around the world, where public servants have been successful at delivering digital transformation.

I’m delighted to be joined today by Shri Abishek Singh. Abishek is CEO of MyGov, the national online Government portal for India. He also leads India's National e-Governance Division, and the Digital India Corporation. In these roles he’s responsible for projects which support 1.4bn people

This is part two of our discussion, and I’m really delighted we’ve been able to continue this conversation to dive deeper into some of the projects he’s been working on. Last time we learned about the context of his role, how he set priorities, how he’s engaged people, and how he’s worked through COVID. Now we’re going to learn about how he’s using data standards to work across government departments and states, the DigiLocker project which is providing joined up services, and who he gets his inspiration from. So without further ado, let’s get into part two of our discussion.

**OLIVIA NEAL:** One of the things that I’m really interested in is you mentioned earlier, the 22 official languages that India has and how you’re delivering to support all of India citizens. I’m also interested in how you work with the different regions in India and the different cities because, of course, from a federal or from a national government perspective, there’s so much that is delivered in tandem with other parts of government. I wondered if there’s any lessons that you have in how best to work with other levels of government.

**ABHISHEK SINGH:** As you rightly said, we are a big country, we are a diverse country, and we need to capture every perspective that is required for governance. So one part is of course the languages, like how do you ensure that various services are offered in multiple Indian languages?

So for that, we have working on a project called Natural Language Translation Mission, which allows us to build various tools which can help in delivering services on multiple languages. And now they are taking it to another level because we find that like though in India we have around 700 million-plus people on the internet, on the web, consuming services, but there are another 500 million people who are not. And these 500 million people, majority of them are not literate.

So how do you offer them services? How do you offer them e-services? For them, using the various language tools, we are building voice-enabled services, like how they can access voice internet, because that would ensure that they would be able to talk to a app or talk to their phones and say, hey, government of India, how do I track my passport or how do I get a driving license or how do I get food coupons, the ration cards. So that way, that voice interface is being built, and that ensures inclusion, that ensures access to services to all parts of the country.

And another thing that we have done is made provisions of assisted access because we realized that there is a lot of people around the country who might not have access to a device or access to connectivity or maybe have the skills to navigate an app or do an online form.

So for them, we have set up 400,000 kiosks across India. We call them Common Services Centers, which are run by entrepreneurs at the village level in which these fellows have a set of computers, they have internet connectivity, and then they offer solutions on an assisted access. Like somebody comes and says that, hey, I want to file this application or I want to track my entitlement or for my pensions or scholarship, and these people will do the necessary filling of the form and get the service for him, for a charge. So that way that ensures that everybody is able to access a service in whichever form they have.

The other thing that we have done is that we work very closely with the state governments. We have almost 36 states and UTs, and these states have their own local level services. The cities are offering the local level services.

So while the architecture is designed in such a way that there might be a central application of software, which was offering software as a service, but customized modules at the local level, at this state government level, or at the city level, with the functionality which are required there, in the language that is prevalent there, is made available.

So every city or every state will have their own instance. Like for MyGov, there’s a MyGov India, but if you go to Uttar Pradesh, there is a MyGov for Uttar Pradesh. If you go to Maharashtra, it is MyGov Maharashtra. So people there can access similar services in their language with the look and feel that they can relate to. So that ensures that they are able to follow that and they are able to engage there and they’re able to contribute and get information from that portal.

So these are the few ways in which we work, offer services in multiple languages, trying to enable voice-enabled services, and also working closely with the federal government and the state government in order to ensure that they also become equal partners in the way we are offering solutions.

**OLIVIA NEAL:** And in addition to those ways of working, with the states and – and also across the federal government as well, I think one of the areas that you’re looking at is trying to implement standards in the way that people are operating so that as services are being built out or as technology architectures are being developed, those will be interoperable going forward. I wonder if you could just say a little bit about that piece of work as well.

**ABHISHEK SINGH:** Yeah, that’s one of the most critical part of it, because when we are building e-services and we are trying to integrate services across departments, across India, the standards, data standards, the metadata standards become very, very, very critical, because we actually should be able to talk in the same language.

Like when databases have to talk. For example, suppose we are offering a service to farmers, then each unit of the area of the land that a farmer has, has to talk to each of them. Like it cannot happen that somewhere we’re talking in square feet, somewhere we’re talking in square meters or acres or hectares. So these standards have to be standing in order to ensure that everybody’s talking the same language.

