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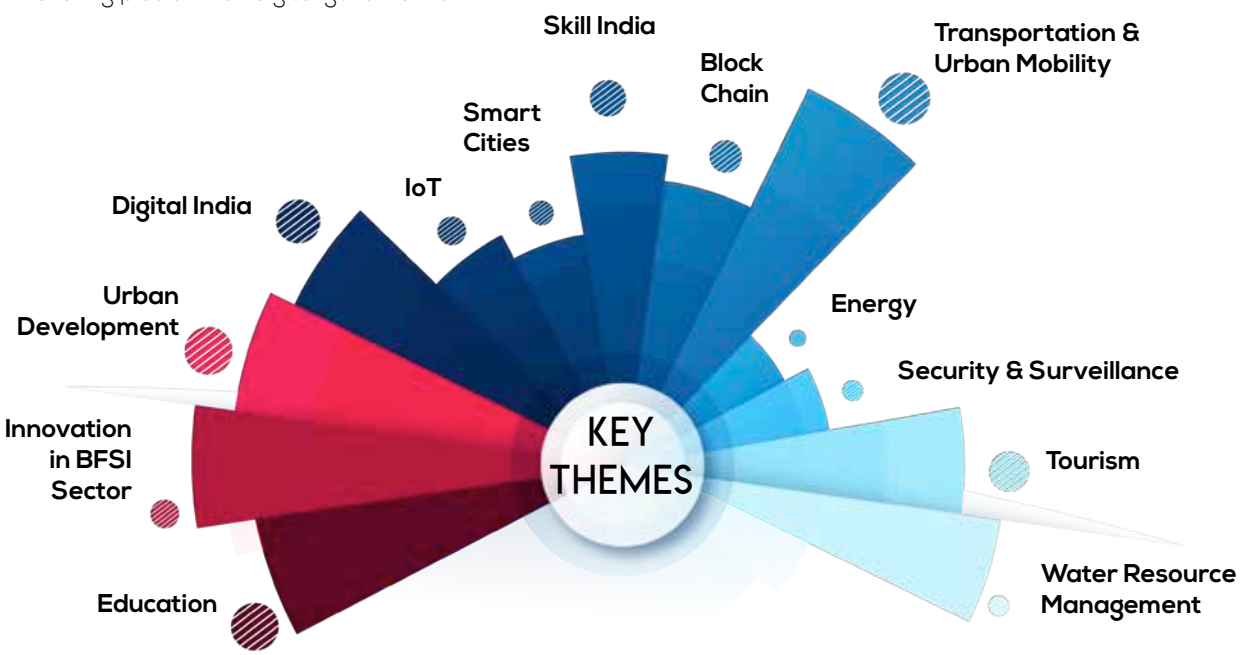

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Our Publications and Initiatives

CONNECTING THOUGHT LEADERS

Founded in 2005, eGov magazine is published in both print and online formats. Innovative use of ICT in Governance is at the heart of our all eGov initiatives.

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> MAGAZINE

It compiles ICT-related advancements being introduced, exercised by various government organisations via eGovernance module.

> NEWS

Dealing with various key developments and policy-related decisions that define Indian governance style at large, this section throws light on the most important aspects.

> WEBSITE

With a reach of sixty lakhs, the website is pushing the Digital India campaign of the Government of India. It highlights various dimensions of anything and everything related to the changing trends of governance in India .

> EVENT REPORTS

This segment narrates the discussions and deliberations of participants at the occasional conferences held nationally or internationally.

> CASE STUDIES

It deals with in-depth detail of various projects being implemented in any part of the country, worth inspiring others in providing solutions.

> VIDEOS

The youtube channel '*EletsTv*' deals with live recorded versions of tech-experts and key decision makers who participate in key debates or discussion of Elets knowledge conferences.

> INTERVIEWS

This section highlights various stakeholders, bureaucrats and policy makers influencing governance in the country.

Leaders Transforming Governance in India

The governance discourse in India has undergone a paradigm shift in the past few decades with technology driving the change in the relationship between the government and citizens.

This tectonic shift has been guided by the power of impactful and innovative ideas by our bureaucrats, the leaders who are entrusted with the responsibility of implementing ambitious government programmes and schemes on the ground and have the first-hand knowledge of the gaps that need to be bridged. It will help people to reap the benefits extended to them.

This special issue of eGov magazine is all about these leaders who have been shouldering this responsibility with great passion and vigour to ensure governance becomes a tool to deliver government services in a transparent and effective manner, making inclusive growth a reality in New India.

Our cover story, 'Governance Matters', celebrates the journey of the changing face of governance in India in the past 16 years, which saw Information and Communication Technology being increasingly used to tackle complex issues of governance.

Incidentally the emergence of eGov magazine is intricately intertwined with e-governance journey of India, making it a unique chronicler of this unfolding story. It tries to wade through the various initiatives adopted across the country to help the cause of effective governance to empower its citizens through e-governance.

This leadership special issue of the magazine carries interviews of governance leaders like Durga Shanker Mishra, Secretary, Ministry of Housing Affairs, Government of India; Sanjay Bhatia, Chairman, Mumbai Port Trust; Teeka Ram Meena, Chief Electoral Officer of Kerala and Additional Chief Secretary, Government of Kerala; Dr Kalpana Gopalan, Additional Chief Secretary, Youth Empowerment and Sports Department, Government of Karnataka; Satyajeet Rajan, Director General (Tourism), Ministry of Tourism, Government of India; and CJ Venugopal, Principal Secretary IT, Odisha, among others.

As India Inc. is fast moving towards Industrial Revolution 4.0, it is but imperative to have a clear roadmap and a sound strategy to make this transition a smooth affair. This issue of eGov magazine has, therefore, taken into account the perspectives of key industry players like Micro Focus, Marg ERP, Axis Communications, Canon, Dasault, Sequretek and Raritan to help our readers decide on their future course of action to stay ahead of the curve.

We hope our bouquet of articles, features and interviews will bring our esteemed readers more power of knowledge and evoke an invaluable response from them.

DR RAVI GUPTA
Editor-in-Chief, eGov magazine, and
Founder Publisher & CEO,
Elets Technomedia Pvt Ltd

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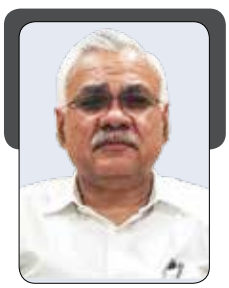

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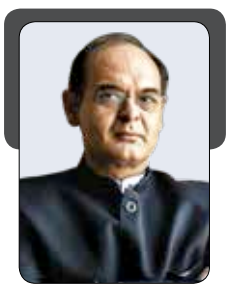

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GOVERNANCE MATTERS

In a country as diverse and as vast as India, the complex structure of governance needs innovations and ideas driven by sheer objectivity and will to transform lives, writes **Vivek Ratnakar** of **Elets News Network (ENN).**

A little over 16 years ago, eGov magazine came into existence as a breath of fresh air in a country that was starting to find a firm footing in an already globalised world where ideas were expected to lead large scale transformation in the way governments and governed interacted. Slowly but steadily, eGov emerged as one of the largest depositories of ideas and innovations with a promise of effecting change.

Although the history of e-governance in India goes back to early 1960s, which was marked by efforts to usher in an era of computerisation in governance, it was only in the post liberalisation era of 1990s that those efforts started to find some traction on ground.

One of the major milestones for the growth of e-governance included establishment of National Informatics Centre (NIC) in 1977 as the first major step towards e-Governance in India. Subsequently, the launch of NICNET in 1987 was one of the driving forces for e-Governance.

The initial years of new millennium were when the e-governance as a potent tool to shed silos and bring power of ICT to millions of Indians to

improve government service delivery in a transparent and effective manner somewhat attained maturity. Thus, India was ready to take a massive leap through technology-mediated administrative process-restructuring to promote good governance.

TACKLING THE GOVERNANCE CHALLENGE OF INDIA

In a country as diverse and as vast as India, the complex structure of governance needs innovations and ideas driven by sheer objectivity and will to transform lives. While a holistic approach towards e-governance would have served the best, the peacemeal approach adopted by various states and agencies in promoting e-governance did no disservice to the country, where the challenges of governance are as complex as they can be.

The formulation of a 12 point e-governance agenda in 2000 and the IT Act in 2000 gave some boost to e-governance. This resulted in policymakers formulating e-governance programmes such as Bhoomi Project in Karnataka, the Gyandoot centres of Madhya Pradesh, the Lokvani centres of Uttar Pradesh, the 'Friends' and 'Twins' single window utility bill-payment centres in Kerala and Andhra Pradesh, among many others that managed to set the ball rolling for e-governance across India.

In a 2008 article titled, 'Bhoomi, Fully Online eGovernanace Project for Karnataka', published by eGov magazine said, "All 20 million land records of 6.7 million land owners in 176 taluks of Karnataka have been computerised... While the project is largely funded by Government of India, some critical components of this project are funded by State Government as well."

The ground was fertile for ideas to take root. Thus, the need was felt to adopt a common vision, strategy and approach. The National e-governance Plan, a

Although the outcome for reducing corruption appears to be mixed, e-government does seem to have the potential for significant reduction in corruption in service delivery.

systematic framework for e-government in the country, was born in 2006 bringing a new paradigm of governance in the country.

G2C EMERGES A MAJOR THRUST AREA FOR EGOVERNANCE

While e-governance can broadly be classified under three categories -- Government to Citizen (G2C) initiatives, Government to Business (G2B) initiatives and Government to Government (G2G) initiatives – the Government to Citizen has emerged as a major thrust area, as the idea of G2C is closely intertwined with the success of ambitious government programmes.

eSeva project launched in Andhra Pradesh in 1999, Revenue Administration through Computerized Energy (RACE) Billing Project in Bihar initiated in 2001 and e-Mitra project in Rajasthan launched in the year 2004 are among the examples of some of the important G2C e-governance projects.

In an exclusive interview with the eGov magazine in the year 2012, Sanjay Jaju, the then Secretary of Information Technology & Communications Department in the undivided Andhra Pradesh, said: "e-Governance does not only bring benefits to the people, it also enables respective organs of the state to discharge their duties in an efficient and transparent manner. That is why the importance of e-Governance cannot be denied."

Talking about the e-governance project called Mee Seva, he said the flagship initiative of the government would provide a range of benefits and services to the people residing in the state.

But the biggest challenge, he said, in the implementation of e-Governance projects is "that we have to deal with large number of government departments. At times there is multiplicity of authorities. Problems also crop up when there is lack of

awareness about new systems, and there is also the resistance to adoption of new technologies".

In a 2010 research report titled, 'Assessing the Impact of E-Government: A Study of Projects in India', authors Subhash C. Bhatnagar, Adjunct Professor, Indian Institute of Management Ahmedabad and Nupur Singh of the Centre for E-Governance, Indian Institute of Management Ahmedabad, assessed the progress made by India to justify investments in e-government.

The authors observed that "for seven of the eight projects, users rated the computerised services higher in overall quality. The differences were statistically significant, though some services, such as eSeva and Bhoomi, have shown a larger improvement in service quality than others, such as eProcurement."

"The rate of error in documents (as reported by the users), which is an important measure of quality, was also lower for all the projects except Bhoomi's issuing of RTCs. Reduction in errors saves additional trips for users and improves productivity by reducing additional work for the staff. Pensioners and Drawing and Disbursing Officers (DDOs) in Khajane perceived significant improvements—clearly a huge gain for a treasury system."

On the question of the role e-governance in containing corruption, the study said, "Although the outcome for reducing corruption appears to be mixed, e-government does seem to have the potential for significant reduction in corruption in service delivery. The proportion of users paying bribes has generally declined."

GAME CHANGING E-GOVERNANCE INITIATIVES

By the end of the first decade of new millennium, it was fairly clear that e-governance is the way forward to overcome inefficiencies in India's existing legacy systems. UIDAI was created in 2009 to issue Unique Identification numbers (UID), named as "Aadhaar", to all residents of India that is robust enough to eliminate duplicate and fake identities, and can be verified and authenticated in an easy, cost-effective way. It was given a statutory status under the provisions of the Aadhaar (Targeted Delivery of Financial and Other Subsidies, Benefits and Services) Act, 2016, under the Ministry of Electronics and Information Technology (MeitY). Today, Aadhar is playing a critical role in strengthening the e-governance initiatives launched across the country.

Another significant initiative was taken by the Government of India towards creating a Digital India was the National Fibre Optic Network (NOFN) launched in October 2011 that aimed at connecting all the 250,000 gram panchayats in the country to further deliver e-governance services to the last mile.

Digital India programme launched in 2015 was another shot in the arm for e-governance in India. Launched with the vision to transform India into a digitally empowered society and knowledge economy, governance and services on demand was one of the three key vision areas for Digital India.

It talked about extending high-speed secure internet to the grassroots level, digital infrastructure, digital empowerment, digital literacy and availability of digital resources or services in Indian languages. It covers electronic services, products, devices, manufacturing and job opportunities and promises inclusive growth.

"The Digital India programme focuses on preparing India for the knowledge- based transformation and delivering good governance to citizens by synchronised and coordinated engagement with both Central Government and State Government. It seeks to provide services to the citizens' right at their doorstep by integrating them across departments and jurisdictions and making them available in real time for both online and on-mobile platform," said SB Singh, the then Deputy Director General, National Informatics Centre, in an interview with eGov magazine in 2016.

This big step was also in line with the idea of position India to reap the economic benefits that come with digitisation. According to a research by Microsoft and International Data Corporation (IDC), by 2021 digital transformation will add an estimated $154 billion to India's GDP and increase the growth rate by 1 percent annually.

THE FUTURE PERFECT

The success of e-governance projects in India is linked to the success of the government to strengthen and improve sustainability of the existing projects through innovative business models and continuous infusion of advanced technology. Although efforts are on to break information silos, creating shareable resources for all government entities will be one of the keys to ensure that government processes are transparent, citizen centric, efficient and easily accessible.

Given the high level of government commitment in planning the country's growth around the digital infrastructure and e-governance to effect change, India is likely to soon emerge as a leader in E-governance space.

New URBAN Policy for New INDIA

The Draft 'National Urban Policy Framework (NUPF)' outlines an integrated and coherent approach towards the urbanisation in India and we are seeking citizens' comments on this through the SmartNet and MyGov portals to put in place a comprehensive urban policy which would result in complete urban transformation in the country in coming years, says **Durga Shanker Mishra**, Secretary, Ministry of Housing & Urban Affairs, Government of India, in an exclusive interview with **Souvik Goswami** of **Elets News Network (ENN).**

What is your assessment of the progress of 'Smart Cities Mission?

In the 'Smart Cities Mission' our first commitment was to select 100 cities through two level challenge process- State and Central; get SPVs formed, and project management consultants (PMCs) instituted to projectise the plans and ensure that works begin at the earliest. I am happy to share that all 100 smart cities have been selected , PMCs instituted and city-level advisory forums (CLAFs) formed.

In all the 100 smart cities, Special Purpose Vehicle (SPVs) have begun functioning. Detailed Project Reports (DPRs) have been prepared and converted into tenders and many have been awarded to commence the works on ground. Out of the total Rs 2,05,000 crore worth of Smart City Plans for these 100 smart cities, we have tendered out works for nearly Rs 133,000 crore worth; and projects for over Rs 87,000 crore have been grounded for construction. So far various works of more than Rs 14,000 crores have been completed. This is a huge success, as it takes lot of time to go through the transparent process of commencing the work.

As many as 16 smart command and control centres (SCCCs) have already been made operational and by the end of 2019, more than 50 SCCCs will be operational in the country. This facility was extensively used in recently held largest human congregation in Kumbh at Prayagraj for crowd control. Their effective use have reduced crime incidences, improved traffic compliances, bettered utilisation of pubic utilities like sanitation, water, transport etc, enhanced safety & security, and many other benefits. They work like brain and nervous system of the city and could be scaled up modularly to enhance reach and utilisation.
Further, 23 smart roads have been completed and 58 are under implementation. Many projects related to smart water, smart energy, smart solid/ liquid waste management, smart solar, smart education etc. have been completed or under implementation. Various public places, waterfronts, heritage buildings etc have been improved or works are under progress on them. At the same time, PPP projects worth Rs 2,280 crores have been completed and many are under progress. Private sector has shown encouraging interest in partnering for public delivery.

Various impactful projects such as incubation/ innovation centres, skill training and livelihood promotion facilities etc have been completed/ under progress. Smart governance, pubic facilitation and grievance redressal are direct benefits flowing to the citizens. Very good results of Smart Cities Mission are visible across the country. The respective citizens and visitors can directly feel those changes.

Work on a smart city project in progress

Smart cities programme of such a scale has never been undertaken in any part of the world till date.

It is important to make cities of future with high livability index. What is your opinion on this?

The 'Smart Cities Mission' is like lighthouse project for us. Urbanisation is taking place rapidly in our country. In the next three decade, more than 50 percent of population will be living in urban areas. Are we prepared for tomorrow? Are we prepared to provide urban amenities to such a huge chunk of urban population in future? That is why we are keeping the benchmarks very high. Smart Cities Mission is a step in the right direction. Proper planning along with technology will help us to use available resources in an efficient manner and the mission is showcasing that. We are trying to ensure that future cities would be sustainable and livable.

How technological innovation is playing an important part in India's urban overhaul?

Technology is extremely vital and data is the game changer. Analysis of data is helping us in decision making. Earlier, every city was doing something or the other in its own way, but now we are trying to synchronise everything with the help of technology and innovation. This will help in the reduction of cost, promote local entrepreneurship, etc. There are 40 researcher fellows with the ministry who are all engaged in analysing the data to find solutions to various urban challenges.
Apart from 'Smart Cities Mission,' there are other ambitious government flagship programmes like 'Swachh Bharat Mission,' etc. Do you think that these kinds of convergence of various programmes to bring transformation in urban landscape have worked well?

There is no doubt about it. The 'Swachh Bharat Mission' has been one of the most important contributors to make cities smart. Unless the cities are neat and clean, how can be they smart and beautiful? Add to this, 'Housing for All', 'AMRUT', 'National Urban Livelihood Mission', etc; all of which have been converged to ensure the success of Smart Cities Mission.

'Swachh Bharat Mission' has played the most important role in the scheme of things. 'Smart Cities Mission' is for 100 cities, but 'Swachh Bharat Mission' is meant for all cities across the country and it has done wonders. Initially, people had doubts when this programme was launched in October 2014, but now even the most skeptics are beginning to see the success of the mission.

This success has come from three components: 23 States/UTs fully and 4,144 cities become open defecation free (ODF) with over 62 lakh individual

and five lakh community/ public toilets having been constructed; effective solid waste management (door-to-door collection of garbage has reached nearly 90%, segregation at source into dry and wet waste has reached around 60% and over 53% of waste is being treated scientifically- this was around 15% only five years ago); and massive behavioural change (through citizens participation as swachhagrahis, messages from community leaders of eminence for awareness creation). It has truly become Jan Andolan (mass movement) now.

What progress has been made in the Urban Housing sector?

Hon'ble Prime Minister envisioned that everybody in the country should have a house by 2022, when we celebrate 75th Anniversary of India's Independence. This led to PMAY-Urban Mission for urban areas. I am happy to share that we have completed and delivered more than 25 lakh houses to the beneficiaries out of the total assessed demand of 1.0 crore conveyed by States/UTs. We have already sanctioned around 81 lakhs dwelling units under 4 different verticals: Beneficiaries Led Construction (BLC), Affordable Housing Unser Partnership(AHP), In Situ Slum Redevelopment (ISSR) and Credit Linked Subsidy Scheme(CLSS). For the first time middle class beneficiaries with annual income up to Rs 18 lakh are being benefitted under CLSS through interest subventions, which amounts to around Rs 6 lakhs over a period of 20 years of loan repayment term. We have benefitted over 1.5 lakh such MIG beneficiaries and more than 5 lakh CLSS beneficiaries that includes EWS and LIGs as well. Hon'ble Prime Minister recently launched Global Housing Technology Challenge to get the best technology in Housing for quick, resource efficient, cost effective green technologies in the country. Ministry is also working to promote rental housing in the urban areas.

Another important issue is employment and through National Urban Livelihood Mission, we are addressing the problem of unemployment. We have trained over nine lakh people and more than five lakh have been funded by us for employment. Nearly 36 lakh women have been engaged in Self Help Groups (SHGs) to improve livelihood opportunities. Street vendors are being mainstreamed at a massive scale through the States/ UTs and city administration.

