

● **INTERVIEW: NIRAJ PRAKASH**, director, solution consulting, public sector, Oracle India

A smart city must nurture entrepreneurship

While the primary focus of smart cities is providing safe, healthy, convenient and scalable living spaces, these must also deliver on the promise of contributing to economic growth. 'A smart city must provide a digital ecosystem that nurtures entrepreneurship, which in turn will contribute to economic growth,' Niraj Prakash, director, solution consulting, public sector, Oracle India, tells Sudhir Chowdhary in an interaction. Excerpts:

Don't you think we need smart villages more than smart cities?

I have personally believed in national outcomes of technology. So, it will be very interesting to look at the big priorities for the government, the nation and how we are driving and aligning technology towards those outcomes.

Coming to specific programmes such as smart villages and smart cities, it is indeed interesting to see the momentum, interest and all the talk and action around the Smart Cities programme which is gradually but surely taking shape now. Recently, Prime Minister Narendra Modi announced the Shyama Prasad Mukherjee Rurban programme. He reiterated the significant role of this programme in developing the country socially and economically.

We still have 65% of the population residing in rural India and we are absolutely aware of these demographic realities and the contribution of villages as well. When the programmes are formulated and given shape, the rural belt will form an integral part

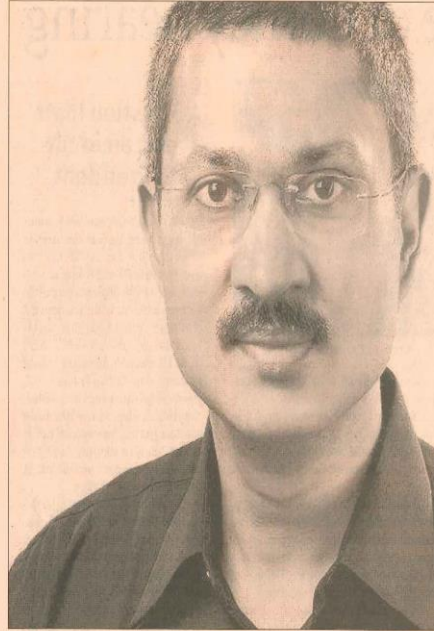
of these programmes and will merit as much attention as the cities. We are extremely keen and ready to partner the government in the Smart Cities and Smart Villages programme.

What challenges do you foresee in building the smart cities?

City building or restructuring is always a challenging endeavour which has to balance revenue streams on the one hand and citizens' needs and expectations on the other. Further complicating matters, smart city initiatives are long term and span multiple election cycles. Having a well-defined smart city transformation roadmap which clearly outlines responsibilities and contributions of the various stakeholders (public and private sectors, governmental agencies, citizens) will help ensure successful implementation of the Smart Cities Mission.

Smart cities have a multi-layered mandate. While the primary focus is on providing safe, healthy, convenient and scalable living spaces, smart cities must also deliver on the promise of contributing to economic growth. The massive investments in infrastructure and technology can pay for themselves in the long term if they provide a robust and intelligent digital platform to incubate and enable services and enterprises in healthcare, education, science and technology, e-commerce, finance, etc.

In other words, a smart city must provide a digital ecosystem that nurtures entrepreneurship, which in turn will contribute to economic growth. Therefore, the technology



infrastructure must be carefully designed and implemented on a cloud-based platform so it can scale to sustain fast paced growth.

Are government officials ready to implement new technologies from Oracle?

Oracle has been partnering governments and state projects globally with its technologies over decades. We surely see a huge receptivity amongst the Indian government towards newer and innovative technologies. We do see a new wave of transformation and I believe, the Prime Minister's vision of Digital India is a step in the right direction.

In India, there are exceptionally talented officials who not only understand technology but can also structure and design these projects very well. However, this knowledge and technology know-how needs to be broadbased for the programmes to become successful. That is where understanding and implementing the technology comes into the picture. Hence, there arises the need for the government to do more on capacity building programmes and centres for facilitating the process and Oracle can actively contribute there.

What measures has Oracle taken to secure its technology offerings?

I think, security is of utmost importance today especially with the advent of cloud and the various digital technologies. Security is non-negotiable in today's day and age. Our own chairman and CTO Larry Ellison has been committed to security for all of the Or-

acle systems. In fact, he talks about the concept of security which is 'always on'.

Security is not an option to design and plan in the system but it is something that needs to be inbuilt and always on. That is the philosophy that Oracle believes in and that's what our products offer. We have a complete suite of access and identity management solutions. As we go into the cloud, the important point to be noted is that we are able to provide cloud access security brokers which can give you a very good discovery and monitoring security design on the cloud. With the security paradigm changing in the cloud world, the significant thing is that we have a security design that cuts across on-premise and cloud and isn't limited to the client, end-point or on-premise security solutions.

What are your views on artificial intelligence?

What might have seemed like science fiction a couple of generations ago is a real and usable technology today. Artificial intelligence's (AI) applicability is deeply relevant across industries, including the public sector. There already exist numerous applications of AI that can lend themselves to many of the government's programmes, be it Digital India, Smart Cities, Make In India, Skill India, etc. AI and related disciplines of machine learning, deep learning, analytics and robotics are steadily permeating all areas of public and private life, compelling government agencies to understand them better and introduce them into their operations.