And then whatever information resides or whatever data resides in one government system should be able to share with other government systems. That’s key to build open, interoperable systems, and that’s very, very important. Because, for example, even when we’re doing the driving licenses, a registration project, we found that initially what had happened was that every state had built their own systems and they had different fields. Even something like name, whether the name of a person should be like first name, last name in two different boxes, or it can be as an name as a common string.

So we realized that India being diverse, in some parts of India, people like for write their names, their first name, followed by the last name. But in the southern part of India, they write the last name first. So if I’m Abhishek Singh, I will be Abhishek Singh here, but if I go to southern India, my name would become Singh Abhishek. So then of course, this requires breaking it down, requires laying down standards for that.

So then we’ve heard that why not write the name as one string. Why do you want to break it into first name? Let them write the way they want to write. So that way, the name standard was finalized.

This is a very basic, simple example, but then you are require for every other field that we are working in, especially health, like when we were implementing the Digital Health Mission, which would allow electronic health records and which would allow health records to be imported from one health facility to the other, and you should have access to your electronic health records over a period of time.

And when health records are being issued by multiple health facilities, then they all should follow the similar standard. So there are global standards, there are WHO standards. So we have kind of aligned with that. And wherever there are no standards, we have had to lay down standards via a consultative process, by ensuring that everybody is able to adopt that, and then there’s a lot of advocacy then for ensuring that complies with that. And that becomes the key for offering services across the board.

And we have also been looking at once we do that, the services being offered by multiple departments at different points of time can also talk to each other. One key enabler in this has been, of course, the Aadhar project, the unique identification project that we have implemented, through which 1.38 billion biometric unique IDs have been issued to people.

That becomes a common identifier across services. If a pregnant woman goes to the Health Ministry for getting some services from them, then that ID, she will carry it to the Women and Child Department when the child is born. And similarly, the child gets an ID there, and that child should carry that ID when he goes to school. So, whether it’s Health or Women and Child Ministry or the Education Ministry, they should be able to talk to each other through these common IDs and common standards.

So laying down e-government standards, laying down data standards and metadata standards is very, very much a part of our strategy and that enables more interoperable and more open services.

**OLIVIA NEAL:** That’s fantastic. Thank you. I think that’s a really, really crucial foundational layer to hear that you’re putting in place and I think for other people to reflect on how they’re doing that in their own countries as well.

You’ve mentioned a lot of work, which are very big projects and will be ongoing, as well as thinking about areas such as voice-enabled services. Are there any other areas of priority which you’re excited to be focusing on as you’re looking over the next couple of years ahead?

**ABHISHEK SINGH:** I would like to mention, one of the projects which we launched a couple of years back, and which has been making a huge impact in the recent times, is the DigiLocker project. The DigiLocker is like a document repository or document wallet in which all your e-documents can be accessed by you at anytime, anywhere. It’s a mobile app on which you can access that.

So whether it’s your identity documents or your tax documents, or whether your driving license documents, or your academic documents and now health records also, they all come there. And what it does is that it allows you to access the document seamlessly at any point of time by using your credential. But it also allows you to share it with any entity, with your consent, and also third parties can verify that document electronically.

So the potential of that is huge. So far, we have got like in the last one year itself, the number of users of this service has gone up from 30 million to 100 million-plus now. So that’s like a huge, huge growth. And then we have more than 4.5 billion documents stored there, and the daily authentications are happening in multiple ways.

So the way it works is that, for example, you have your academic documents there, you have your school certificates, the (intent?) and print certificates there, and suppose you apply for a college and the college wants to verify whether the academic credentials that you are submitting to them is legit or not. In traditional ways they verify it from the concerned schoolboard, or they write to the university to confirm them, and that sometimes takes a lot of time.

So here what happens is that if a query is raised and if you have given your consent, the verification happens on the fly, seamlessly. So that reduces any hardship, that ensures paperless kind of systems, and that has really, really helped students especially get admission to universities and colleges during the pandemic, because there was no way people could go to physically submitting documents. So that really helped.

Going ahead, we are building in all the university documents across India on that platform. Already we have done a thousand universities, we have it onboarded, and going ahead, all of them will come onboard.