Urban Transport is another challenge being addressed in a big way. Over 657 km of Metro Rails have been made operational in 18 cities; work is under progress on over 800 km in these 18 and another 9 cities. For the first time, Regional Rapid Transport System (RRTS) has been started between Meerut to Delhi. Once made operational in next 5 years, one can cover distance of 82 km with 16 intermediate stoppages in just 49 minutes. This will obviate the need to live in Delhi. One can live in nearby city and commute efficiently to do the work in the national capital city. RRTS from Delhi to Alwar and Delhi to Panipat are in advance planning stages of preparations. Recently Hon'ble Prime Minister launched 'One Nation One Card' System with indigenously developed Debit/Credit Cards with

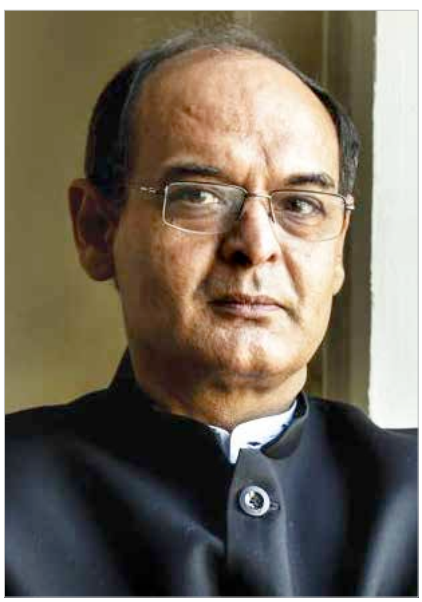
National Common Mobility Card Standards, Automatic Fare Collection Gate and whole System. India becomes one among very few countries, which have such capability. Many other works are going on to improve ease in urban mobility.

Shed some light on the challenges in the course of urban transformation.

There are many challenges and that's why we are trying to address them through AMRUT and Swachh Bharat Mission. Rejuvenation of water bodies is an area of concern. But some cities have done wonderful work on this front and we are trying to replicate those in other cities.

We are now working on a new Urban Policy. The Draft National Urban Policy Framework (NUPF) outlines an integrated and coherent approach towards the future of urban planning and development in India. We are seeking citizens' comments and suggestions on this through SmartNet and MyGov portals to put in place a comprehensive urban policy. This will be done for the first time. Considering the rapid pace of organisation in the country and our experience in steering various urban missions in last five years, I think it is ripe to prepare this policy which would result into complete urban transformation in coming years.

MbPT: OPENING NEW AVENUES & POSSIBILITIES



Sanjay Bhatia
Chairman
Mumbai Port Trust (MbPT)

Mumbai port is persevering to transform the port area and redevelopment of 280 hectare of land in phase-I is going to give rise to new and recreated neighbourhoods, as seen in Manhattan and New York City, says **Sanjay Bhatia**, Chairman, Mumbai Port Trust (MbPT), in conversation with **Kartik Sharma** and **Harshal Desai** of **Elets News Network (ENN).**

Please share Mumbai Port Trust's plan of revamping the eastern waterfront of Mumbai.

Mumbai city's eastern waterfront has largely been inaccessible to the public hitherto due to industrial, commercial and port activities. Mumbai Port Trust (MPT) has been appointed as the Special Planning Authority (SPA) for the 966.30 hectares of portland along the city's eastern waterfront, which stretches from Sassoon Dock to Wadala. Mumbai Port is reinventing its waterfront on the lines of port cities like London, Barcelona, Miami, Osaka and many others around the world. Mumbai port is persevering to transform the port area which got freed with discontinuation of coal, dangerous goods and shipbreaking and is endeavouring to redevelop it to meet the city's needs. Redevelopment of 280 hectare of land in phase-I is going to give rise to new and recreated neighbourhoods, as seen in Manhattan and New York City. This mega project will bring many jobs in the service industry, incubation centres for nurturing early-stage startups besides new cultural attractions and all the hype that has wooed people to cities such as New York City and London. Mumbai Port waterfront will have a spectacular landscape, large open spaces, tree avenues, walking tracks and cycling paths along the whole stretch of roads in the plan.

Various projects, such as Marina,

Kahnoji Angre Island, floating restaurants, ropeway over the sea and 'RO-PAX' are being undertaken to promote sea-tourism and water transport by utilising the area under the port. Mumbai Port Trust has thus opened up its eastern waterfront to the public; offering cruise, entertainment, and recreation centered development.

The new domestic cruise terminal, with its accompanying tourist attractions like sea-side restaurants, cycling tracks, skating rink and amphitheater has become a major tourist hub for all. Projects like RO-PAX terminal and water taxis are envisaged to promote public–friendly water transport. An evacuation plan has been prepared for effective management of diverse range of traffic including additional traffic to be generated on account of new developments. RO-PAX services from Mumbai to Mandwa and Nerul will reduce travel time by 2.5 hours, ease congestion on city roads and reduce pollution.

Similarly, water-taxis will ply between domestic cruise terminal and Karanja, Dharamtar, Kahnoji Angre and Belapur. It will provide ease of connectivity to the locals as well as tourists and will be a huge relief for daily commuters between Mumbai city and Navi Mumbai. The ropeway project between Sewree and Elephanta will be one of the world's longest ropeways over the sea. Proposed Marina on the eastern waterfront is planned with a capacity of around 300 yachts in phase-I and will be equipped with ancillary facilities such asrepairing units, water supply, fuel, and waste disposal facility. Mumbai Port is also aiming to provide advanced healthcare services by upgrading its 241-bedded hospital in Wadala to a 600-bedded super specialty hospital through PPP mode for its employees and the people in the catchment area.

Aligned with your ambitious project of developing cruise tourism in India, recently Mumbai Port Trust has launched its domestic cruise terminal and is in the process of completion of international cruise terminal. Can you please throw more light on it and the potential of cruise tourism in India?

A study entrusted to the top international consultant in the industry, Bermello & Ajamil Partners in its report indicated vast potential of 900 ship calls per annum and 4 million passengers in India by 2024-25. In this backdrop, special focus is laid by Mumbai Port on sea tourism and water transport. The port has made significant efforts in upgradation and modernisation of its domestic and international cruise terminals with more passenger amenities. In the year 2018-19, 108 cruise ships arrived in Mumbai carrying approximately 86,757 passengers. In 2019-20, Mumbai Port is expecting about 246 cruise vessels. International cruise terminal, which is under development at Ballard Pier extension berth at an estimated cost of Rs 350 crores, will not only be used by cruise ships and passengers but also by the city folks as it will have retails, restaurants, leisure areas, and many more facilities for other than cruise passengers. State-of-the-art facilities are also created at the domestic cruise terminal, which is the embarkation and disembarkation point for the recently started Mumbai–Goa cruises.

"Mumbai Port waterfront will have a spectacular landscape, large open spaces, tree avenues, walking tracks and cycling paths along the whole stretch of roads in the plan."

The new domestic cruise terminal, with its accompanying tourist attractions created on 1 km long Mumbai's new eastern waterfront offer more recreational avenues. Newly launched line Jalesh Cruise 'Karnika' is all geared up to commence its cruises from Mumbai Port from April 2019 offering weekly cruises to Goa. In future, domestic cruises are expected to go to many other tourist destinations of the country.

How do you view government's initiatives on port-led development in India? According to you, what other measures should be taken to augment the port sector in the country?

Ports play a pivotal role in the international trade of any country. In India, exports and imports account for almost 50 percent of the country's GDP. Maritime trade further contributes to a significant 90 percent of the total export-import trade volume of the country. India's port sector is at the brink of change and needs a transformational journey to improvise the existing capabilities.

"A study entrusted to the top international consultant in the industry, Bermello & Ajamil Partners in its report indicated vast potential of 900 ship calls per annum and 4 million passengers in India by 2024-25."

Many projects are running in parallel for improving traffic, development of cruise and water tourism, enhancing the capacity of the port and enabling IT and automation for the ease of doing business. Government's initiatives of 'Make in India' resulted in the export of vehicles, metro coaches and various engineering, electrical and electronic goods and machineries through Indian ports. The government's initiatives on various IT-enabled systems such as Port Community System, Access Control System and ERP for port-related activities will result in standardisation throughout the port community and establish ease of business for port users.

Mumbai Port, one of the pioneer ports, known for its excellence in handling project cargoes and heavy lifts of various types, shapes and sizes has handled 324 Metro coaches manufactured by M/s. Bombardier and exported to Australia during the period from January 2016 to December 2018. The port has also handled various heavy engineering goods, electrical goods, electronic goods, and machinery (3,134 packages weighing 17,196 metric tonnes) in the year 2017-18.

Although significant achievements and progress have been made in the last three years in the Maritime sector, many challenges still remain, which include –

- Providing last mile connectivity to all Ports.
- To handle large size vessels for achieving the economies of scale, sufficient draft is required at all Indian ports.
- Simplification of procedures to make things easy for the trade is another challenging area given the large number of Govt. and non-govt. players in the logistic chain. This requires induction of new technology, re-engineering of processes and working in very close coordination with other regulatory agencies like Customs, Health and private players like shipping lines, CFSs, etc.

How has the changing business environment due to emerging digital innovation and ICT impacted the port sector? How is Mumbai port adopting the changing scenario?

The maritime agenda for 2020 has recommended implementation of Enterprise Resource Planning (ERP) solution covering all functional areas within ports including port operations. The resulting ERP system is expected to interact with operational technology consisting of automated equipment and other systems such as VTMS, AIS, RFID, surveillance and other security systems. The Enterprise Business System Implementation project is a large turnkey project to implement Large Enterprise Business System which includes complex business process, information flow, provisioning of hardware systems, and others across six major ports of India including Mumbai.

In order to provide enhanced transparency, increased accountability, assured data security and data integrity, to transform the government work culture and ethics and to promote innovation by releasing staff energy and time from unproductive procedures the Port has implemented eOffice through NIC,Delhi, Government of India.

MBPT has installed and commissioned Access Control System for management of visitors and cargo vehicles. The system comprises multiple applications, such as access control, visitor and vehicle permit, employee ID card, time and attendance monitoring, RFID tags for tracking vehicles, and smart cards to visitors.

"To be relevant and sustainable for many more decades, MbPT has dived deep into its role vis-à-vis city's needs and realigned its vision accordingly."

Mumbai Port is implementing Integrated Estate Operation Management System which will have an interface with Geographical Information System (GIS) for management of Port's tenancies/leases.

Please apprise us about your future plans for Mumbai Port reflecting its cherished history as the principal gateway to India?

Mumbai Port has been pivotal to the economy of the whole country. There are no two opinions about the great contribution of this port towards the growth of Mumbai city. During the last 145 years, Mumbai Port has held a leadership position by continuously transformingitself in adapting to the changing needs of ships and cargoes. However, with a large megapolis surrounding it from all sides, there is an inevitable need to look at city's needs as well. To be relevant and sustainable for many more decades, MbPT has dived deep into its role vis-à-vis city's needs and realigned its vision accordingly. Megapolis is undoubtedly posing challenges to the city such as evacuation difficulties by road and environmental concerns and in this context Port land opens up many new opportunities, being a number one and prime urban space. Port has accordingly prepared Master Plan in this regard after long and intensive consultations with all stakeholders with following three distinct characteristics.

A. Cargo-related: Increase cargo by improving efficiency, cost reduction and using more of pipelines and waterways for evacuation while containing/ stopping the dusty/ polluting cargoes. Main projects undertaken by MbPT in its operational areas include enhancing of POL capacity by constructing new Fifth oil Berth, Bunkering Terminal, Upgradation of Indira Dock, MoU with CSL for upgradation and modernization of Ship repair facility, movement of containers from JNPT to Mumbai through barges amongst others.

B. Sea Tourism related: Here thefocus has been to transform the waterfront which fell into disuse, redundancy and re-orient it for the new opportunities of tourism development. This includes projects like Mumbai Port Eastern Water-front, International Cruise Terminal (ICT), Domestic Cruise Terminal, Ro-pax terminal, Marina, Ropeway between Sewree to Elephanta.

C. City related: About 700 acres of land is identified for development of Eastern Waterfront areas of Mumbai Port. MbPT is notified as a Special Planning Authority by the Government of Maharashtra to enable a holistic development and has prepared a blueprint of possible development.

Teeka Ram Meena
Chief Electoral Officer of Kerala and Additional Chief Secretary, Government of Kerala

MAKING EVERY VOTE COUNT

Considering that today's youth and urban population is always "logged in", we have been using social media and WhatsApp groups to spread the message that voting is their right and they should come and cast their vote on April 23rd, says **Teeka Ram Meena**, Chief Electoral Officer of Kerala and Additional Chief Secretary, Government of Kerala, in an interview with **Gopi Krishna Arora** of **Elets News Network (ENN).**

With Lok Sabha elections approaching, what initiatives have been planned by the Election Commission to encourage young voters who will be voting for the first time to come to polling booth?

This year, 2.6 crore people will be casting their votes in Kerala with close to 3.6 lakh being first time voters from the state. The Kerala State Election Commission this year has taken many innovative steps to ensure that first time voters are made aware of how important it is to exercise one's voting right to elect the right leader. The aim this year is to ensure that 100 percent first time voters cast their vote.

The Commission conducted many camps to allow first time voters to enlist and the last date for the same was extended to March 25th, 2019. Not just that, steps have also been taken to allow voters to track their application status online. The Election Commission of Kerala is taking

constructive and innovative steps to ensure that every eligible voter exercises his right to vote and participates in the election process this year.

Our plan is to ensure that no voter is left behind for any reason. Special efforts have been taken to include groups and communities who have been sidelined or excluded traditionally. Through our Systematic Voters' Education and Electoral Participation Programme (SVEEP) all district administrations have conducted various programmes that have a youth appeal.

Election Literacy Clubs were set up as a part of spreading awareness amongst students. More than 1,000 electoral literacy clubs are functioning in schools and colleges across Kerala and quiz, plays, flash mobs, music and other programmes were organised to help create interest amongst the youth.

Campus ambassadors were also identified from different educational institutions in the state and they have also been enlisted to help spread the message of exercising one's vote this year. Competitions were also held on the topic of Ethical Voting for college (documentary creation) and school students (poster creation) and the prizes were distributed on National Voter's Day, January 25th 2019.

Campus visits were made by officials and also EVM/VVPAT familiarisation drives were conducted in campuses across the state. Mass runs, bike and cycle rallies, flash mobs, video messages from eminent personalities including our Kerala state SVEEP icons Smt KS Chithra and Shri E Sreedharan (Metro Man) have been publicised through social media.

Pledges were taken and creative campaigns were devised by local administrations to ensure that they connected effectively and repeatedly with the youth in the run up to the election. Social media has been used effectively to reach out to the younger generation this time round.

Teeka Ram Meena, Chief Electoral Officer of Kerala and Additional Chief Secretary, Government of Kerala conducting an EVM-VVPAT media awareness programme in Kerala.

How is the Election Commission in Kerala using ICT to reach out to common man to create awareness about the polling process, EVMs and VVPATs?

The Commission has also launched a toll free number 1950, as the voter helpline for voters to get authentic information pertaining to their voter registration. The enrolled electors in the Electoral Roll can check the details of their personal information, the Polling Station planned for them to visit on the Poll Day and to know the contact details of Booth Level Officers, Electoral Registration Officers and District Election Officers, by using the Voter Helpline.

Considering that today's youth and urban population is always "logged in", we have been using social media and WhatsApp groups to spread the message that voting is their right and they should come and cast their vote on April 23rd. We also identified campus ambassadors and youth icons across all districts who are well-known faces and eminent personalities whose video messages were recorded and publicised through YouTube and Facebook.

Documentary about voter awareness was made by KFDC and has been shared on TV and social media. Interesting and simplified videos of how to operate and use the EVMs and VVPATs have been created and put out on the Internet for viewing and familiarisation.

Not just that we have also created many posters and pamphlets to clarify things to the public and these are being put up in public places and also being distributed to all.

What steps are in the offing to arrest the spread of the recent phenomenon of fake news?

The Election Commission of India (ECI) has directed its state-level bodies to appoint nodal officers to keep an eye on fake news, problematic content and hate speech over social media platforms that

violate the model code of conduct of elections.

Social media platforms like Facebook, WhatsApp, Twitter, Google, ShareChat and ByteDance had, in March, agreed to follow a 'Voluntary Code of Ethics' during the parliamentary polls. ECI has appointed three nodal officers in New Delhi. The commission further said that a copy of the violations should also be forwarded to the nodal officers appointed by it who would examine the matter instantly and would write to the social media platforms to take appropriate action against the violators, after the approval of its Director General (media).

The commission would examine the content on social media platforms for violations of the model code of conduct or any of its instructions, law provisions or court orders related to election matters, the daily added.

The 'voluntary code of ethics' is expected to help the Election Commission take down 'problematic content' and is an attempt to bring about transparency in political advertising on social media platforms, during elections.

According to the daily, almost a third of India's 900 million voters are active on social media platforms. This makes it (appointing nodal officers) one of the biggest-ever attempts to monitor Internet content.

We have set up a Media Certification & Monitoring Committee (MCMC) at the state and district level to monitor media content and also for pre-certification of publicity and ad materials of candidates and parties for use in media.

How do you plan to empower common citizens to report the breach of model code of conduct?

The ECI has launched an innovative and user-friendly mobile app called cVIGIL (Vigilant Citizen) for citizens to report Model Code of Conduct and expenditure violations and which will be a fast track complaint reception and redressal system during the elections. cVIGIL can be used for reporting violations from the date of notifications for bye-election/ assembly/ parliamentary elections. The uniqueness of the app is that it only allows live photo/ video with auto location capture from within the app to ensure digital evidence for flying squads to act upon in a time bound manner.

By using this app, citizens can immediately report on incidents of political misconduct within minutes of having witnessed them and without having to rush to the office of the returning officer. cVIGIL connects vigilant citizens with District Control Room, Returning Officer and Field Unit (Flying Squads) /Static Surveillance Teams, thereby, creating a rapid and accurate reporting, action and monitoring system. All that is required, is to click a picture or a two-minute video of the activity violating MCC and describe it shortly, before registering the complaint. GIS information captured with the complaint automatically flags it to the concerned District Control Room, permitting flying squads to be routed to the spot within few minutes. The app has inbuilt features to prevent its misuse.

POLL CHALLENGES IN KERALA

- Threat of Maoist activities in certain areas like Wayanad, Malappuram and Kannur, Kozhikode
- Sensitivity of Sabarimala issue which has the potential of causing disharmony among the people
- Due to the floods there are certain polling stations also which were damaged and they are under repair
- There are some areas that have been left inaccessible due to waterlogging in Alleppey, Ernakulam, where you cannot reach by road and polling materials have to be transported via boats. Also in certain other places like Idukki where there is limited access in tribal populated areas where we face challenges.
- Similarly Kannur which is a highly sensitive area where the intense political rivalry leads to political violence and problems.
- Political rivalry is high and it is a closely contested election always especially between the UDF and LDF.

Which key poll reforms have taken place in the past one decade and which reforms you think can be expected to see in the near future?

There have been various reforms in the last few years. Some of the important ones in recent times have been introduction of None of the Above (NOTA) which allows a choice to reject all the candidates; restriction on exit polls; ceiling on election expenditure, which has been increased to Rs 70 lakhs in bigger states; disclosure of election expenditure; making political parties to report any contribution in excess of Rs 20,000 to the EC; declaration of criminal antecedents of candidates; barring of persons charged with heinous crimes: Sec 8 (4) of RPA from contesting elections for the next six years; compulsory declaration of educational qualification by a candidate contesting elections; expansion of the scope of RPA section that concerns with asking votes in the name of religion; setting up of Media Certification and Monitoring Committee (MCMC) at the state and district level to monitor media content and also for pre-certification of publicity and ad materials of candidates and parties for use in media; Election Commission of India's Model Code of Conduct; creation of a fully computerised database of electors, and video recording of the polling and counting procedures, among others.

(Spl. Note: The interview was conducted before the Lok Sabha Elections-2019.)