And that is also helping us build up a system called National Academic Bank of Credits. What it does is that if you are studying in a particular university and you have kind of earned a few credits, or you have done two semesters there, and because of any reason you have to relocate to some other university, how do you take those credits there?

So, the National Academic Bank of Credits, either through your digital wallet, allows you to transfer your credits from one university to another and continue your education, so that becomes very, very powerful.

Then we are also building it, the same project is now being extended to the school level also. So we’ll be able to track the progress of a child’s learning right from grade one to school as he finishes school and later on.

If any child has got any deficiency in a particular subject or supposed he’s diagnosed to have learning disabilities or any kind of thing, that can also be detected and remedial action be taken. Because very often, when you go to a new grade, the teacher also doesn’t know what you had done in the previous class or if somebody is weak in math  – or some exceptional strength in science, that can be tracked early and that can ensure that we are able to use the data and analytics for improving our learning, improving the teaching that happens in schools and colleges. So this is going to be huge potential as far as education is concerned.

Similarly on the health front, since all my health data is going there, I will be able to track my parameters myself. So if I am getting all my blood reports and if I’m going all my lipid profile numbers and all, over a period of time, the analytics will give me advisories with regard to what I should be doing, what I should not be doing.

At the same time, since health records are coming there at an aggregate level, we’ll be able to track if there is a problem, if there is epidemic happening in any part of the country, and if any intermediary measures are being taken, it can be done.

So apart from serving as a mere document wallet, the DigiLocker project has a huge, huge potential in improving delivery of education, health services, and other services. So I feel that this has been one of the projects which I have been very passionate about, and I see a lot of potential on this in the days to come.

**OLIVIA NEAL:** That’s fantastic. Thank you so much for sharing.

**ABHISHEK SINGH:** I think it was a very engaging conversation, and sometimes what happens is that whenever I talk to people in this forum, it also gives you time to think and introspect and look back on what you have been doing. Otherwise day-to-day, you just go on in trying to solve the problems which are there on hand.

**OLIVIA NEAL:** Yes. And just reflect on how far it’s come as well, because I think it’s huge. So just one final question for me. Obviously, you and colleagues in India really are leading the way and certainly are leading at the scale, which is unique on the world stage in terms of digital transformation. Is there anybody else who you look to for inspiration when thinking about where to go next with digital transformation, whether that be another country or another government who’s doing something very well, or a private sector company or an academic institution? Where do you get your inspiration from?

**ABHISHEK SINGH:** See, like a very small country, but the way they have transformed really, digital transformation, Estonia. So their X-Roads project and the way they have integrated IDs and the way they have brought in services from multiple departments on one platform, that’s something that we aspire to do. We are working on a similar model, similar to the X-Roads project, the Aarogya Setu project that we are working on, which brings with it all the services of multiple departments on one platform, allows interoperability of services, reduces hardship of citizens.

So that’s one country that I really, really admire. So even though on a scale, they are much smaller than India, but as a model and the technological architecture, I think I would like to design my systems similar to that, and I’m pretty inspired by that.

Over and above this whole field of emerging technologies and artificial intelligence and building solutions is kind of work, which is being done in top companies across the world, is really, really inspiring. So we look forward to working with multiple such players globally, with the academicians and the Carnegie Mellon University or in India with teams like Wadhwani AI. We work very closely with them in trying to use emerging technologies, especially AI and blockchain, in improving the way we deliver our public services.

**OLIVIA NEAL:** Absolutely and that’s a fantastic example. Thank you so much for sharing that.

**ABHISHEK SINGH:** Thank you. Thank you, Olivia. It was a pleasure talking to you.

**OLIVIA NEAL:** Real pleasure. Lovely to meet you. Take care.

[Music]

**OLIVIA NEAL:** Well, thank you to Abishek Singh for all of the insights which he’s provided today and in our previous episode. And thank you to you, for joining me today on Public Sector Future. If you missed our last episode, please do go back and listen to Abishek share more about his work.

Our goal is for you to learn something new and to be inspired to think differently about your journey. If you enjoy today’s episode and want to help other people find it, please share, rate and review the show. It really does help people discover new shows like this one. Check out our show page to links to all of what we discussed today. And visit us at wwps.microsoft.com. Please do reach out send us your questions and your feedback. You can find me on Twitter @LivNeal or on LinkedIn, or you can email us at [ask-ps@microsoft.com](mailto:ask-ps@microsoft.com). Thank you and see you next time.