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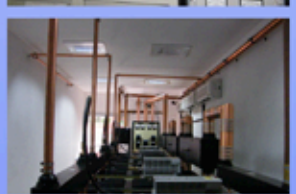

- Supply and commissioning of 2 numbers of 1000 KW MW AM Super Power, solid-state transmitters at Rajkot and Chinsura for AIR external services.
- Establishment of Common Transmission Infrastructure (CTI) for FM Phase-II & Phase-III Broadcasters.
- Setting up of TV Studios for Rajya Sabha, Lok Sabha, Rashtrapati Bhawan and various Universities.
- Setting up of Up-Link System for Lok Sabha Channel.
- Establishment of Pvt FM. Studios for Radio City, Radio Mirchi, Malayala Manorama, Mathrubhumi, Dainik Jagran, Dainik Bhaskar, Indigo FM, Positive Radio.
- Setting up of Electronic Media Monitoring Centre (EMMC) for Ministry of Information & Broadcasting.
- Setting up of e-Class rooms at IIM Indore.
- Setting up of transmission infrastructure for over 62 Community Radio Stations (CRS) across the country.
- Video Surveillance & Access Control Management System for Government Organizations.
- SITC of Spectrum Monitoring and Analysis System.
- Establishment of Secured IT Data transfer Network.
- Pro AV Projects for National School of Drama (New Delhi), Rajasthan Vidhan Sabha (Jaipur), Gaiety Theatre (Shimla), National Institute of Technology (Surathkal, Karnataka).
- Auditorium projects for Gaiety Theatre (Shimla), Indian Institute of Science (Bangalore), Auditorium (Jamia Millia University), Stage lighting and furnishing of IGCIC (Phoenix, Mauritius), Police Auditorium (Jammu).
- Providing Social-Media Relationship Management (SRM) Services to Ministry of Information and Broadcasting and other Government Departments.

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Dr Kalpana Gopalan
Additional Chief Secretary
Youth Empowerment & Sports
Department, Government of Karnataka

Karnataka **Harnessing Youth Energy** through Sports **Governance**

We have taken various initiatives to ensure accountability and transparency in the system. The technology initiatives have been adopted both in intra organisational administration and extra-organisational transactions with sportspersons who are our core clientele. Our intra-organisational initiatives aim at streamlining departmental processes, says **Dr Kalpana Gopalan**, Additional Chief Secretary, Youth Empowerment & Sports Department, Government of Karnataka, in conversation with **Souvik Goswami** of **Elets News Network (ENN)**.

"Our department is leveraging technology to maintain profiles of all its athletes and monitor their progress to provide timely interventions like financial, psychological and coaching support."

How is the Government of Karnataka driving the youth empowerment movement through its various initiatives?

The Department of Youth Empowerment and Sports (DYES), Government of Karnataka, has the twin objectives of youth empowerment and sports development. Youth in the age group of 15 to 30 years constitute a major segment of Karnataka's total population. This segment is crucial for the overall development of the state. If properly channelised, this youth energy could be transformed into an asset; else it becomes a liability. Karnataka's Youth Policy delineates the programmes and

schemes essential for youth empowerment. We have adopted a multi-pronged approach to drive the youth empowerment movement.

Direct targetted initiatives: Capacity-building programmes for youth and sportspersons include life skills development training programmes, community development programmes, adventure sports camps and strengthening and engaging youth clubs in rural development.

Sports for empowerment: The DYES has adopted the twin approach of universalisation of sports culture and promotion of sports excellence. Universalisation involves initiatives like Grameena Kreedotsava to provide financial assistance to rural youth clubs and organisations to conduct rural sports events; Yuva Kreeda Mitra and Yuva Chaithanya to provide sports materials and sports kits to rural sports clubs that encourage youth and children to involve themselves in sports activities on a daily basis, distract them from undesirable pursuits, spot talent in the community and refer talent to the department. We encourage outstanding young sportspersons through liberal financial support under the Sports Academy for Excellence Scheme. Cash awards and the Ekalavya, Karnataka Kreeda Rathna and Kreeda Poshak awards provide recognition and incentive for sportspersons to excel at international competitions and to institutions to continue supporting sportspersons. Providing scientific coaching, organising tournaments to increase competitiveness and a system of incentivising achievers in sports has the ultimate impact of achieving excellence.

"We have migrated to e-office to incrementally transform the department into a paperless department. The Online File Monitoring System has been implemented to ensure timely disposal of files."

Infrastructure Development: We create basic sporting infrastructure like playgrounds at grassroots level and state-of-the-art international level sports infrastructure like synthetic athletic tracks, hockey turfs, swimming pools, indoor stadia and so on at district level. The department has taken up playgrounds in all villages in convergence with MNREGA. This, in combination with Yuva Kreeda Mitra and Grameena Kreedotsava schemes, has resulted in the department spotting and grooming of raw sporting talent.

Would you shed some light on the sports policy of the State?

The Karnataka State Sports Policy proposes interventions to bring about changes in the sports sector, namely, sports governance and institutions, sports ecosystem, hard infrastructure and soft infrastructure. The policy lays emphasis on nurturing sportspersons who can excel at national and international level. The main features of the Sports Policy are governance and institutions, hard infrastructure, and soft infrastructure.

How is your department leveraging technology to ensure accountability and transparency in the system?

We have taken various initiatives to ensure accountability and transparency in the system. The technology initiatives have been adopted both in intra-organisational administration and extra-organisational transactions with sportspersons. Our intra-organisational initiatives aim at streamlining our departmental processes. We have migrated to e-office to incrementally transform the department into a paperless department. The Online File Monitoring System has been implemented to ensure timely disposal of files. The Khajane-2 online system has been adopted for all treasury transactions which enables senior officers to have real-time data on the financial progress achieved in various schemes across Karnataka apart from effective financial control.
E-procurement portal is being used for all tenders which enables prospective bidders to bid for tenders online doing away with all short-comings of manual tenders. Online Human Resource Management System (HRMS) has been implemented covering salary, annual increments, leave encashment facility and other services.

All information related to our schemes and citizen centric services is available on our dedicated website with open access to all. We have leveraged an e-governance initiative called Seva Sindhu to invite online applications from sports persons for sports welfare schemes. The IT Cell Application development to maintain athlete profiling, monitor performance, and ease communication with sports associations is in final stages. The Direct Benefit Transfer system has been introduced for all individual and institutional 8 beneficiaries wherein all grants, rewards and prize money are transferred directly to their accounts. Certain services have been brought under the Sakala programme to ensure time-bound delivery. E-janaspandana portal helps resolve public grievances online. Youth Helpline has been launched to provide information and guidance on various schemes of the department.

As many as 47 sports organisations recognised as state sports associations are provided grants to conduct coaching camps and depute Karnataka teams to attend tournaments. A user-friendly online system is being developed to handle the grants-in-aid. This will also help to continuously track the performances of sportspersons, thus enabling us to nurture talented sportspersons. This innovative project has been funded under the Challenge Fund of the Government of Karnataka.

As a senior policymaker of the country with vast experience in administration, how do you view the importance of technology and innovation for ensuring effective governance?

Advances in information technology and digitalisation have transformed the world into a global village with barriers and distances fading away. Availability of reliable and accurate information and the geographical spread from where the information is collected are crucial for decision making. With the current security and data integrity levels, where the confidentiality of the information source is assured, technology can be leveraged to collect reliable and accurate information to enable us to formulate and reorient existing schemes for the benefit of the public.

Advances in internet data speed, real-time monitoring of the implementation of schemes and reach with beneficiaries in real-time has resulted in faster and meaningful implementation of the government programmes at grassroots level with the involvement of stakeholders.
Adoption of technology in governance has greatly eased the delivery of services to the citizens. Technology enabled solutions to the day-to-day challenges of administration have increased transparency and accountability resulting in better monitoring systems, timely delivery of services, reduction in bureaucratic red-tapism and corruption. Real-time access to data on various parameters of administration and developmental indices help senior administrators to monitor progress of developmental programmes and take quick decisions. It also comes handy to detect financial irregularities and frauds at initial stages. Digitalisation of records, including land records, have revolutionised governance making it easier for both the common man and the bureaucracy.

Our department is leveraging technology to maintain profiles of all its athletes and monitor their progress to provide timely interventions like financial, psychological

and coaching support. Direct Benefit Transfer of government support to sports persons' bank accounts, which has eliminated the malpractices and exploitation to a large extent, is a classic example of how technology can be leveraged to reach real beneficiaries. Going forward, technology is the key for effective implementation, monitoring and reorientation of the government programmes which will give policymakers cutting-edge advantage in dealing with real-time burning issues facing the society and the state-at-large.

What is your vision for the youth empowerment through sports?

A majority of the population of Karnataka, about 66 percent, falls in the working age group of 15-59 years; about 17 percent of the population falls in the age group of 5-14 years.

The Department of Sports has understood this demographic advantage and the fact that sports has the potential to be used as a major tool for youth empowerment. To address this, a series of new initiatives to engage youth in constructive activities have been rolled out.

We have introduced schemes to involve not only the youth but people of all ages to actively participate in community sports activities. We incentive achievements in sports by way of scholarships, fee reimbursement, financial support, awards and cash awards. Realising the crucial role of private stakeholders, private organisations and institutions that are voluntarily working for the development of sports and sportspersons are given recognition through awards. To motivate more organisations to embark on this path, we have introduced Kreeda Poshaka Award to recognise their contributions for the sports development. Grameena Kreedotsava is one such scheme where youth clubs and organisations are given financial assistance for conducting rural sports events. Yuva Kreeda Mitra is a scheme wherein sports clubs are given sports materials to encourage youth to involve themselves in sports activities on a daily basis and spot talent in the community and refer talent to the department. Yuva Chaithanya is a scheme where youth clubs in villages are given sports materials so that children and youth can play sports on a daily basis.
The department in convergence with MNREGA has taken up creation of playgrounds in all villages so that children, youth and all others can play sports. This, in combination with Yuva Kreeda Mitra and Grameena Kreedotsava schemes, has resulted in spotting of raw sporting talent who are then groomed by the department. School-going children are motivated to continue in sports by providing sports scholarship of Rs 10,000 per annum for their achievements at state level. The Educational Fee Reimbursement scheme supports youth to pursue sports continuously along with education at higher levels. Sports schools and hostels in every district to identify and nurture sports talent by providing balanced nutrition, scientific coaching, sports kits and sports competition exposure.

Admission to professional courses under sports quota has also provided incentive for children and youth to pursue sports. Other schemes like cash awards, Ekalavya, Award, Karnataka Kreeda Rathna 14 Award, and Kreeda Poshaka Award provide recognition and incentive for sportspersons to excel at international level competitions and also institutions to continue supporting sportspersons.

*(**Dr Kalpana Gopalan**, is a composite public policy professional: practitioner, policymaker, scholar, author, volunteer and IAS officer. Views expressed are personal and for educative purpose only.)*

Pravir Krishna
Managing Director
Tribal Cooperative Marketing
Development Federation of India Ltd
(TRIFED)

Driving India's Tribal Crafts on Global Stage

The objective of TRIFED is to instill the necessary marketing skills among the tribal artisans and craftsmen and provide them exposure to the global marketplace, says **Pravir Krishna**, Managing Director, Tribal Cooperative Marketing Development Federation of India Ltd (TRIFED), in an interview with **Souvik Goswami** of **Elets News Network (ENN).**

What has been the growth path of TRIFED in the recent past?

TRIFED looks after tribal commerce. The handicrafts and forest produces constitute around 70 percent of the tribal income. The organisation is involved in promoting tribal products and providing skill development opportunities and market access to help craftsmen sell their produce. We are on a high growth path for over the last two years. We have quadrupled our turnover with improved sales and procurements. We are benefitting over 2.5 lakh tribal handloom and handicraft producers.

The Ministry of Tribal Affairs has notified the Minimum Support Price Scheme through which we want to create additional income for around 1.1 crore tribal households by providing the minimum support price for almost 50 varieties of minor forest produces. This scheme could prove to be a gamechanger if implemented well. We are also looking forward to add value to tribal products under the Van Dhan programme by helping tribal collectives to market their products.

TRIFED has provided employment and additional income to more than 1.5 lakh tribals with sourcing of handlooms and handicrafts rising by almost 500% and their sales by 97% over the two years. A turnaround is happening with TRIFED aiming to double this in the coming year with ambitious expansion plans to provide employment to an additional 5 lakh tribal artisans.

VanDhan with its new Guidelines will reach 1.5 cr tribals spread over 307 districts in 27 States of the country and

an integrated IT platform to deliver this is being put in place with the CSC network in coordination with the chosen district units.

How is e-commerce helping in the promotion and sale of the tribal produces?

TRIFED has about 103 retail outlets across the country. We are promoting tribal handmade products in a big way by leveraging online marketplaces. We have got into partnership with Amazon, Snapdeal, Flipkart, GeM and our own portal, Tribes India. We started with a very conservative sum of Rs 1,000 about six months ago which has now grown up to about Rs 30 lakh. We hope to grow our e-commerce to a large scale and aim to achieve sales of Rs 5 crore through the e-portal. Although it may look a fairly huge amount, we are optimistic about achieving the target as the online marketplace is accessible across the globe providing due exposure to our artisans.

As we talk about providing market access to the local tribal craftsmen and artisans, there still exists a gap, especially while attuning to the global market. Do you have any awareness or skill development programme in your agenda to bridge this gap?

The Indian tribal artisans are extremely skillful and their art has been carried forward for over generations. They produce a phenomenal quality and amount of work. What they lack is marketing ability as they reside in forests or remote locations. They tend to get involved with middlemen who buy their products and produces at nominal rates and sell them in the market at much higher prices. TRIFED has been trying to bridge this gap. We have already registered 2.5 lakh tribal artisans whose produce is sold in big markets through our retail outlets and portals. We also organise Aadi Mahotsav exhibitions to promote tribal crafts. In the recent Delhi Aadi Mahotsav, sale worth around Rs 18 crores was made in 15 days. In the value chain of commodity, tribals get around 20 to 30 percent. By providing them access to large market places, this value would increase by 80 percent. This is how we are trying to bridge the gap between the tribal craftsmen and the customers across the world.

Do you plan to expand such exhibitions across not just metros but to tier-II cities as well?

We have expanded the Aadi Mahotsav across 200 centres in the country across tier-I, tier-II and tier-III cities. Earlier, it used to be a difficult task to convince artisans to participate in these exhibitions but now they approach us for availing the opportunity to exhibit their produce. We now have a waiting list of around 500 artisans who want to participate in the Aadi Mahotsavs. All the profit that is generated in these exhibitions is given to them along with free stalls, transportation and lodging in the cities where the Aadi Mahotsav is conducted.

What new plans you have in the pipeline?

To implement the Minimum Support Price Scheme in order to provide remunerative price to around 1.1 crore tribal households by surpassing the middlemen is a big challenge in front of us.

We also aim to help the tribals to value add in order to sell their products in the market at higher prices. For example, tamarind in its raw form sells at around Rs 30 in the market. However, the deseeded and defiberised form would sell at around Rs 120. Further, the more refined forms such as powder, chutney or sauce would sell for around Rs 400. These primary level value additions can be done in the village itself. We first want to provide tribals the Minimum Support Price (MSP) for their produce and then give them access to facilities to value add and then sell at much higher price. We are facilitating them to increase their income to at least four times through MSP and value additions. This is the next big challenge TRIFED is looking at.

How is TRIFED utilising technology to achieve its goals?

Every business transaction is done on a digital platform. TRIFED is 100 percent digitised and the tribals are trained to use the digital modes.

What is your vision for TRIFED in the next five years?

Our idea is to induce tribals to learn the necessary skills to meet the big market needs. We give them little inputs on design, colours or market trends and they produce world class products. Our motto is "More the Merrier". We want to connect with the 5.5 crore tribals living in forests and convince them that they can grow and add to their income without changing their basic ethos. We want them to be experts in marketing. We want them to get the value they deserve and not fleeced by people who predate on their capabilities.

Is there any plan for global collaboration?

Yes, we have written to 100 embassies and plan to send our tribal artisans to international exhibitions, both cultural and commercial. It is the first time we have approached the embassies and I am sure our craftsmen will win at the world stage as well. We have tied up with Amazon Global and are putting the products on display at a price which is five times higher than that of India. Tribal commerce has its own dynamics, rhythm and beat. There is no reason why it cannot beat the commercial market.

Incredible India Leaps Forward

The biggest success factor of North East, Uttarakhand, Himachal Pradesh or Kerala in the tourism sector has been the emergence of home stays because staying with local people is an experience in itself, says **Satyajeet Rajan**, Director General (Tourism), Ministry of Tourism, Government of India, in conversation with **Souvik Goswami** of **Elets News Network (ENN).**

Satyajeet Rajan
Director General (Tourism), Ministry of Tourism, Government of India

"The Ministry of Tourism launched the new Incredible India website in June 2018. The website showcases India as a holistic destination, revolving around major experiences, such as spirituality, heritage, adventure, culture, yoga, wellness and more."

What are the focus areas for the government in promoting tourism in India?

The Government of India has put in place favourable policies to promote tourism in the country. Special attention has been given to the North East India and also on attracting more and more international tourists. For that, some new markets have to be tapped. We are focusing on short haul markets like China, Gulf and South East Asian countries as we believe that the biggest jump in the number of foreign tourists visiting India would come from these markets in the coming decade. For example, the Chinese outbound market is estimated to be around 13 crore and our aim is to increase it many folds from miniscule three lakhChinese tourists presently.

To attract more foreign tourists, India should have world-class infrastructure in place. What is being done on this front?

Development of tourism infrastructure is being prioritised to provide better experience to foreign tourists. Theme based circuits are being developed under the Swadesh Darshan Scheme spanning the entire country. A total number of 76 projects worth Rs 6,102 crores have been sanctioned till date under the scheme covering 30 states and Union Territories. Various projects under the Swadesh Darshan Scheme have been inaugurated in Manipur, Arunachal Pradesh, Andhra Pradesh, Nagaland, Chhattisgarh, Madhya Pradesh, Meghalaya and Kerala till February 2019. Besides, integrated development of identified pilgrimage destinations is

being initiated under the'National Mission on Pilgrimage Rejuvenation and Spiritual, Heritage Augmentation Drive' scheme. Besides, infrastructure in temples is improving under PRASHAD scheme.
We are trying to ensure linking of smaller places like Hampi, making them more attractive to tourists so that tourists have wider choice. Facilities like tourist facilitation centres, eco log huts, sound and light show, helipads, cafeteria, wayside amenities, water sports, craft villages, tribal thematic villages, illumination, nature trails, jetties, boat club, adventure zones, interpretation centres, etc. have been developed.

Most importantly, 17 sites in 12 clusters have also been identified by the ministry to transform them as iconic tourist sites with world class facilities. Non-governmental sector is being encouraged to adopt tourist sites to channelise non-governmental funding including CSR funds.

How Smart Tourism can be ensured by leveraging Smart Cities Mission? What is your opinion about home stays?

Smart cities will become tourism hubs in their respective areas because they would provide high-end hotels and entertainment which will further boost tourist influx to these cities. We are promoting home stays in a big way. The biggest success factor of North East India, Uttarakhand, Himachal Pradesh and Kerala in the tourism sector has been the emergence of home stays because staying with local people is an experience itself. I believe home stays would become the next big thing for India's tourism sector.

In terms of industry and government collaborations, I think hospitality sector has to ensure rooms and amenities at par with international standards. Technology can play a big role in this. Restaurants have to ensure specialty foods keeping in mind the needs of global tourists. We have requested Chinese restaurant chains to provide Chinese foods at our iconic tourist sites like Taj Mahal in Agra and Kaziranga National Park, Assam.

We are expecting from our hospitality sector to focus more and more on the needs of international tourists along with domestic tourists. We have to ensure that tourists feel that they have been taken care of.

Shed some light on the promotional and awareness creating activities to promote tourism by using technology and innovation.

The Ministry of Tourism has launched 'Incredible India 2.0 Campaign' which marks a shift from the present generic promotions being undertaken across the world, to market specific promotional plans and product specific creatives, with greater focus on digital presence and social media. Six films have been released so far, over 20 million views for each film covering luxury, Kaziranga, Yoga, cuisine, Ayurveda, Buddhist circuit, North east. 67 bloggers saw different parts of India in luxury trains. We also launched the new Incredible India website in June 2018. The website showcases India as a holistic destination, revolving around major experiences, such as spirituality, heritage, adventure, culture, yoga, wellness, and more. The website follows the trends and technologies of international standards with an aim to project India as a 'must-visit' destination. To leverage more and more technology, the ministry has launched Incredible India mobile app. The app has been equipped with features to assist the traveller in each phase of their journey to India. We are also thinking of coming up with new app which will help us in locating a tourist and we are in talks with various tech companies to use more and more augmented reality, AI to ensure use of technology and innovation for tourism ecosystem.

What is the future growth roadmap for India's tourism sector?

The vision has been completely laid by the Prime Minister. The thrust is to reduce the barriers. Visa reforms in the last four-five years have been focusing on that. We have to make it more liberal. Apart from e-Visa, we should also extend visa on arrival beyond specified three countries. In the lean period of tourism, we can offer visa on arrival without any fees which will result in an increased number of foreign tourists to India. GST rates are very high in India for the hospitality sector. The rates have to align with the rates in competing markets like China, Thailand, Singapore, Indonesia and the Middle East. We have to also ensure cleaner tourist destinations to attract tourists. Swachh Bharat Mission has helped us in this. But, there is a long way to go. We also need to work more on safety and security of tourists. Finally, Experiential Tourism is the future of tourism and all stakeholders should align their activities to provide this.

C J Venugopal
Principal Secretary, Electronics & IT,
Government of Odisha

'E-Governance Initiatives Improved Efficiency and Productivity in the State Government'

Over the past few years, Odisha has come up with innovations and initiatives in the Information Technology sector. A lot of emphasis is given on the digital infrastructure of the state to enable a citizen centric approach, says **C J Venugopal**, Principal Secretary, Electronics & IT, Government of Odisha in an interview with **Kartik Sharma** of **Elets News Network (ENN).**

"In the coming years, there will be more activities in the ICT space. ICT infrastructure coming up in a big way with Data Centres, security systems like the SOC, NOC, etc., which would ensure better reach and engagement with the citizens."

What are some of the IT and innovation initiatives taken and implemented in Odisha?

The biggest initiative which we have enabled is the Government of Odisha Cloud or GoO Cloud. With this, we have been able to host a lot of our major applications. The Cloud is located in our State Data Centre. We have also given a lot of emphasis on our digital infrastructure. Within this, we host video conferences from the state headquarters to the offices in the 314 blocks and 30 districts. This has reduced a lot of time and energy of the officers by sparing them to travel to the headquarters for meetings or review and assessments of any particular project.

Has it improved the e-governance structure of the state to take the services to the doorstep of the people?

This initiative has created a lot of awareness among the government system cells and more applications are developed. Some of the applications are also citizen-centric and some are automated and bring end to end solutions in the lifecycle. All these have improved efficiency and boosted productivity in the governance itself. It is a continuous effort and we also need to keep improving the human resource capabilities through training programmes, capacity building and awareness programmes at regular intervals. At the same time, we must identify new cases and start developing them.

What are the steps taken to ensure the state's cyber security?

The Cyber security plan has been implemented and the CERT-O (Computer Emergency Response Team –Odisha) is already setup. We are also organising training programmes and capacity building on cyber security for our officers. We are also in the process of building Cyber Security Operations Centre (SOC). A lot of work is being done on the cyber security operations of all our applications.

What are your plans to develop the state government's online presence, in terms of the official website or social media presence to enable better communication with the citizens?

We do have a social media portal which is acting as a bridge to reach out to people. We receive feedback from the citizens and work on it. This is a continuous process of engaging people with us. We are planning to set up centres of excellence on the emerging technologies in multiple areas. These areas include Artificial Intelligence, block chain, robotics, drones and data analytics to name a few.

"We have Electronic Manufacturing Cluster where hardware units can come and start their businesses. In that way, a lot of enablers have been put in place and incentives have been offered."

How are you planning to tap the new talent?

We have set up incubation centres in IT initiatives, Electronics System Design Manufacturing (ESDM) hardware and FAB Lab and Characterization Lab. FAB Lab is about digital fabrication, this FAB Lab consists of CAD, CAM, 3D modeling etc. We have access to 1600 FAB Labs across the world with which we are connected for knowledge exchange. The idea is, if you have a chip design centre here, you won't need to go out of Odisha to develop it as a patentable idea by incubating it in these hardware incubation labs. We have similar incubation labs in the software as well.

While the state is taking so many IT initiatives, are you also encouraging the IT organisations and start-ups to work with the state?

We are following the best practices of the IT/ITeS and ESDM companies. We are giving a lot of incentives to both IT and electronic companies to encourage them to invest in Odisha. We have Electronic Manufacturing Cluster where hardware units can come and start their businesses. In that way, a lot of enablers have been put in place and incentives have been offered. The basic idea is that, we need to create an enabling environment for ease of doing business that will give competitive advantage over other states.

What were the challenges that you faced while implementing these initiatives and how did you cope with them?

The biggest challenge in working for the Government is that you don't have a choice to select a team. E-governance is such an area where you have to get other users on board. This is an even bigger challenge according to me to get them on the same page on the policies and initiatives and how it would improve the entire governance. More than technology, human resource or change management is extremely important. The success of the project depends on how much ownership the team takes.

What are your plans and visions for the coming years?

We welcome more companies to come on board and invest in Odisha. We have a very robust ICT Policy which gives sufficient incentives and we welcome investors in both hardware and software sectors. Being a Tier-II city, the attrition rate is much lower; hence it is an advantage for companies to start their operations here. I believe that in the coming years, there will be more activities in the ICT space. ICT infrastructure is coming up in a big way with Data Centres, security systems like the SOC, NOC, etc., which would ensure better reach and engagement with the citizens.

Ajoy Singh
Secretary, Urban Development,
Government of Jharkhand

Jharkhand Making Headway Towards Urban Transformation

In order to achieve urban transformation, the state has proactively planned for meeting the requirements of rapidly transforming urban areas by putting in place the requisite institutional structures as well as municipal infrastructure to efficiently deliver basic civic services, says **Ajoy Singh**, Secretary, Urban Development, Government of Jharkhand, in conversation with **Gopi Krishna Arora** of **Elets News Network (ENN).**

What steps have been initiated to ensure urban transformation in the state of Jharkhand?

Urbanisation in Jharkhand picked pace since it became a separate state (15 November, 2000) owing to migration and associated economic activities that increased in urban areas. Municipal elections were held in Jharkhand in 2008 after a long gap of 22 years.

The Government of Jharkhand has implemented a number of reforms at the state and the Urban Local Body (ULB) level with regards to devolution of powers to ULBs under 74th CAA, rent control, public disclosure law and revision of building bye-laws for streamlining approval process and making provisions for rainwater harvesting and reuse of recycled water and more. The Government of Jharkhand enacted the Jharkhand Municipal Act–2011 to ensure proper devolution of funds. Most of the ULBs now have elected local governments.

Further, the state has implemented reforms for stamp duty rationalisation. Following the provisions of 73rd Constitutional Amendment and the 74th Constitutional Amendment Act of 1992, the state government has constituted the State Finance Commission (SFC) for recommending devolution of resources to local governments. It has also established District Planning Committees (DPCs).

Challenges notwithstanding, the state offers several opportunities for development owing to the presence of big industrial houses, supportive government policies, reputed educational institutions, and most importantly, presence of skilled manpower.

The state receives support from several centrally sponsored schemes which aim to alleviate challenges in urban areas, especially in areas related to urban transport management, drinking water supply, sewerage and drainage, solid waste management and provision of civic amenities. Furthermore, the government is also keen on exploring public-private partnership (PPP) models for urban projects and has taken several institutional measures for improving capacity and infrastructure of ULBs.

"Challenges notwithstanding, the state offers several opportunities for development owing to the presence of big industrial houses, supportive government policies, reputed educational institutions, and most importantly, presence of skilled manpower."

In order to achieve urban transformation , the state has proactively planned for meeting the requirements of rapidly transforming urban areas by putting in place the requisite institutional structures as well as municipal infrastructure to efficiently deliver basic civic services to all citizens, especially the urban poor, through effective governance.

Realising the importance of water and sanitation projects, the Department of Urban Development and Housing seeks to achieve 100 percent coverage. At present, around 16 urban water supply schemes are under execution and similar efforts are being put towards sewer and drainage.

Jharkhand is part of the ambitious "Namami Gange" project and out of the two towns of Jharkhand, the sewerage treatment plant

at Sahebganj is on the verge of completion.

Under Atal Mission for Rejuvenation and Urban Transformation (AMRUT); execution of water supply schemes, sanitation and parks schemes are under progress in seven cities of Jharkhand. The state has already made considerable headway in its commitment to provide affordable housing for the urban poor and Jharkhand Affordable Urban Housing Policy has been made effective from April 2016.

The local bodies in Jharkhand continue to be heavily dependent on the grants and fiscal transfers from the higher tiers of the government. On an average, revenue generation from own sources amounted to just 10 percent of the total revenue of the local bodies in 2012-13 with a major fraction of revenue coming from inter-governmental transfers including assigned revenues, grants, loan and other fiscal transfers. This has constrained the ability of the local bodies in the state to mobilise sufficient resources to meet the demand for investments in urban infrastructure as well as operation and maintenance of existing assets.

The state government has recently taken steps to improve financial management in the local bodies through the introduction of accrual-based double entry system of accounting by notifying the Jharkhand Municipal Accounts Manual and by pumping investments for infrastructure building and institutional development for the local bodies.

The state has endeavoured to improve institutional capacity through creation of state-level institutions such as the Jharkhand Urban Infrastructure Development Company (JUIDCO), State Urban Development Authority (SUDA), Town and Country Planning Organisation (TCPO) and Jharkhand Urban Planning Management Institute (JUPMI).

"As many as 36 projects to the tune of about 3,000 crores are under the ambit of smart city mission in Ranchi out of which 27 projects to the tune of 2,700 crores are in full fledged implementation currently."

Further, to improve public transport a company named Jharkhand Urban Transport Corporation Limited (JUTCOL) has been formed. As Ranchi has also been identified as Smart City, a company Ranchi Smart City Corporation Limited has been formed.

At the ULB level, the reforms relating to implementation of e-procurement system as well as other e-governance measures such as computerisation of birth and death certificates, property tax collection are under implementation in many ULBs.

The migration to Double Entry Accounting System is a major reform initiative which has been implemented in all the ULBs. Other reforms relating to property tax and user charge billing and collection are underway. The reforms relating to pro-poor budget earmarking and provision for basic services to urban poor are in advanced stage of implementation.

The Government of India's flagship 'Smart City Mission' is changing the game of Urban Development in the country. What is the progress of cities in your state? Also shed light on the progress of Swachh Bharat programme in Jharkhand.

Ranchi, the state capital of Jharkhand, is the only city that figures among the 100 smart cities listed in the Smart City Mission of Government of India. The city is greenfield and ranks 5th with regards to progress among smart cities.

As many as 36 projects to the tune of

about Rs 3,000 crores are under the ambit of smart city mission in Ranchi out of which 27 projects to the tune of Rs 2,700 crores are in full-fledged implementation currently.

Initiatives taken up in Swachh Bharat Mission:

Jharkhand was declared Open Defecation Free (ODF) on October 2, 2017. In addition to this, 29 ULBs have been declared ODF+ and 1 ULB has been declared ODF++. In the Swachh Survekshan results of 2019, Jharkhand managed to bag nine awards. Apart from bagging the No. 2 Best Performing State, 8 ULBs have bagged award in various categories such as Cleanest City in Zone, Best Citizen Feedback, Best Innovation and Best Practices, etc.

- **Sanitation Committee:** Ward Sanitation Committees formed in all ULBs for proper planning and implementation of sanitation at ward-level.
- **Integration with other Schemes:** State has done an innovation; thereof sanctioning community toilets consisting of 4,050 seats from 14th FC (with a unit cost of 2.5 akhs per seat)
- **Self-sustainable Community Toilets Model:** A self-sustainable model consisting of skill training centre, shops and community toilet has been designed and developed by the State Government for all ULBs.
- **Google mapping of Community/ Public Toilets:** All Community Toilets/ Public Toilets are mapped in Google for easy accessibility of citizens.
- **Grievance Redressal:** We have a public grievance management system. Toll for Grievance Redressal "Swachhata App" developed by Mnistry of Housing and Urban Affairs (MoHUA) implemented successfully in all ULBs. Till date 1,33,947 citizens are registered in Swachhata App and 3,01,773 complaints are resolved under SLA (Service Level Agreement) out of 3,54,817 complaints.
- **Citizen Feedback Devices in Community/ Public Toilets:** ICT-based feedback polling station for gathering public feedback on public and community toilets installation in all major cities.
- **Smart Bins:** One reverse vending machines to process solid PET and aluminum/steel waste installed in Ranchi as a pilot.
- **Vehicle Tracking System:** All Soild Waste Management vehicles are under Vehicle Tracking System for proper monitoring installed in (534) of all ULBs.
- **Swachh Competitions:** Various competitions like Swachh Hotel, Swachh Dharmik Parishar, Swachh Hospital, Swachh RWA/Muhalla, Swachh Super Market/Market/ Hat, Swachh School are organised to promote competition in sanitation.
- **Jharkhand Shahri Swachhata Purskar:** Jharkhand Shahri Swachhata Purskar is announced for ULBs to create awareness and competition among stall sanitation sector.
- **Sanitation Book:** Book on Sanitation for class 1 to 5 are prepared for sanitation awareness among children.
- **Success Stories:** Coffee Table Book prepared on success stories of IHHL beneficiaries.

"In the Swachh Survekshan results of 2019, Jharkhand managed to bag nine awards. Apart from bagging the No. 2 Best Performing State, 8 ULBs have bagged award in various categories such as Cleanest City in Zone, Best Citizen Feedback, Best Innovation and Best Practices, etc."

How do you view the importance of technology for building futuristic cities?

One of the most important aspects of technology in building futuristic cities is to have better control on tracking the assets on real-time basis. The government invests on building the infrastructure which on a longer run needs to be operated and maintained. Having the right technology eases out the maintenance and also leads to better revenue augmentation and generation.

The concept of futuristic sustainable cities can be achieved by the effective use of information and communication technologies (ICTs) tools, which have the ability to provide eco-friendly and economically viable solutions for cities. Potential advancements could be made, among others, through efficient water management based on real-time information exchange, public transport systems organised through information from satellites, air quality, and electromagnetic field monitoring.

In addition to the infrastructure, use of technology will help in strengthening the institutional capacity.

What are the challenges in implementing technology for building effective urban infrastructure?

The Governments around the globe are partnering with technology firms to make cities "smarter" by retrofitting various city objects with technological features. While this might make our cities safer and potentially more user-friendly, it has been seen that though technology is helping cities become smarter but it also might have implication on the environment.

Technology can be used to gather real-time data and analyse the information to improve the quality of life, however, these systems may be costly and complicated to install and maintain. Also, sufficient capacity needs to be built for operation and maintenance of these technologies so that dependency on vendors may be minimised.

Successful implementation of technology solutions needs effective horizontal and vertical coordination between institutions providing various municipal amenities as well as effective coordination between the central, state government and local government agencies on various issues related to financing and sharing of best practices and service delivery processes.

Another major challenge is that software infrastructure in cities usually contains components supplied by different vendors. Hence, the ability to handle complex combinations of technology solutions developed by multiple technology vendors becomes very significant.

Last but not the least, educating and engaging the citizens to use and take advantage of the new technologies is a very resource intensive process to ensure sustainability of the usage.

What are your plans to ensure urban transformation in Jharkhand?

Ensuring timely and effective provision of basic services (e.g. water suppy, sewerage, urban transport etc.) to all households and building amenities in cities which will improve the quality of life for one and all alike while prioritising equity in access for the poor and disadvantaged population.

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Palka Sahni
Executive Director (IPDS)
Power Finance Corporation Limited

Leveraging Technology, Empowering DISCOMs The IPDS Story

As a 2004-batch IAS officer of the Bihar cadre, she gained an in-depth experience in the power sector while serving as Managing Director of Transmission as well as Distribution companies of Bihar. She also handled flagship programme of Government of India such as Make in India and Ease of Doing Business, and was a part of the team which saw India break into the Top 100 in World Bank's Ease of Doing Business ranking.

Presently, she is spearheading the Integrated Power Development Scheme (IPDS) programme of the Government of India to strengthen urban power distribution sector.

Saying IT enablement of Distribution Companies (DISCOMs), achieved under Integrated Power Development Scheme (IPDS, or the erstwhile RAPDRP), has also eased life of common man, Palka Sahni, who is presently the Executive Director, IPDS, Power Finance Corporation Limited, in an exclusive interview with Souvik Goswami of Elets News Network (ENN), shared this and much more.

"Discoms are trying to adopt the latest technology. However, very often the same doesn't go beyond the pilot projects either due to fund constraints or resistance to change within the ecosystem."

Give us an overview of Power Finance Corporation Limited (PFC).

The Power Finance Corporation (PFC) is one of the leading NBFCs in the Infrastructure sector, having loan assets worth around Rs 3 Lakh crore. The company has achieved excellent MoU ratings continuously for past several years.

We are a Navratna PSU under the Ministry of Power and along with financing to power sector we are engaged with the ministry in implementation of various key initiatives of the Government of India like IPDS, UMPPs (ultra mega power projects), etc.

How is IPDS helping country's energy sector and what sort of role is being played by the PFC?

PFCL is the nodal agency for implementation of IPDS. As a nodal agency, we are responsible for overall implementation of the scheme across the country. The scheme envisages

strengthening of distribution infrastructure in more than 3,600 towns in 32 States & Union Territories (of the total 36).
IPDS has a key role to play in removing of bottlenecks in power supply due to capacity constraints of distribution networks. Under this scheme more than 1050 new 33/11KV Substations, augmentation of 1,600 exiting substation, around 1,20,000 Km HT & LT lines and 60,000 distribution transformers are being installed. All the projects are in advance stage of implementation. So far more than 55% progress has been achieved.

The total outlay of the scheme is Rs 32,000 crore, wherein as high as 75% grant is provided by Government of India, which is around 90% in case of North Eastern Region (NER) and hilly states.

How technology and innovation can be used more and more to bring transformation in the DISCOM ecosystem?

Discoms are trying to adopt the latest technology. However, very often the same doesn't go beyond the pilot projects either due to fund constraints or resistance to change within the ecosystem.

Under IPDS, we are supporting Discoms to take up large scale technology-driven projects like funding for 41 lakhs Smart meters, 150 nos. GIS substations including e-containerised substations have been sanctioned. We are also ensuring IT enablement of around 1,900 towns, in addition to the 1,400 towns already covered under RAPDRP (Restructured Accelerated Power Development and Reforms Programme). Further, to improve upon the business process of the Discoms ERP projects worth Rs 800 crores have been sanctioned to as many as 39 Discoms.

"Under IPDS we are supporting Discoms to take up large scale technology-driven projects like funding for 41 lakhs Smart meters, 150 nos. GIS substations including e-containerised substations have been sanctioned. We are also ensuring IT enablement of around 1,900 towns, in addition to the 1,400 towns already covered under RAPDRP."

SCADA projects were also sanctioned in 59 large towns across the States. We are pleased to share that 43 of them are fully functional as on date and States like Maharashtra are moving towards unmanning of substations in SCADA towns.

How do you see IPDS is impacting the lives of end consumers and viability of Discoms?

With such a massive thrust on strengthening of distribution infrastructure, it is expected that availability and quality of power on the last-mile would improve in the urban areas and the same time AT&C (Aggregate Technical & Commercial) loss reduction would also be achieved with interventions like AB cabling, consumer metering etc.

Further, IT enablement of discoms achieved under IPDS (erstwhile RAPDRP) has also eased the life of a common man. For example, as high as 22% consumers are now paying their bills through digital modes. So far, 44 centralised Customer Care Centers have been established under IPDS, thus, release of new service connections and registering of complaints have become very simple and effective. Also a common toll free number for electricity complaints "1912" has been implemented in the entire country.

S Suresh Kumar
Joint Secretary and Additional CEO,
Government e-Market Place (GeM),
Ministry of Commerce and Industry,
Government of India

Procurement Made Easy

GeM a Game Changer

GeM is an open, inclusive portal for vendors, both big and small, providing them equal opportunity to participate in the government procurement system. Lot of data integration has been leveraged in GeM to ensure easy registration of vendors, says **S Suresh Kumar**, Joint Secretary and Additional CEO, Government e-Market Place (GeM), Ministry of Commerce and Industry, Government of India, in conversation with **Souvik Goswami** of **Elets News Network (ENN)**.

"More than 34,750 buyer organisations, 2,20,000 sellers offering 9,00,000 products. Till March 2019, transactions worth Rs 23,700 cr done through GeM portal amounting to more than Rs 1.7 million order."

Please share with us the journey of Government e-Market Place (GeM) since its inception.

The Government e-Market Place (GeM) is the national procurement portal, launched with the aim to transform the entire public procurement system by using digital technology. For the past several decades, public procurement was done mostly manually and through the Directorate General of Supplies and Disposals (DGS&D). Some innovations did take place in the last decade like e-Tender, but the advent of e-Commerce in the last five-six years proved to be a game changer. Realising the need to transform the existing procurement system, which had some inherent problems, the Government of India launched the

pilot project of Government e-Market Place (GeM) in August 2016. After the success of pilot project it was decided to establish a paperless, cashless and contactless system by using innovative technologies. This led to the development of an end-to-end technology-driven public procurement platform that does not require any manual intervention. This ensures transparent, open and inlusive procurement, leading to huge savings to government. Government e-Market Place (GeM) is now the one-stop online procurement portal for all government buyers including central/state ministries, departments, bodies and Public Sector Undertakings (PSUs). In 2017, the Government of India created an organisation called Government e-Market Place (GeM) headed by a CEO. We have the flexibility to hire domain experts from industry as well as officers from various government departments to ensure smooth operations.

How GeM is changing the game of public procurement in the country?

In the last two years, we have introduced various innovations and technological advancements in the public procurement space. It is not just upgrading an existing system with few digitisation initiatives, but a transformative digital innovation based on market place. Some countries like Singapore and Chile have GeM like set ups. But the biggest differentiator for India's GeM system is that it is a market-based procurement system and this has happened because of the e-Commerce boom in the last five-six years. The government also incorporated a new rule to the General Financial Rules (GFR) to ensure that all the Government of India ministries do their procurements mandatorily through GeM portal, while it is not mandatory for PSUs or State Government departments.

One of the biggest successes of this platform has been that out of 35 States and Union Territories, 28 have signed MoUs with GeM realising the potential benefits it can offer.

It simplifies the entire procurement process and brings in transparency. All information in GeM is available on the portal for the use of any buyer based in any part of the country.

How is GeM helping the vendors?

Vendors face mainly two issues – marketing cost to reach out to the potential buyers and the issues related to payments. That is why a large number of quality vendors are reluctant to do business with government agencies. GeM is an open, inclusive portal for vendors, both big and small, providing them equal, fair opportunity to

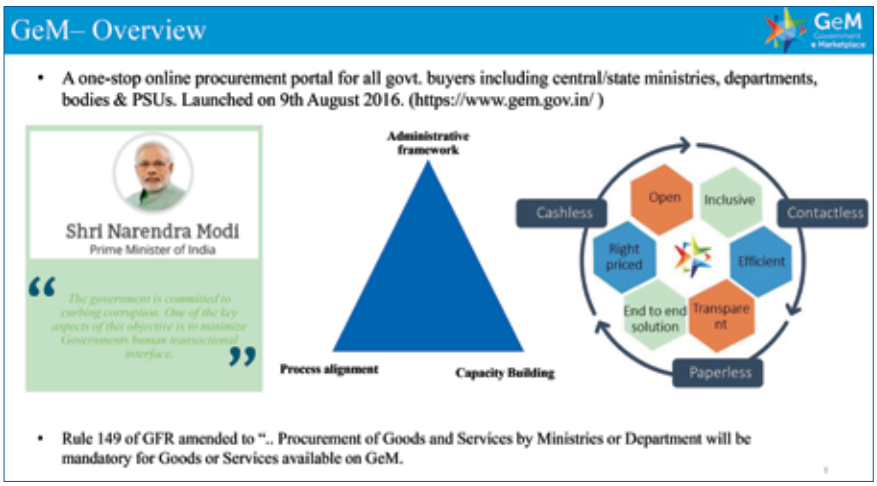
participate in the government procurement system. Lot of data integration has been leveraged in GeM to ensure easy registration of vendors – Aadhaar, GSTN, IT database are integrated with GeM and it takes less than 30 minutes for a vendor to get registered on GeM portal. Once a vendor is registered, all the buyers can see vendor information on the portal which further simplifies the procurement process. Vendor assesment and rating gives further confidence to buyers about the credibility of vendors.

GeM also ensures timely payment to vendors as it is mandatory within 20 days of delivery, a buyer has to make the payment to the vendor. Average payment time is 21 days in GeM. This is a big game changer for vendors.

Integration of data, analytics, etc. is necessary for the smooth functioning of GeM portal. Would you shed some light on it?

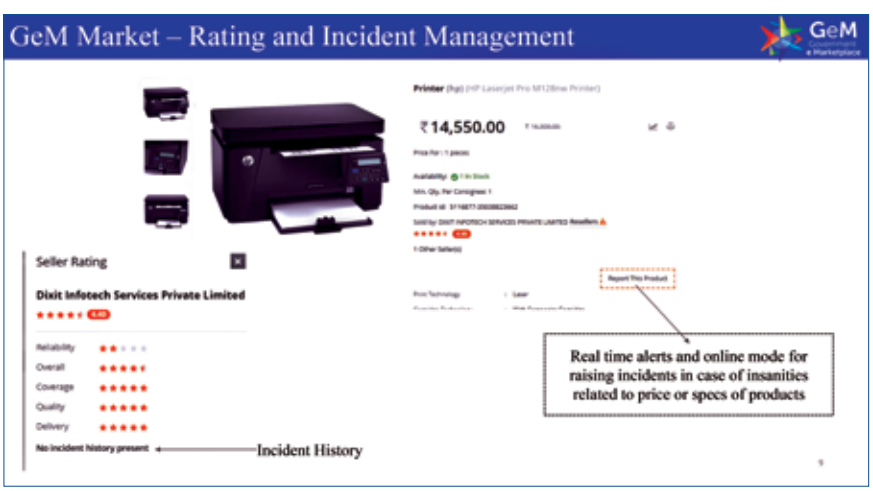
We have to ensure confidentiality, safety and security of data in the government procurement mechanism. To ensure this, GeM has taken every possible precaution and comply with all government guidelines.

The Government of India has launched the ambitious 'Startup India' programme to encourage startups and innovators. How can they be benefitted through GeM?



As part of GeM's inclusive mandate, there are specific sectors like startups, women entrepreneurs, MSMEs, who need handholding, capacity building and facilitation. With this objective in mind, we have recently launched an initiative – Startup Women & Youth Advancement (SWAYATT) – through e-Transactions. Each of these segments has got its own challenges that need to be overcome.

For example, startups face a major problem of establishing their products along with pricing and these are sensitive issues for government agencies. To tackle this, we have started a POC corner for the startups. The Department of Industrial Policy & Promotion (DIPP)-registered startups can offer their products on the GeM portal on trial basis free of cost. After using it for few months, buyer can give his feedback. If at least three government buyers give positive feedback about that particular product, then GeM portal allows that startup to offer its products on commercial basis. Already more than 1,500 startups are registered on GeM portal. Similarly, various initiatives have been undertaken by us to facilitate women entrepreneurs and MSMEs.



What are the major achievements of GeM?

GeM has created a large market ecosystem in a short time. It has more than 34,750 buyer organisations, 2,20,000 sellers offering 9,00,000 products. Till March 2019, transactions worth Rs 23,700 cr done through GeM portal amounting to more than Rs 1.7 million order. This has resulted in a saving of 31 percent for the Government. This is quite a remarkable achievement of GeM. One big challenge is changing the mindset of people to use new technology. We are hopeful that all government departments, including PSUs will completely shift to GeM for all their procurement.

ENSURING NO VOTER is Left Behind

SELVA KUMARI J
District Magistrate,
Collector and District
Election Officer, Firozabad

"Digital volunteers have been formed and a separate WhatsApp group has been set up by the police for regularly checking objectionable material circulating in social media."

As many as two lakh voters in Firozabad are eligible to exercise their voting right for the first time. To attract the youth, a number of initiatives like debates, speech competitions, Nukkad Nataks, painting competitions, etc. were organised to highlight the various issues related to elections, says **Selva Kumari J**, District Magistrate, Collector and District Election Officer, Firozabad, in conversation with **Arpit Gupta** of **Elets News Network (ENN)**.

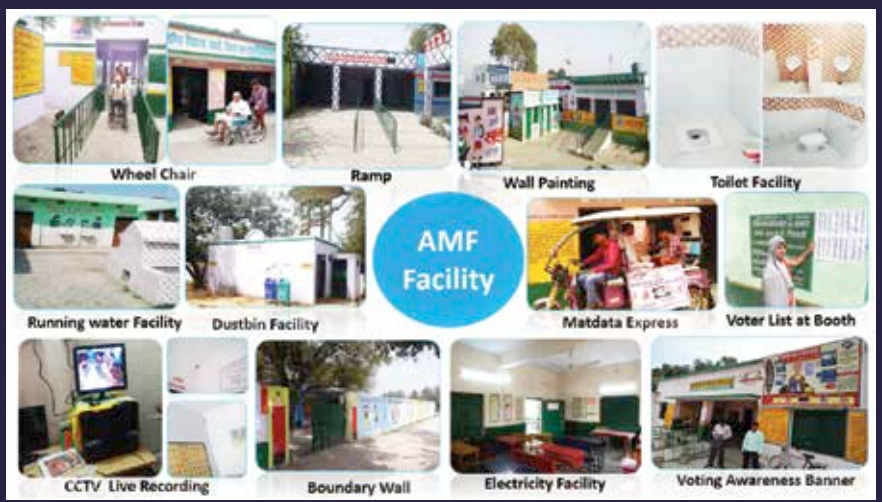
With the Lok Sabha Elections approaching what initiatives have been planned by you to encourage young voters who will be voting for the first time to come to polling booths?

When it comes to attracting youth towards elections, a different strategy is needed. Special approach is needed to educate them, register them and also bring them out to vote on the election day. About 2-3 % of our voters are in the age group of 18-19. A massive drive was taken up after I joined in Firozabad in February, and more than 40,000 young voters have been added to the voting list.Our 'Youth to Booth' initiative started in March 2019 includes a lot of SVEEP programmes, but also a massive campaign to register them as voters. All Colleges, Universities were targetted and through 'campus ambassadors' , we were able to register a number of voters. As many as 2 lakh voters in Firozabad will be exercising their voting rights for the first time. To attract the youth, a number of debates, speech competitions, Nukkad Nataks, painting competitions etc were organized for creating a conducive environment to discuss about Elections. Our officers were present in different institutions, villages and city areas to encourage youth to have healthy and positive discussions on importance of Elections and Voting. Focussed discussion on Topics such as future career choices, employment opportunities, safe neighborhood, environment, how the politicians can deliver better had been included. We have included NGOs and prominent media to organise and motivate 'youth to booth'. Social media platforms have been used to create awareness and educate youth on functioning of EVMs and VVPATS, how to register as a voter, how to vote, what are the facilities that a PWD voter can expect in a booth and ethical voting. Encouraging youth to participate in the biggest festival of democracy has been a challenging task. But SVEEP programs like 'Find my Booth', Mehndi competitions, Youth festivals like 'Matdata Mahotsav', Bike rallies and other rallies have increased youth participation with civil societies. Our own SVEEP Logo 'KAANCHI" of the Glass City, Firozabad, has been made in the image of Women of Firozabad who form the backbone of the glass industry. This was mainly done with the idea that if a woman of the house turns up for voting then all the members of the household will turn up for voting. Electoral literacy clubs, Chunav Pathshalas especially in urban areas and low turn out areas are educating parents and youth about the significance of single vote and also clear doubts related to voting and elections. 'Mock Elections' have been conducted in many villages so as to educate the public at large about voting process.

How do you plan to empower common man to report breach of Model Code of Conduct? What are the steps in the offing to stop the spread of fake news?

Election Commission of India

has come up with a number of applications to facilitate the common voter. The NVSP portal is a single window portal which helps Voters in registering process in electoral roll and also get details about their booth, constituency, BLO, Election Officials etc. National Grievances Services provides a single window common interface to citizens for submitting their complaints and getting proper redressal of all their complaints. ETBPS Developed by ECI helps Service voters to cast their vote in using electronically received Ballot papers while serving outside their constituency. One major way by which a citizen can report a MCC violation is cVIGIL - an online app denoting the vigilant citizen who can play a proactive role in checking MCC violations and helping District administration to conduct a free and fair elections. For identifying and taking action on Fake news and paid news, Media Certification and Monitoring Committee is formed which includes information department officers, Media experts and social media expert headed by District Magistrate. Digital Volunteers have been formed and separate WhatsApp group has been formed for regular checks on objectionable material circulating in social media.



What are the present challenges that you face during elections? How can emerging technologies be used to overcome them?

Every Election is unique in its own way and there is always an attempt by DEO to improve every election based on his/her past experiences. In District Firozabad we have tagged about 22434 PWD voters in our database. Special facilities like wheel chairs, Ramps, proper access roads, 'Matdata Express" for facilitating accessible elections. Through Voter Awareness forums about 20314 Postal Ballots including EDC will be done by Government servants, first time that such large number of votes will be cast by Government servants in Firozabad.

Our attempts to make every booth Hitech Booth by putting CCTV cameras in every booth to impart transparency and fairness during the election process. This initiative is also the first time that any district has done in Uttar Pradesh, probably in India. Moreover we have designed ' iDEAA ' application. It is an INTEGRATED DISTRICT ELECTION ADMINISTRATION APPLICATION. It is the ultimate tool for DEO to manage Election Machinery effectively real time on Poll day. It also includes Pre-poll monitoring, Post-poll monitoring activities.

- Real Time Tracking of EVMs and VVPAT
- Real time Poll day monitoring of Sector, Zonal, Police, CPF mobile etc
- Real Time Poll Day Management with dashboards, alerts and real time broadcast messages.
- Monitoring Election Expenditure of candidates, MCC enforcement teams tracking and reports
- Dashboards, Reports, Alerts before and during, post Elections for different users
- Real time live feeds – photos and live feed of CCTVs from every booth

This application will help in optimal utilization of Election resources especially manpower on the Poll day at the same time imparting transparency and accountability in the entire process.

(Spl. Note: The interview was conducted before the Lok Sabha Elections-2019.)

Banda on Way to Create History in Lok Sabha Elections-2019

Taking a cue from more than 90 percent voter turnout in two gram panchayats of Banda district in the 2015 Panchayat elections, District Magistrate Heera Lal has embarked on a mission to create history by repeating the previous success in the Lok Sabha Elections-2019, finds out Arpit Gupta of Elets News Network (ENN).

In every election, district magistrate scramble to record high voter turnout but Banda's District Magistrate Heera Lal has this year pushed the target to a seemingly unimaginable level, reaching which won't be an easy task for other DMs. He has taken it upon himself to achieve more than 90 percent voter turnout in the district and has devised a unique strategy that includes many attractive features to help him reach this goal.

How did the Banda DM Come Up With This Idea?

The Banda district magistrate says that he analysed the voting trends of various elections in Banda and was quite taken aback when he found that in the last Panchayat elections, Kolaval Raipur panchayat witnessed 91.80 percent voting and Shahpatan panchayat in Naraina Block saw 90.70 percent voting, compared to 52.69 percent voting on four parliamentary seats in Banda in the 2014 Lok Sabha elections and 60 percent in the Vidhan Sabha polls in 2017.

This led him thinking that when two panchayats can witness more than 90 percent voting then why not all panchayats can achieve this feat. Keeping this in mind, he started the '90 Plus' mission for the upcoming Lok Sabha elections.

The Booth God

The solutions offered by Lal are interesting ones. To increase the voting percentage, BLO can make a significant contribution. In this view, he named each BLO as a 'Booth God' and left no stone unturned to inspire every voter to come out to vote. He entrusted every officer and important government official in the district with the responsibility to take care of their respective voting booths.

Connecting with Masses

District Magistrate Heera Lal's mind is a treasure trove of ideas and his communication skills are so powerful that he leaves people spellbound, making his task of motivating them an easy one.

'90 Percent' Banners Overwhelm Banda's Public Spaces

In Banda, banners with a message in Hindi that roughly translates to: '90% Voting to Make Banda Pride of India' can be seen everywhere. Further, the message printed on thousands of leaflets has been distributed across the district. 'Voting Motivators' have been given a white cap and uniform, which has been adorned by the DM himself. This has inspired his thousands of followers in the district to adopt the white attire, which has taken the shape of a revolution of sorts.

All tehsils of the district organised extensive voters' awareness programmes from March 8-11. Heera Lal, the only district magistrate in the country who has resolved to achieve the target of 90 percent voting in the 2019 parliamentary elections, has left no stone unturned to achieve his goal.

This unique initiative was definitely a break away from the tradition.

Steps taken in Banda to Reach the '90 Plus' Voting Target

Cultural Programmes

Cultural programmes have been developed as a medium to communicate with common people and voters. Local artistes have been roped in to give performance in order to create awareness about voting at as many as 471 villages in a planned manner. These artistes are creating awareness among people on the request of the district magistrate.

Brand Ambassadors

The district magistrate has selected three brilliant girls -- Kr Shivani, Kr Anjali Verma and Kr Vijayeta -- as brand ambassadors. These three brand ambassadors are creating awareness about the polls through cultural activities of their own.

Booth Ambassadors

Booth ambassadors have been appointed for all 1,454 booths in the district. This responsibility has been given to first time voters and other vigilant people in villages. These people will encourage local voters and convince those who reside outside the district to come back home on the polling day to cast their vote.

Internship

Students from educational institutions like ITI, Polytechnic, KCNIT, and Government Engineering College have been given the responsibility of one booth each as part of their internship programme. Students will collect voters list of their chosen booth from BLO and connect with each voter to encourage them for voting. After the polls will get over, the district magistrate will award these students internship certificates.

20,000 letters written by DM

The district magistrate has been writing letters to government officials and vigilant citizens on attractive letter pads. In the 20,000 letters he has written so far, he has been presenting an analysis of facts and figures from the past elections to encourage voters in an impactful way. According to Lal, there have been precedents of more than 90 percent voting recorded in the district.

Transport Facility

Voters have been allowed to take their two-wheelers and four-wheelers to the voting booth, which was not the case earlier. This will facilitate voters to reach their polling booths easily, which will prove to be an effective move as patients and infirm will also be able to cast their vote.

Voting Fair

All the 843 voting centres will be designed as voting fairs. Every tent put up at the fair will be able to accommodate 100 people. The voting centre will have seating and refreshment facilities. Voter would be allowed inside the voting booth one at a time so that they do not have to wait in long queues. Moreover, the voting officials deployed at the voting site would help and welcome the voters.

Other Initiatives

The district magistrate has taken more innovative initiatives like special facility for differently-abled, involving colleges as knowledge partners in the voting process, a war room to ensure smooth voting process, advisory committee, new methods of voting awareness campaign, best voting award, and standard operating procedure, among others.

WHEN PASSION MEETS THE DESIRE TO IMPACT LIVES

Hari Chandana Dasari
Zonal & Additional Commissioner, GHMC

From being an environmentalist by heart to a crusader who drove Hyderabad to emerge as the leader of recycling initiatives in India, **Hari Chandana Dasari**, Zonal & Additional Commissioner, GHMC has always been an inspiration for many. **Sudheer Goutham** of **Elets News Network (ENN)** in conversation with the iconic IAS officer tries to find out more about her multifaceted personality and career milestones.

What prompted you to take up a career as an Indian Administrative Service (IAS) officer after giving up a high-paying job in a London-based global firm?

IAS was a kind of career diversion for me after a life-changing experience. After completing my studies from London School of Economics, I started working with global firms like World Bank and then BP Shell in London. Once when I came back home on a vacation, I happened to interact with an old man who came to meet my father, a former IAS officer. While offering him water, I

asked him the purpose of his visit. The old farmer was one of the beneficiaries of the land distribution that my father took up when he was the joint collector in Medak district (United Andhra Pradesh). Even after 20 years, he still remembered my father and came to convey his regards. The land parcel they received brought them good fortunes as the land price went up. His family and children are still surviving on that.

This chance meeting triggered me to choose IAS as a profession, which has much wider public reach than any other work profiles. In private sector, I would develop specialisation but the impact and public reach is limited. In World Bank again I was working with IAS officers. Bureaucracy and politics are the only two professions through which a larger impact can be brought for betterment of people. While the latter was not my cup of tea, I chose to take up IAS.

Your father is a former IAS officer. As a child when you were growing up watching your father functioning as a bureaucrat, what was your experience and impression?

Yes, my father D. Srinivas is an ex-IAS officer of 1987 batch with the then United Andhra Pradesh state government. Initially, we felt this job (IAS) was more stressful as my father could barely give time to the family due to his work. My brother and I grew up under the influence of our mother. She was the one who used to take major decisions of our life like education, among others. That is when I decided to get into a job which shouldn't take away the family time. Later, I realised the kind of impact this job can have on people's life and betterment of society. Even smaller decisions that my father took in his tenure as a bureaucrat have had great impact on people's life. Even after decades, people still remember

Hari Chandana practices what she preaches. She shares that her household has not contributed any form of wet waste to garbage dump in last three years, as 100 percent of it is routed for composting. She has installed a compact biogas unit at her place.

"As the sub-collector of Vijayawada, we took up the first ever Land-Pooling Scheme of India which happened to be a big success. It was a satisfying experience as it gave decent housing to the poor and development rights to the land owners who contributed in the pooling."

him and hold high regard for him. Incidentally, when I visited Adilabad to meet tribal communities during my training period, people would remember my father and his work. That is the kind of impact a civil servant can make on people's life. Then I realised that this job is worth it even to sacrifice a part of our family life and continue to live in a glass bowl.

In the beginning you had a different outlook on this service as it would take away the family time. Now, being in the service how do you manage to achieve work-life balance?

The character of service has changed now. Even the public's demand on your time has come down. This change can also be credited to the competency of private sector and technology which has eased the load on bureaucrats, which is good. Presently it's not that stressful.

Can you tell us the positions you have held before working with Greater Hyderabad Municipal Corporation?

I was sub-collector of Vijayawada district (united Andhra Pradesh) for about 2.5 years. This is my second posting and I have been with GHMC for about five years now. I covered almost 75 percent of the ground in Hyderabad working in the North Zone, Central Zone and now West Zones of GHMC.

Apprise us about some of your works so far that give you a sense of pride and immense satisfaction.

I would say there were several works performed by me which gave me immense satisfaction. As the sub-collector of Vijayawada, we took up the first ever Land-Pooling Scheme of India which happened to be a big success. It was a satisfying experience as it

Mir Alam Lake Park developed by GHMC

"Even smaller decisions that my father took in his tenure as a bureaucrat have had great impact on people's life. Even after decades, people still remember him and hold high regard for him. Incidentally, when I visited Adilabad to meet tribal communities during my training period, people would remember my father and his work."

gave decent housing to the poor and development rights to the land owners who contributed in the pooling.

Another initiative that gave satisfaction was implementing tax on sand mining which curtailed illegal mining to a large extent. Further, my first project in GHMC, which was building the IDH Colony in Secunderabad, was the first such project (double bed-room housing for the poor) in the state of Telangana. It was another immensely satisfying job I did.

In the corporation, I took up several recycling initiatives as I was concerned about the sustainability of the city. Most of the works we do now involves recycling aspects in it. Now, Hyderabad is the leader in recycling. We use recycled plastics in laying roads and prepare tiles in use them for laying footpaths. Dustbins are being made out of recycled plastics. Now, we are promoting recycled housing and also put recycled toilets. With this we have used over 15,000 kg of waste which was supposed go to the landfill.

Coming to bigger project, given my job profile, we have created around five wonderful and innovative parks that are proving to be good community centres for the citizens. One of them is the first ever dog park in India. Others include Durgam Cheruvu Park (The Secret Lake Park) and Play Park in Kukatpally. We also created Panchatantra Park based on the themes of Panchatantra stories, which is exclusively for children, and Mir Alam Lake Park developed on Nizami or Dakhini theme. We are also coming up with another park for senior citizens.

Since you have dealt with cracking the illegal sand mining and other matters, have you faced any dangerous or scary incidents that made you think it is such a serious job?

Yes, there were some scary law and order situations I had to face. In the initial days of my career, sand mining was a big industry in the Vijayawada division as it was next to the Krishna River. I used to get complaints of sand mining in the nights and I had to go for sudden raids in the night and seize the heavy vehicles used for mining.

Initially it was like an adventure, but later I realised that how this illegal activity would seriously impact the eco-system of the river. The random raids and seizing of the vehicle were not going to work. We needed sand mining but at a sustainable level. That is when we started fixing the sealing and brought in the concept of tax payment for mining over and above the basic minimum quantity. That was how we could bring down the illegal sand mining significantly. I used to take along the police force with me as there were always dangerous elements. However, some officers did lose their lives while dealing with the illegal sand mining mafias.

Tell us about the incident when you almost got kidnapped by Naxals?

That was yet another experience. During my training as an IAS officer, I was deputed in Paderu village in Vishkapatnam as an assistant collector. I had to function as VRO as part of my training. I went there and

started working. One day, the local superintendent of police and his team came rushing to my office and asked me to leave with them immediately.

Initially, I was confused and somehow we managed to leave the place. Later, after reaching the district headquarters I was told that some naxal movement was reported in the place and they had planned to kidnap me. It was like a near miss for the naxals. Later, I went back to the area and spent one month of time working there and also stayed in the village. Incidentally, it was the same place where my father got kidnapped by naxalites along with an MLA for three days in early 90s. He was then serving as the project officer for Integrated Tribal Development Agency (ITDA). That incident made national news headlines back then. It was a stressful time for my family.

The first dog park of India in Hyderabad

Your husband also happens to be a bureaucrat. Please tell us how did you both meet and finally got married?

Yes, he is also a bureaucrat and is currently working with Central Tax Department. Our meeting, however, was not a very romantic one. We were like family friends and I have known him for a long time. Ours was an arranged marriage.

You are a working mother and a bureaucrat with demanding field-work profile. This job-profile usually involves high expectations from the citizens. How do you balance your personal and professional life?

It is very tough. Sometimes I get very busy and my day starts at 6 am. When its election period, I end up working till 12 am or post midnight mostly. The family needs to understand the nature of our job and adjust accordingly. Since my husband is also in service, he understands how demanding the job can be. It works in a balance system, where we both adjust accordingly and give time to our child. It is really tough.

The kind of work you are doing needs a lot of passion for it. What has been your driving force?

It's mainly the self satisfaction of creating an impact and bringing the change that keeps me driving to do better. I am passionate about sustainable and clean planet initiatives which I personally believe in. As for Hyderabad, I am born and brought up in this city and I have a desire to do something for the city. Fortunately, I got the opportunity to work in this post and I am doing my best.

What's the definition of innovation for you and how do you put it in practice in you day to day work?

Innovation, I would say, is the change for better. Sometimes it's a small change and sometimes it can be a big transformation. For instance, in GHMC we never thought of recycling products. Once we introduced it everybody got on it. Recycling is not a new concept but it can be an innovation in the city. As we go ahead with it, new things emerge. Earlier in GHMC, recycled material were used only in foot path tiles and laying roads. Now, we have taken it up in boards and cardboards kind of things that are used in building houses.

You worked in both private sector and now in government service. How has been the experience?

Before becoming as IAS officer, I worked with BP Shell and World Bank. World Bank is a think-tank and the work is more focused and research oriented. In BP Shell, the work was on bio-fuels and clean energy. In IAS, the work is more practical and involves crisis management where we go with the flow. Some of IAS profile can be more of planning and conceptualization, but we are more into action.

Any other passion or interest you have?

I am passionate about painting which I do during my free time. I also like travelling. I am happy even with short trip that gives time to relax. Travelling also gives exposure to different culture, people and their perspective, which is good to understand.

Any message you would to give the readers of eGov Magazine and Portal?

I would say keep an open mind rather than setting limits and stay highly positive. We need to keep thinking for better ways to do. That is how we grow as a person and also as a society for better.

RPSC – Breaking New Ground in e-Governance

Breaking new ground to help civil services aspirants easily locate their examination centres and figure out the best commuting alternatives available to reach the centre on time, the Rajasthan Public Service Commission (RPSC) has come up with an innovative solution, writes **Akhilesh Mittal,** Additional Director IT&C, Department of Information Technology & Communication, Government of Rajasthan, Additional Charge of RPSC & BSER Ajmer.

India is at an inflection point marked by technologies redefining the way we access government services and information; travel across our cities and beyond; locate destinations and interact with different social groups. The Government of Rajasthan has shown through its various initiatives a great will to transform the governance landscape in the state by assimilating technological advancements in its planning and implementation processes.

As part of its vision to use Information and Communication Technologies (ICT) for deeper citizen involvement, the Rajasthan Public Service Commission (RPSC) has come up with a number of citizen-centric initiatives that are not only convenient but also futuristic.

Centre Trace - GIS-based Exam Centre MAP

The objective of Centre Trace is to provide candidates the information regarding exam centres' allotment during Rajasthan Public Service Commission (RPSC) conducted exams.

Initially launched for candidates taking online exams, the project aims to

Akhilesh Mittal
Additional Director IT&C, Department of Information Technology & Communication, Government of Rajasthan, Additional Charge of RPSC & BSER Ajmer

provide a detailed map view of the examination centre along with its distance from the nearby bus stand or railway station.

Besides candidates, other users can also view the exam centre information and its location within a district.

the Rajasthan Public Service Commission now plans to extend this facility to candidates appearing for offline examinations as well. For this, necessary linking with Rajdharaa GIS platform of the State Government is undergoing for the required geo tagging of the RPSC examination centres.

Exam Centre Management System

Exam Centre Management is very crucial for conducting RPSC examinations in timely and effective manner. Every time RPSC conducts an exam, it needs to check the availability of examination centres along with their capacity to conduct the exam. Before generating roll numbers and admit cards of the candidates, the commission usually collects the information regarding availability of exam centres and their

capacity through district coordinators via email, which is a time consuming process.

RPSC also needs to process various payments/bills for conducting examinations along with ascertaining the manpower to be allotted for conducting exams, which at present is done manually through email.
To further expedite these processes, RPSC is developing an online portal to receive all the information online along with allotment/selection of examination centre for conducting the exam. The processing of various bills and payments and manpower deputation to conduct examination will also be integrated with the exam centre management system so that end-to-end solution could be deployed.

e-Library/Digital Library

RPSC has also undertaken innovative steps to provide e-Library/Digital Library. For this, the commission is coordinating with the National Digital Library, Lal Bahadur Shastri National Academy of Administration (LBSNAA), Mussoorie and other institutions to create a common digital platform to ensure availability of e-resources, newspapers (print), magazines (print and online) and journals to all including RPSC officers, experts, and various other officials who play an important role in the examination process.

Official portal and examination process to be more accessible for the differently-abled

Today, it is essential to have systems and processes that are accessible to differently-abled persons. RPSC plans to achieve this by making processes smooth, transparent and accessible as per their needs.

The commission believes that its web portals and examination process must be accessible to provide equal access and equal opportunity to people with different abilities. The Rights of Persons with Disabilities Act, 2016 also mentions easy accessibility of websites and content to such people. Therefore, RPSC is working on the following issues to be addressed:

- Alternative Text for Images
- Keyboard Inputs
- Transcripts for Audio
- Use of different elements on web pages for accessibility
- Elements for navigation of pages
- Accessible elements for form fields and select boxes
- Use of digital content for education
- Steps for making exam process smooth and accessible & Important recommendation for scribes.

SALIENT FEATURES

- The map is also printed on the back of admit cards of candidates.
- Candidates can view the location of the exam centre allotted to them on a map, which also contains information about its distance from the nearest boarding points (bus stands/ railway stations, etc).
- Anonymous users can also view examination centre details of a particular district.
- Administrator can view the logs of candidates who have traced their centres.
- Easy to add new centre or update existing ones.
- MIS reporting by administrators for various kinds of information to be extracted regarding candidate location/number of hits/interest toward centre trace application.

Ravi Ranjan
Mission Director, Jharkhand Skill Development Mission Society
Government of Jharkhand

'Need to Identify Opportunities Matching Aspirations of Youth'

The major challenge we are facing right now is the lack of aspirational quality infrastructure to take care of existing skill gap and fulfil the mandate given to JSDMS. There is an urgent need to establish a large number of quality training centres covering a wide spectrum of job roles, says **Ravi Ranjan**, Mission Director, Jharkhand Skill Development Mission Society, Government of Jharkhand, in an interview with **Gopi Krishna Arora** of **Elets News Network (ENN).**

Inauguration ceremony of the Global Skill Summit 2019 on 10 January in Ranchi, Jharkhand

How is Jharkhand Skill Development Mission Society (JSDMS) leveraging ICT to promote skill development and employment generation in the state? Please share with us some of the success stories.

Information and Communication Technology (ICT) is being treated as an enabler to ensure convergence of skilling efforts across the state. JSDMS has developed an in-house portal 'HUNAR' under which all the major state government departments implementing skill development programmes can manage their entire skill development value chain on the portal from registration of candidates, candidates' attendance, assessments, placements and post placements tracking.

The portal has dedicated user accounts for candidates, Tribal Sub Plans (TSPs), JSDMS and other departments to manage their activities on a single portal. Even employers can post their requirements and search CVs of the trainees for their purpose. The departments have already started using the portal and the migration from the previous portal has also been completed. The biggest testimony of our ICT efforts was all departments uploading their placements for the recently-concluded Global Skill Summit and more than one lakh offer letters being recorded.

Further, JSDMS has a dedicated call centre which is working across the skill value chain, and is a primary source for the youth to obtain information about skilling and/or employment opportunities, report grievances, share feedback and placement feedback. Targeted SMS campaigns have been taken up during our placement drives which have resulted in improved outcomes.

What are the key challenges in terms of resources required to further boost skill development in the state?

Skill development requires interplay of multiple stakeholders and the outcomes are influenced by several factors. We need to identify opportunities matching the aspirations of our youth and create an enabling environment requiring capacity building across the skill value chain. The major challenge we are facing right now is the lack of aspirational quality infrastructure to take care of existing skill gap and fulfil the mandate given to JSDMS. There is an urgent need of establishing a large number of quality training centres covering a wide spectrum of job roles.

Though the national skill ecosystem along with National Skills Qualifications Framework (NSQF) and its range of Qualification Packs (QPs) provides plenty of options, development of curriculum for job roles assessed to be in high demand in Jharkhand and not yet included under the NSQF, pertaining to traditional arts and crafts in Jharkhand and offering more broad based and relatively longer duration skill development courses through suitable merging of QPs or stacks of National Occupational Standards (NoS) is an important issue.

Another pertinent issue is addressing the stigma from vocational education and blue collar jobs which has more to do with prestige than employment. The youth needs to be taught that almost all the jobs today require skills in one form or the other, which could be either technical domain skills or the soft skills. In order to make it aspirational, we need to associate a sense of pride with skills which could be done through rewards and recognition and upgrading the skill infrastructure to international standards.

A Memorandum of Understanding (MoU) being exchanged at the Global Skill Summit 2019

It is critical that skill development has vertical and logical horizontal pathways to ensure that skill development is not terminal in nature. Adequate placement commensurate with one's abilities remains a major challenge which I am happy to state that we have been able to address to a major extent. We have initiated the process of setting up Migration Support Centres which would benefit our youth migrating for employment.
We have proactively taken numerous steps targeted towards addressing these issues, and still have a long way to go making Jharkhand the 'Skill Hub of India' and becoming a model for rest of the country to emulate.

Which policy initiatives are driving skill development in the state?

As far as the key training programmes being administered through JSDMS, three schemes are being run by the State.

First is Saksham Jharkhand Kaushal Vikas Yojna (SJKVY), under which training centres are located up to block levels throughout the State so that training can be imparted at the doorsteps of the trainees. We have already ensured coverage across all legislative assemblies. Second, Mega Skill Centres (also known as Deen Dayal Upadhyay Kaushal Kendras, or DDU-KK), which are aspirational centres of minimum 25,000 sq. ft. area setup with corporate support for knowledge transfer and placements. Third is Employability Excellence with College Education and Learning (EXCEL), under which training for soft/ communication skills, and domain skills is given to the college going students.

The first two programmes are both residential and non-residential, whereas EXCEL is a purely non-residential programme.

All the courses are free of cost with regard to training, course material and boarding/lodging. Payments are made to the TSP by JSDMS as per common cost norms. Additionally, we do ensure that the courses selected under each programme or scheme are market driven, and lead to employability. The scheme focuses on youths of the State in the age group of 18-35 years. Skill development courses are aligned to high impact sectors including tourism and hospitality, telecom, security, retail, plumbing, logistics, IT/ITES, electronics, domestic worker, construction, capital goods, BFSI, beauty & wellness, automotive, apparel, and agriculture, etc.

Furthermore, the flagship scheme of Pradhan Mantri Kaushal Vikas Yojana is being implemented under their CSSM

component. Jharkhand has received a skilling target of 57,668 to be completed in the next three years, and JSDMS has empanelled 20 training partners and have allocated the target to achieve its mandate.

With respect to key policy Initiatives, JSDMS has launched the Jharkhand Skill Policy in January 2018, which focuses on harnessing the 'Demographic Dividend' in a youthful state like Jharkhand. It focuses on few overarching objectives such as making skill training aspirational, skill development infrastructure creation, incentives for capacity creation, embedding skills in education and vocationalisation of secondary and higher education, preparing for Industry 4.0 through CoE, Big Data, Robotics, etc.

Please apprise us about the current focus areas of the society.

The current areas of focus for JSDMS are based upon the positive interventions and their outcomes that emerged over the last couple of years. Such interventions encompassed the entire sphere of our operations, be it placements, driving industry connect, improving curricula or ensuring employability through the courses selected. Following are few of the key interventions that delivered excellent results, as well as other aspects that are crucial towards improving the ecosystem of skilling.

1. Mass recruitments through Campus Placement Drives (CPDs): One of the key pillars in reaching the huge milestone of 1,00,000 job offers during the recently held Global Skill Summit has undoubtedly been the campus placement drives and mega placement drives that have been vigorously taken up over the whole of last year.

These CPDs have been instrumental in acting as one of the strongest advertising and marketing of Jharkhand's skilling ecosystem to employers, as the latter are exposed to the real skill and know-how that the trained youth of the state possess. Over 150 such CPDs had taken place and we hope this important practice of facilitating candidate-employer interface gains strength in coming years.

The efforts were reflected in the high pedigree of employers that our sustained outreach has achieved, such as Dish TV, BBQ Nation, Siesta Hospitality, Vardhaman, Welspun, Nahar, Arvind Mills, Cotton Blossom, Maruti India, JBM and Aegis amongst many other reputed names.

FUTURE PLANS OF JSDMS

- Setting up of Skill University
- UK Skills tie up
- Instituting RPL at a macro level
- Establishing Migration Support Centres in high volume migration corridors
- Setting up Centres of Excellence as part of the ITE Singapore MoU
- Maximising the potential laid out by the various industrial policies in the state

2. Mega Centres: Another key focal area is the opening up of more Mega Centres, as these centres are driven by the Hon'ble Prime Minister's vision of skill training based on scale, speed and standard. As many as 22 such aspirational and well equipped Deen Daya lUpadhyaya Kaushal Kendra centres are in operation today, and they collectively boast of an impressive placement record of over 80 percent. We at JSDMS are hopeful that more of these centres will gives us coverage across the state and provide state of the art training facilities to our youth.

3. Industry Roadshows: One intervention that we felt will go a long way in building quality network with industry is through conducting larger numbers of industry roadshows. The trend of hosting Industry linkages through roadshows that started last year was a huge success for us. We hope and aim to carry forward the momentum generated as each of the 3 roadshows resulted in quality industry connects.For instance, the Industry roadshow in Bangalore was conducted on 1st December 2018, where some of the prominent organisations we interacted with were Wipro, Cotton Blossom, Hero Cycle, Schneider Electric etc. Two MoUs were signed with Industree Crafts Foundation, Connect India Foundation. Similarly in Delhi, we forged strategic ties with Kemppi, Maruti Suzuki, Siesta Hospitality Services Limited, etc. 2-MoUs were signed with Wadhwani Foundation, Footwear Development Institute.Finally, speaking of the UAE roadshow, which was the first by any state CM after more than a decade, a number of leading UAE based industry heads were reached out. Prominent amongst corporates were the Emirates Driving Institute, Conares Group, Al Safah Group, HR International and others. The discussions led to a lot of insight sharing between possible investments in the state as well as workforce exchange.

In addition, there are several interventions at various stages of development in the state, and JSDMS as the nodal skilling body is anchoring many of these interventions. Some of the noteworthy interventions being taken up are Industry Support for providing practical exposure (On-The-Job Training), Designing of Course Curriculum as per the needs of the industry especially for the MSME sector, Adoption of the skilling ecosystem by the industry through infra sharing, knowledge partnership (industry expert to be nominated as guest faculty, exposure to shop floors, monitoring of training parameters, etc.), Introduction of NAPS (National Apprenticeship Promotion Scheme) scheme in the local industry, providing flexibility to industries for improving the training modules, engaging employers in skills development and utilisation at the local level, develop work-based learning system and enlisting help from district administration to identify suitable infrastructure for Mega skill centres, etc.

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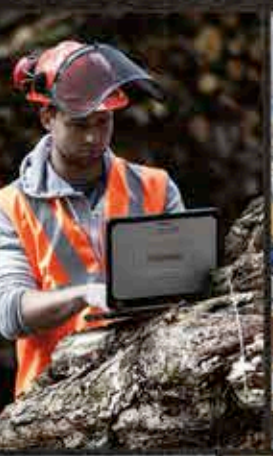

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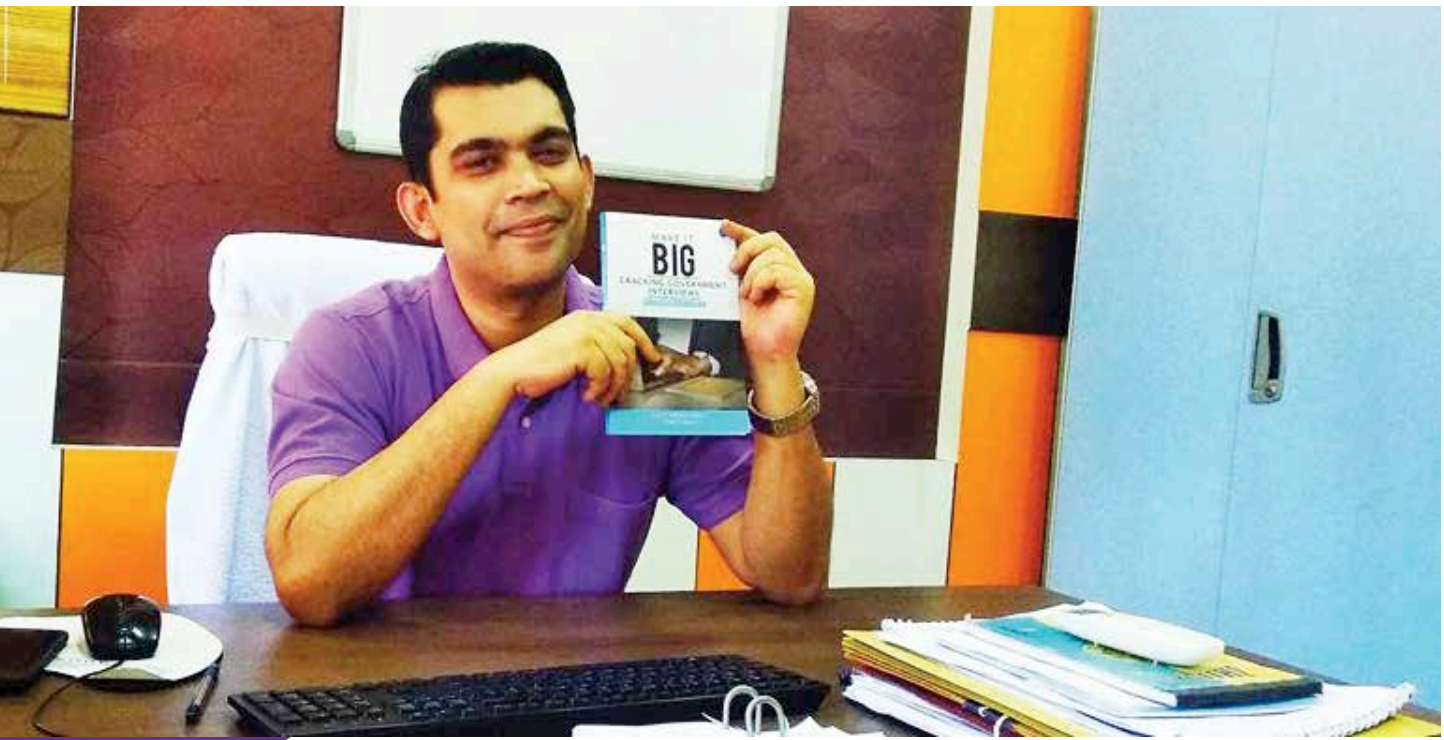

SMC – Safeguarding Quality of Life through Innovation

The city witnesses footfall of over a lakh floating population daily at the peak of summers and winters. While this would be normal for any of other big cities of India, it should be remembered that Siliguri is a city spread over only 42 sq. km. area. Thus, the quantum of floating population puts a tremendous pressure on the city, says **Saptarshi Nag**, Secretary, Siliguri Municipal Corporation, in an interview with **Gopi Krishna Arora** of **Elets News Network (ENN)**.

What are the key focus areas for Siliguri Municipal Corporation?

As mandated by the Constitution of India and the West Bengal Municipal (Amendment) Act, 2015, Siliguri Municipal Corporation (SMC) is responsible for delivering a wide range of basic services to the citizens of Siliguri, all of which are equally important. The failure of any of the service systems will result in inevitable mayhem. However, the core principle behind all the roles and responsibilities of SMC is to ensure that the quality of life of the citizens of Siliguri is at par with the other Class I cities of India.

Towards this, special attention is given to safeguarding healthy and clean living conditions through provision of safe water supply, sewerage, sanitation, solid waste management, transportation, welfare of the economically weaker sections (EWS) of the society, enhancing air and water quality, and the upkeep of community spaces, both open and closed.

Which major initiatives have been launched by SMC recently?

SMC's recent initiatives include segregation of solid waste at source into wet and dry categories, and their consequent processing at a modern and

state of the art facility; detection of leaks in the water supply pipeline through acoustic leak detection technology; monitoring of air quality through four air quality monitoring stations (based on which an air quality action plan is being developed); inventorisation of greenhouse gas emissions in and around the city by assessing the vulnerabilities of the city and its citizens with respect to climate change, and developing climate resilient city action plan to mitigate and adapt to the various impacts of a changing climate; riverfront development; restricting the use of plastic carry bags; and using the seized plastics for laying roads.

How does the city fair in terms of waste management, adoption of clean mobility, and sanitation?

These are three different issues and sectors, but in the case of Siliguri they are not mutually exclusive. This is because Siliguri is an ideal example of what we call a 'break of bulk' point in economics. The city is the economic engine of the eight northernmost districts of West Bengal, and an important trading post for Sikkim and the seven northeastern States of India, Nepal, Bhutan, and Bangladesh. Simultaneously, the city developed as a strong transport and tourism interchange hub. As such, the city witnesses the footfall of over a lakh of floating population daily at its peak in the summers and winters. While this would be normal for any of other big cities of India, it should be remembered that Siliguri is a city spread over only 42 sq. km. area. Thus, the quantum of floating population puts a tremendous pressure on the city with respect to (i) solid waste management, (ii) providing adequate sanitation facilities and (iii) keeping the city congestion free.

(i) Solid Waste Management - There are 47 wards in Siliguri which generate more than 350 tonnes of solid waste

per day. The waste is collected from each households, commercial, transportation and institutional units and transported to an open landfill within the city boundary. Dumping of solid waste in an open landfill is not really a sound practice, but other than that we already have a robust system in place for solid waste management in the city. The system will be further strengthened if we are able to curb indiscriminate dumping at the end point, i.e. the open landfill. Towards this, we have recently conducted a pilot for segregation into wet and dry waste at source in a few wards of the city. The wet waste is being converted to compost at SMC's mechanised Organic Waste Composting Facility, while the dry waste is being sold to recyclers, thereby, ensuring minimum waste is reaching the open landfill from these two wards. The pilot has received acclaim from all sections of the society and now we are planning to scale it up to the whole city. Once this is achieved then it would result into minimum waste reaching the open landfill from the whole city, following which we can work towards transforming the open landfill into a scientific and sanitary landfill.

(ii) Sanitation - The citizens of Siliguri are very cleanliness-oriented and so, sanitation issues have never been a cause of concern in the city, except in the transportation depots like railway stations, taxi stands and bus terminuses, commercial hubs and slum areas. All these critical places have provision of sufficient number of toilets. The residents of slums are being made aware of the menace of open defecation and discharge of urine in the open environment, while on the other hand the offenders in the transport depots and commercial hubs are being levied on the spot fine for their offence. This combination of awareness generation and penalization, coupled with construction of toilets by SMC, has curbed the menace of open defecation and discharge of urine in the open environment in Siliguri.

(iii) Adoption of clean mobility - The transportation sector is beyond the purview of SMC's jurisdiction. SMC supports the District Magistrate's Office, Sub Divisional Officer's Office and the Traffic Police for operating the transportation sector in Siliguri. In order to reduce the dependence on fossil fuel based transport modes, the Government of West Bengal is promoting electric rickshaws and mass public transport systems in Siliguri, which are entirely new concepts for the city. Simultaneously, the Government is also promoting the traditional modes of commuting within the city, viz, non-

motorised transport modes like cycle rickshaws and bicycles, and walking, which together account for 33% for daily trips within the city.

What are the major challenges being faced by the citizens of Siliguri and how do you plan to use e-governance and ICT to overcome them?

The citizens of Siliguri, like any other city in India, face the problem of inaccessibility to the top brass of SMC for the solutions of their problems. After all, the citizens hope the top leadership will listen to their problems with more care and solve their problems. However, it is sad and bitter truth that we at the leaders' tables already have our hands full. So, often we cannot entertain all those who want access to us. Although, we strive to the best of our abilities like staying behind at office late in the evening, often beyond 7 pm, still we cannot fulfil everyone's hopes, even though we want to. To solve this issue we have started SMC's Facebook page, alongside our own personal Facebook and other social media profiles, where petitioners can message us directly. SMC's Facebook page is closely monitored by a group of dedicated personnel under our, i.e. the leadership's direct supervision. This has resulted in the solution of many critical issues and disputes in a speedy manner, which otherwise might have taken up a lot of time. SMC uploads tenders and disburses fuel and emoluments through an e-portal in order to ensure transparency and accountability.

Tell us more about your book 'Make It Big - Cracking Government Interviews in Corporate Style'. What inspired you to write it?

As the name suggests, the book's theme is personality and mindset development for cracking government interviews. Our personality and mindset get reflected in our attitude, behaviour,

mannerisms and fashion. Well, there are countless such books in the open market, and despite that I chose to write on these very subjects. The reason behind this is every day is a new day. The world is in a constant course of change. Something that was relevant a few years ago might not be so today. In all probability, this book of mine might not be relevant a few years or decades down the line. This is an age of technological advancement. We are making technological breakthroughs almost every day. We are being exposed to new ideas, concepts, and beliefs on a regular basis, which is moulding our own perceptions gradually. Governments are no different because at the end of the day, governments comprised people only, especially the younger generation, who are bringing in modern, revolutionary and path-breaking concepts as they enter the system. The aspirants need to keep pace with this gradual yet constant change as well, lest they be left in the dust.

To be honest, I wrote the book on a whim actually. West Bengal is home to a multitude of talent, but unfortunately they lack the wherewithal to transform their talent into something tangible. Leaving aside reading on the concepts of personality and mindset development, there are areas in almost all developing countries, India included, where people have not even heard of such concepts. A few years ago, I started my own YouTube channel following the requests of some students and aspirants, offering them guidance for their upcoming interviews. Through those videos, I developed a follower base and came in touch with students from the various parts of West Bengal, some of which were so interior that the students belonging to those parts had to walk or cycle tens of kilometers just to access the internet. Yes, right the internet, something that we in the cities take for granted so easily!Following this, I decided to lighten their burden to the best of my abilities, and what better way to do so than to deliver a book to them. I had hoped that instead of wasting time on travelling hours just to watch a half-an-hour video of pep-talk, those students can spend the time reading a book and motivating themselves towards the glory that they so crave. This book is primarily for those who even amidst the highest form of struggle for existence, have not stopped pursuing their dreams. Thus, the book does not expound on any important theoriesor theorems of success, rather the book aims to give a Big Push to all the struggling and scorned ones towards realising their pursuits.

In the book, I have stressed on the importance of positive attitude and challenging oneself time and again as a surefire way of smelting oneself. As a confession, I might add that this book is also a smelting trial for myself, because I wanted to get out of my comfort zone of being an established government bureaucrat and explore avenues of my own self, which hitherto had been unknown to me. As the saying goes, 'preach what you practice'. Even if this book of mine does not sell many copies, still I shall challenge myself once again and continue writing till the goal is reached.

DIVERSIFICATION: BECIL's EXPANSION MANTRA

This year we have touched Rs 300 crores in revenue. We are growing nearly at the rate of 20 percent annually and have set a revenue target of Rs 400 crores by 2020, says **George Kuruvilla**, Chairman and Managing Director, Broadcast Engineering Consultants India Limited (BECIL), in conversation with **Souvik Goswami** of **Elets News Network (ENN).**

What role do you foresee for BECIL in India's digital transformation process?

BECIL is into the broadcast engineering domain. We look after television and radio production besides transmission of TV, radio and satellite and cable television. Whatever we are doing has a lot of synergy with the telecom and IT domains. One of the areas where we see great opportunity is the last-mile connectivity through fibre , radio frequency , satellite communication technology and thereby provide ICT-based e-governance projects to various state and Central Government.

Besides connectivity there is a great need to archive the contents, networking , analytics , automation, and distribution of the content both at the state and central level. There is great need to provide cyber security , coding and encryption of content, create IPR wherever required , monetize the content wherever possible.

Another opportunity is the digitization of documents in each department, meta tagging of data, digital processing of files, dynamic website development, thus provide Office Automation and Information Management system. Integrating the websites with payment gateways as per requirement. This would help in creating true paperless offices and help in digital transformation of Government Departments. Moreover through these dynamic websites Government departments can connect with citizens through social media and provide a responsive governance.

BECIL has also expanded its base in the smart city ecosystem. Can you elaborate on this?

"In the last three-four years BECIL has diversified into various new areas, which has started bearing fruits now. Initially we were focusing more on broadcast related domain, but in the last one year we have ventured into new areas like smart lighting, smart electronic metering, point of sales machines, etc."

We are actively looking at the opportunities in smart cities space, especially when it comes to smart LED lighting, smart metering, smart garbage management, Integrated traffic management system etc. The various functional areas of smart city require separate Command and control system and also an integrated command and control at the Apex level. Smart city management requires active engagement with the common citizen using appropriate listening tools and response using Customer Relationship Management tools. BECIL is developing all these capabilities by using specific products and solutions and strategic partnerships.

What has been the growth story of BECIL in recent past? Also shed some light on future road map.

In the last three-four years BECIL has diversified into various new areas, which has started bearing fruits now. Initially we were focusing more on broadcast

related domain, but in the last few years we have ventured into new areas like smart lighting, smart electronic metering, point of sales machines besides CCTV, surveillance and access control etc. We are growing up in all these areas and building up our businesses, besides providing human resources to various government agencies.

BECIL is now entering into the fields of AI, Machine Learning and cyber security as these areas are of importance for various governments departments. On the other hand, platform as a service is also our focus area as we have realised the need for a media data centre.

In terms of financial growth, we are quite encouraged with the growth in the last few years. This year we have touched Rs 300 crores in revenue. We are growing nearly at the rate of 20 percent annually and have set a revenue target of Rs 400 crores by 2020. There are some challenges like the recovery of payments due to some of the Government departments, which has affected our cash flow and BECIL is incurring loss due to huge interest payment to banks. We are making concerted efforts to recover our due payment and are hopeful that things would improve soon in this regard.

"We intend to house a media data centre to primarily handle the content of Prasar Bharati which is the main content generator for the government. There are other ministries and departments like the Ministry of Culture, Lok Sabha and Rajya Sabha TV, National Archives of India, etc, which have got rich content in the form of photos and videos."

How bright is BECIL's future?

I see a very bright future for BECIL. The reason is simple – BECIL is a PSU which is working in a very niche domain with the required domain expertise. When you think of convergence of broadcast, telecommunication & IT, only BECIL fits the criteria in all the three domain. We are uniquely placed as we understand the technicalities and the wide spectrum of technology related to satellite communication, RF communication, managing audio visual transmission along with data analysis ,automation etc. According to me, BECIL can grow to become a Rs 1000-crore company in the next five years with business expanding in the Asia pacific region countries.

GEL – Ensuring Faster, RELIABLE Public Service Delivery to Citizens

The focus of GEL has shifted from merely helping in computerisation of government departments and institutions to providing the citizens faster processing time and ease of access to avail any service, says **Revati Majumdar**, CEO, Goa Electronics Ltd, in conversation with **Gopi Arora** of **Elets News Network (ENN).**

Revati Majumdar
CEO, Goa Electronics Ltd

What have been the key focus areas for Goa Electronics Limited (GEL) recently?

GEL, a Public Sector Undertaking of Government of Goa (a subsidiary of EDC Ltd), has been working in the area of eGovernance focusing on its areas of expertise, which include:

- IT-Project Management
- Business Analysis
- Application Development
- Database Administration
- System and Network Administration
- Hardware Supply and Maintenance

Catering to over 30 government departments, there are constant efforts from our team to monitor and cater to the needs of the people who want to avail any of the government service. Backed by our expertise of working in the government sector for over two decades, the focus of GEL has shifted from merely helping in computerisation of government departments and institutions to providing the citizens faster processing time and ease of access to avail any service. Government Process Re-engineering (GPR) has been a revelation and we at GEL have focused on integrating GPR and Service Management Framework (SMF), making it a distinct service processing mechanism that can be widely used across all government departments.

Knowing the importance of data analysis and its impact, we have entered in the Artificial Intelligence-based data processing zone with automation systems for key departments which are inclined toward public safety. Considering the fact that the data is growing more rapidly, our R&D division is working towards Big Data and security as it is extremely critical now to securely reuse and process data which can ultimately save time and money.

"Goa's single window portal developed by our in-house team has played a pivotal role in improving our country's ease of doing business ranking on the EODB index published by World Bank."

How is GEL helping the state and the country in developing ICT solutions to drive efficiencies?

Ease of Doing Business (EODB) has been a key area of operation for us. We are catering government to business (G2B) and government to citizen (G2C) services of various government departments. Goa's single window portal developed by our in-house team has played a pivotal role in improving our country's EODB ranking on the ease of doing business index published by World Bank.

Data and document re-usability has been the key mantra for major ICT solutions reducing the number of man efforts required to process a service for citizens as well for government officials. Time-bound delivery of more than 100 services through Common Service Centres (CSCs) or online mode has ensured that the state's vision of 'Maximum eGovernance' is achieved.

With support from the government, emphasis is on encouraging online payments rather than cash payments. Various services for collection of online bill payments towards water, electricity etc. have been set in place with regular monitoring mechanism ensuring that citizens feel safe and secure to complete the payment process.

Mobile application-based services have been rolled out for traffic police to minimise traffic violations. We have been also associated with Election Commission of India through the state chief electoral office Goa ensuring that the state's IT election machinery in conjunction with all other states in India is taken to perfection.

All ICT solutions developed by GEL are working independently towards their own cause however, they all are interconnected in the background contributing in our state and at large countries growth and working to provide a hassle-free and efficient service to the citizens.

Tell us about the progress of the project to develop digital skills among government employees.

Government employees are driving all G2C and G2B projects on the path of eGovernance, hence their level of skills are critical to achieve success. Our dedicated team ensures that digital trainings are conducted in conjunction with the visionary sessions to all the government employees. Digital and visionary exercises are aimed to impart IT skills and also to handover the ownership of the project to all the officials rather than an individual during the initial rollout phase. These ensure that the skill gaps are filled in by themselves which leads to their self initiated contribution to execute the project. Currently, digital skill development is specific to the project and a team of training and capacity management group is placed independently to handle projects ensuring no delays in the execution. Team deployed at the government departments also ensures that the employees are updated on the new digital developments on a regular basis and this is critical during the initial years of IT enablement.

"Goa being a small state having a village level connectivity and a strong IT backbone, we would welcome other state teams to partner and pilot their ideas/vision in our state."

What are the major projects being taken up by GEL?

- G2B and G2C services made available on a single window portal https://goaonline.gov.in/
- Projects Integrated with eTaal, DigiLocker, eChallan, PayGov India, Aadhaar, eSign, SMS, eMail, RAS
- Delivery of services through Common Service Centers (CSC's) by leveraging a common infrastructure of SWAN, SDC and SSDG.

What are future plans of GEL?

eGovernace for EODB and Service Management Framework (SMF) has been our key forte for the last two decades and we will continue to have more value additions with each step of execution. We are working on an Automated Service Processing System (ASPS) which will enable ICT solution to auto schedule service initialization and processing of services with minimum or zero citizen intervention.

We are all set to implement more AI based systems which can improve service delivery and bring more safety to the citizens. Established partners or Start-ups involved in these fields are always our priorities and we plan to work hand-in-hand. Goa being a small state having a village-level connectivity and a strong IT backbone, we would welcome other state teams to partner and pilot their ideas/vision in our State.

With projects like PRISMS we have executed projects in Maharashtra and Bengaluru and we plan to reach out to more states for other ICT requirements with our in-house development and consultancy team ensuring maximum re-usability of resources.

In future, it will be important for all the states and ICT solution providers to work together and share implemented ideas so that we all could concentrate on innovations and thus make our country future-ready.

Abhishek Singh
Group CFO, Mastek

'The new avatar of Mastek is focused on providing services'

The focus of Mastek has been service post the demerger with Majesco, says **Abhishek Singh**, Group CFO, Mastek. In this interview with **Elets New Network (ENN)**, Singh talks about the business and revenue model and the ethos of Mastek.

How has the focus of Mastek shifted post the demerger with Majesco?

In the current avatar, post the demerger, we are out and out services focused. When the demerger happened, it became services and UK centric organisation because the US business went into a demerger at the other side of the aisle. If you look at 2016 as a pivot, five percent of the revenue was coming from UK; majority of the revenue was coming from the public sector. It still had a lot of revenue coming as a sub contract. A history in UK is 26 years old on which I think we have operated as sub contractors for 23-24 years. The new Mastek is services focused, doing business with the government and customers directly. Four years back, 60 to 70 percent of the revenue was sub contractual. Today it is down to three percent at the maximum. Everything else is directly dealt with the customer.

Geographically, what is the revenue at present?

The revenue was 95 percent in UK and five percent in India. Today in 2019, it is 75 percent UK, 24 percent US and only one percent in India. We were the system integrated partner for Oracle. UK continued to be what we call the transformation and the capability that we have always had of a very large nature. Now the finger scanning and the facial recognition are the next generation technologies that they want to incorporate. That needs a very large programme delivery and it is a big engagement for us as well. We have always been doing that. It's just that when digital transformation is concerned, there are no legacies here for which we need to protect. To sum up, what happened in the last 18-24 months, that's what we have been organising ourselves to. We professionalise the management where the promoters have taken their board positions and that they are not in the active management of the business.

Coming to the delivery part, in terms of the delivery infrastructure that has been provided, where is the delivery centers?

In UK we have got two major hubs that are Reading and Leeds. In India it's predominantly Mumbai. Pune is a small footprint followed by Noida and Gurgaon and a small part is in Chennai as well.

What does it mean from the Mastek perspective that your internal workforce, their skill sets have undergone a dynamic transformation?

The genesis of the transformation lies within the organisation. When we did London Congestion Charging Project, it was not just 300 or 400 coders writing the code, it also had 20 or 30 solution architects designing it. And architecting has been a different initiative for Mastek ever since. We have never participated in strength or weakness for everyone else to judge. But you had a bespoke solution you will find 10 people signing up and standing up that drives their creative juices. So going back, even at that time, we had enough architects and today they are the one driving the front end conversation which then leads to the delivery opportunities.

Rahul Goel
Director
Market Engineering Group, Canon India

Canon to Focus on Increasing Services in India Horizontally and Vertically

With an aim to increase the number of customers across the country, Canon India is focusing on technology to reduce the cost of service, says **Rahul Goel**, Director, Market Engineering Group, Canon India. in this interview with **Elets News Network (ENN)**, Goel talks about the customer categories in different groups, products and services offered and vision for the upcoming years.

"Almost all auto companies are our clients. Apart from that pharmaceuticals and banks are other two sectors in which majority of our clients belong to."

How many clients does Canon have in the B2B sector?

B2B and B2C are different set of clienteles. In the B2B sector, printers are used at organisation level. The product for the B2B sector starts from 16 pages per minute per printer to as high as 145 pages per minute. In our direct contract more than 40,000 machines are there.

On an average, how many printers are sold in one enterprise?

The number of orders varies from company to company. It can be as less as one printer to as high as 2500 printers. While companies like Reliance and Axis Bank place orders for more than 2,000 printers, Soho offices use much lesser printers.

How many MDS accounts are there?

We have around 200 MDS accounts.

What has been the yearly growth in terms of customer numbers? Among this, how much repeat business is ensured?

Repeat business around 80 percent in B2B. Growth according to Machines in field (MIF) last year was around 20 percent. This year we are planning to grow and have grown 20 percent in the last three months.

According to the MIF, what is the average obsolesce of the machine? Is it one-time replacement or the customer has to replace it?

It is based on the number of contracts signed. Repeat business accounts are 80 percent in B2B amounting to a net growth of 20 percent.

How do you classify B2C customer?

We identify the B2C customers on the

basis of their membership or subscription to Canon Professional Services (CPS). Although we tell all our customers about the CPS, but the membership also qualifies based on the quality of the product bought by the customer e.g. quality of camera or lens.

How many CPS do you have?

Right now, we have 2000 CPS odd customers across India.

Can we classify a media house as CPS or just an individual? Can media houses be considered as B2B services?

Both can be considered as CPS. Both are considered as B2C because even if you have purchased a lot of cameras you still need to go to a service centre. Whereas a copier can be repaired at a customer's place.

In how many locations, there are Canon service centers?

There are 2700 pin codes. We cover around 91 percent pin codes in India.

Which are the industry sectors in which you have maximum customers?

Almost all auto companies are our clients. Apart from that pharmaceuticals and banks are other two sectors in which majority of our clients belong to.

Do you deal with government customers?

We do a lot of business with government but we do not deal with them directly. Cent percent of the deals are finalised through our partners.

What are your key strategic focus areas for the next few years?

Over the next couple of years, our focus areas would be to increase our services vertically and horizontally. We are also focusing on the technology usage to reduce cost of service. We have already opened new service centres across locations. As per our observation, customers in smaller towns want to purchase new products.

"We identify the B2C customers on the basis of their membership or subscription to Canon Professional Services (CPS). Although we tell all our customers about the CPS, but the membership also qualifies based on the quality of the product bought by the customer e.g. quality of camera or lens."

Sanjay Motwani
Vice President, Asia Pacific, Raritan

'Legrand, Raritan and Numeric would go to market as an integrated entity LDCS'

Raritan, after the acquisition by Legrand plans to build an integrated data centre team, LDCS, says **Sanjay Motwani**, Vice President, Asia Pacific, Raritan. In this interview with **Elets New Network (ENN)**, Motwani shares his vision for the company and why it is important to build uniform brand value from the perspective of customers.

"Over the last decade and a half ago, we realised that IT equipments, especially the servers, are becoming more intelligent. So the remote management tools and capabilities were built enabled equipment itself."

How has been the journey of Raritan over the years?

I will start from the beginning because it is important to get the context right. Raritan has been associated with data centres from 30 years and that's how we started off. We introduced the product at that point of time called KVM - Keyboard, Video and Mouse. At that point of time we did not have mouse but later on it was added and mouse came in the picture. That's how it started. What it does basically is it allows data centre people to manage their infrastructure remotely. It is very basic, fundamental, that's what the job of a KVM.

It is important for the data centre managers to manage their infrastructure effectively. That's the platform and the thought process with which Raritan comes.

Over the last decade and a half ago, we realised that IT equipments, especially the servers, are becoming more intelligent. So the remote management tools and capabilities were built enabled equipment itself. We looked at another category. Since we are coming from the data centre background, we said how best we can help the data centre people more.

That is when we launched the product called Intelligent PDA, which is a power distribution unit that provides basic power to the IT equipments from the data centre. Till such point it was only basic functionality like in households we see small power distribution vault – multi-socket point. That is how it's operating.

We created intelligence into that. The first thing what we did was, we created IP connectivity which means you can manage it remotely. Then we started measuring power at the each device. The objective was – if the data centre people could understand how their equipment was behaving they could take proactive decisions in managing their infrastructure better. And that has evolved over the years.

Over the past few years, the issues of going to cloud, issues of security, and issues of IoT have come into play.

What have been your ways to deal with these issues?

We have provided security tools, environment measurement tools in the data centre but using the basic PADU as a platform or the basis. For example, in the security sight we have automated security door locks, so you are aware that at a data centre you have racks. To go inside a rack you need a handle. So that lock handle has been automated to an extent that if you want you can control it remotely against biometrics or whatever the protocols you want to control. The built-in security, environmental monitoring has come into play in a data centre. The operating expenditure of a data centre is very large. So if you can understand where we are spending extra, where there is extra capacity, then you can optimise. The thrust of Raritan has been to help the data centre managers understand the data centre better in the infrastructure sight.

What are your plans for the upcoming years?

There are two parts to the data centre. We call the IT equipment room as the white room and the other one is the technical room. Raritan helps identify data centre managers where the excess capacity is. If you can realise where the excess capacity is, then you can optimise and bring down your operating cost. Even if you want to expand tomorrow you don't have to look for space you can find the space within your existing infrastructure and utilise it.

Raritan is now a part of Legrand, which has also been in the data centre products for the past four to five years. The plan is to form unified data centre team. Right now we have four or five teams, going to the customers, the same customers from the Legrand. So from the customers point of view, he is dealing with four or five different people from the same company so it is little irritating to the customers. That's why we want if we can integrate our teams, also we want to integrate our solution offerings. We can offer a better consolidated proposal to the end customers. This is what we are trying to work on.

A month ago, we acquired another company called Universal Electrical. So moving forward all this products and solution offerings will get integrated for the market.

How do you plan to integrate the teams of Legrand, Raritan and Numeric?

We plan to call the new team as LDCS – the Legrand Data Centre Solutions. The other brands will continue. It's only the interaction with the customer would be called LDCS because each of these brands has a specific strength in the product category. The focus would be to build a new brand from the scratch and to prove its potential. LDCS will offer the products and solutions from Numeric, Raritan, Starline and others. That's going to be the front face and at the backend for product category of this kind you would have a qualified sales team and very good technical support team because in data centre being a technical space you need technical expertise and skill-set. We will pick people from each of these companies, identify the people, and make a consolidated team. And then offer a unified offering to the customer.
When will LDCS launch in India?
Right now background work is going on. We plan to launch LDCS by next year. In fact it will happen as early as at the end of this year. We will be ready with the formal announcement by next year.

What will happen to the existing migrations?

Everything migrates to this new entity. LDCS will not be a separate legal entity. So as far as obligations to our customers are concerned they will continue to hold on with the individual entities. It's just that the dialogue will happen with LDCS. All obligations and commitments which are there will continue to be on them irrespective. Even today when Legrand acquired Raritan none of our customers have faced any issue. There has been no change as far as the customer experience is concerned and even the channel community is concerned. So even channels won't face any issue.

Will there be channel integration also?

Absolutely! Firstly the integration and consolidation will happen followed by the expansion. Which is why we are working this year to identify people , trying to get the integration and trying to get the training started, trying to get the people understand. So there's no point going to the customer saying I am from LDCS team and I have no knowledge of Numeric's products. Before we start engaging with the market, for that kind of communication and commitment we have to do this. That is what is happening this year.

If we look at verticals, how has been the status of deployment in the Indian context?

Raritan has been very strong in one vertical in which people normally don't assume to be a strong vertical. The vertical is labs and the R&D. Nobody even looks at it and thinks so are. But they are the one of the biggest people and spenders on technology. For example, when you go to a data centre, Cisco has 15 labs and 15 R&D centers in India alone. Which company in India has 15 data centers? That's how we look at it .Each of the data centers as they call it labs are not traditional data centers and has 1500 to 2000 racks. So that's the scale with which they are. So we focus on R & D labs very extensively. We work with CISCO, Dell, Microsoft, pretty much all of them. So R&D, Labs are a very big vertical for us. The three big verticals are Finance, R&D and Telecom.

Saurabh Saxena
Country Director – India, Micro Focus

MICRO FOCUS – 'TECH'TONICALLY TRANSFORMING INDUSTRY

Every industry sector is undergoing digital transformation. But the pace and maturity of transformation vary from segment to segment, says **Saurabh Saxena**, Country Director – India, Micro Focus, as he provides an insight on the spin-merger with HPE, the growing challenge of cybersecurity and the core philosophy of his company, among others, in conversation with **Jyoti Bhagat** of **Elets News Network (ENN).**

How has Micro Focus performed over the years and what is your plan for the future?

Close to 18 months back, Micro Focus was merged with Hewlett Packard Enterprises. The spin-merge aimed to create one of the largest pure play software enterprises in the industry. A lot of changes happened in the backend. In the past 18 months, we have been able to have a smooth transition to a uniform system. The beauty of this merger was the fact that there was hardly any overlapping technology or individual positions of HPE and Micro Focus. Both the pre-merged companies were serving different portfolios and solutions of the two companies were not complementary. As a consequence, we were able to go back to our customers to talk about the broader portfolios. Most of the Indian customers are in its nascent stage of the digital transformation journey and our solutions are helping them in this journey.

How did you manage the overlapping service areas of HPE and Micro Focus?

One of the key processes of the merger was to integrate product engineering of both the organisations. So we were able to chart out clear cut roadmaps for each of the technologies. Wherever there was a complementary technology or solution, we decided how to leverage and embed them with each another to create a new and better functionality.

It was clear during the spin-merge that the name of this new entity would be Micro Focus. The reason being, Micro Focus is close to 42-year-old software organisation based out of the UK. It is one of the largest pure play software companies. The annual revenue for the fiscal year 2018 was $4 billion. Curently we are operating in 50 countries with over 40,000 customers. The name is known to our customers across enterprises and public sectors.

What is the USP of Micro Focus?

One of the USPs of Micro Focus is its ability to be flexible. We work flexibly with customers. We know the technologies that they are using and aim to integrate them. We have a solution called Operations Bridge. This takes events coming from the underlying technologies and consolidates those events in the Operations Bridge, collate those events and take causal events in the system. We use what already exists and pull up the events from there.

How do you differentiate yourself in the market in terms of other organisations offering similar solutions?

Every enterprise software company will have three key components in their IT ecosystem. The first is applications, which needs to run on some infrastructure. The infrastructure ecosystem is growing increasingly complex. The second component is software, which needs to be constantly upgraded. The third component is data or information which is being generated massively and is very important to organisations. Micro Focus works in all these three areas.

In the area of applications, we deliver better software solutions faster without compromising on the security aspect. We work on DevOps solution. In the area of Hybrid IT, it is important to be agile enough to understand what is happening in the ecosystem and update accordingly. We leverage Machine Learning to extract data and manage the same. As a result, the data is much more accurate, actionable and automated. After thorough analysis, we draw some meaningful insights and give it to our customers. We archive and back up the information and content with the help of Information Management Solutions.

So application, infrastructure and information are the three core areas that we work with our customers. While there are players in the market specialising in one of these three areas, or other niche areas, there are very few who offer solutions in all these areas.

What are the core functional areas of Micro Focus?

The core philosophy of Micro Focus is two-fold -- how we can help customers run and transform at the same time. While doing that, we focus on innovation and minimising risks. There are new technologies rising on the horizon which the customers want to adopt and we help them to do so with minimal or no risks. While doing that, we also help bridge the old and new technologies. We help our existing and core customers of Micro Focus legacy COBOL to migrate to the visual COBOL.

How relevant is COBOL technology in this era of technology?

It is very much relevant. There are several companies of repute which run entirely on the COBOL. Many of the large organisations of certain sectors have been running their applications on COBOL and legacy systems. The cost and risk of this migration is way too high. Organisations have to choose whether they want to migrate or not. One of the reasons they have to migrate is because the vendors can't support in the existing system. Micro Focus helps these organations in transforming their operations.

One of the biggest threats companies, be it private or public, face today is cybersecurity. How do you plan to curb this challenge?

Cybersecurity is indeed a challenging area which needs to be addressed. The basic and core idea is to protect what matters most. There are three areas on which it is worked upon. Firstly, applications, which during the coding level can identify vulnerability in the system. On the infrastructure side, we have solutions around Security Information and Event Management (SIEM), which can protect your ecosystem and can correlate and give you meaningful insights. The third area is information and data, where we protect data with data encryption solution.

What are the other important areas which are growing now where there is a demand to offer solutions?

Predictive Analytics is the need of the hour. We have Big Data Analytics on Vertica, IDOL Autonomy in the area of unstructured data management. While we have a separate business unit which works on analytics for unstructured

data management customers, we also embed solutions in these areas. We look at AI Ops, Machine Learning and User Entity Behavioural Analytics in the areas of Application, Infrastructure and Information.

How would you define the solution areas that you deliver to the customers?

We work on four-course solution areas. The first is Enterprise DevOps where we focus on speed to deliver better software faster. Second is agility of your Hybrid IT ecosystem. The third is Security Risk and governance and the fourth is predictive analytics in terms of providing customers insights. All of these transforms into our four-core solution areas and we engage with the customers around these.

Can you share an industry-wise break up on how much digital transformation each sector is undergoing?

Every sector is undergoing digital transformation. But the pace and maturity of transformation vary from segment to segment. BFSI, Telecom, IT/ITeS have undergone a massive transformation over the last decade. With the current government coming up with the Digital India programme, we saw a lot of central and state government projects taking shape across the past five years. This includes Smart Cities, surveillance projects to name a few, in which we are a part of.

The Manufacturing sector is not alien to this change as well. Be it ERP or Supply Chain Management, the digital transformation in this sector has already begun. The complexity is also pretty high. It has its own set of challenges as well in terms of whether to investment on the infrastructure or Hybrid IT management. We work with all of these industries. The engagement varies depending upon time and season. The pace of projects from the government and public sectors have overshadowed the other sectors because of the high scale as the projects are different in state and central level. Telecommunication sector is undergoing a challenging ecosystem. Curently the system has been stable and will continue to be so until 5G technology comes into place. As far as the BFSI sector is concerned, it is moving towards the next step. The required rate of change in software is very high. Hence, it is a great opportunity for us to engage. IT/ITeS is also very complex and we work broadly with them.

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Sudhir Singh
Managing Director (Sales & Marketing),
Marg ERP

Marg ERP – BRIDGING GAP BETWEEN Demand and DELIVERY

Aiming to associate with more than 1,000 SMEs across India under its initiative Milaap, Marg ERP has turned its competition into a partnership with the motto of 'growing together'. This win-win relationship is based on the premises of utilising each other's fortes to bridge the yawning gap between demand and supply of quality products and services, says **Sudhir Singh**, Managing Director (Sales & Marketing), Marg ERP, in an interview with **Jyoti Bhagat** of **Elets News Network (ENN).**

Tell us about the vision and USP of Marg ERP.

Marg ERP is a leading software application provider helping companies in the smoother transition towards the GST regime. We are a growing and passionate organisation. We, as a team, didn't get bogged down by introduction of GST and have maintained strong growth despite change in the tax regime. One of the reasons for our success has been making prudent investments in terms of building a team and expanding the business across India.

What are the major challenges you have faced?

India is primarily run by Small and Medium Enterprises (SMEs). Our competition is mainly with the SMEs in tier-II or tier-III cities like Kanpur, Udaipur or Agra. They have captured the market owing to their personal connections and affordable products

and services. We, on the other hand, despite offering upgraded products and services, are unable to capture these markets. But now we have come up with a solution to meet this challenge.

What are the initiatives you have taken to mitigate this challenge?

We started a project named Milaap. As the name suggests, we are collaborating with the SMEs operating in tier-II and tier-III cities that allows us to speak with local businessmen to understand their challenges. We propose them to join Marg ERP where we mentor and groom them. In the process, they develop the capability to bring out better products and services. On the other hand, we can capture the local markets which were earlier monopolised by the SMEs. The idea of project Milaap is to complement the SMEs rather than treating them as competition.

How many companies have you included in this project? What is the number that you are targetting?

So far, we have associated with more than 50 companies across India, mostly across the country's north and east regions. Two collaborations have happened in west India and we have almost cracked one in south India. There are around 200-250 Milaap projects in our pipeline. We are aiming to associate with around 1,000 companies with the motto of growing together.

Which are the states where you have worked on the project Milaap so far?

So far, we have approached and gained success in states of West Bengal (Kolkata and Siliguri), Bihar (Patna and Gaya), Uttarakhand (Dehradun, Rishikesh, Haridwar), Uttar Pradesh (Meerut, Muzaffarnagar, Kanpur, Agra), Rajasthan (Udaipur), Haryana, Chandigarh, Punjab, Jammu & Kashmir, Odisha and Maharashtra (Nagpur and Jalgaon). In south India, our first Milaap is about to get finalised in Kerala and we are in talks with four companies in Karnataka.

Such companies are more visible in the western and southern zone of India. However, your collaborations are more in the north and east zones. Is there any specific reason for that?

You are right. Our objective was to pick the low hanging fruits first. Since we were more at home in the north zone and were more confident in exploring these areas first, hence we worked in this zone first. Moreover, there are some cultural variations as well in this region. After gaining success in the north and east zones, we are now proceeding towards the west and south zones where our progress has been steady.

What kind of challenges did you face in bringing these companies onboard?

We have approached mostly SMEs, who have gained prominence in the local market. The major challenge was to convince them why this merger would be a win-win situation for both. Also, some of the companies are present in the market for the past 10-15 years and to merge with us somehow deflated their ego bubble, hence they delayed the process. They had a feeling that Marg ERP would curb their independent way of working. We

did not lose patience and successfully convinced them that their authority or ownership won't be hampered and we would only focus on growing together by utilising each other's fortes.

What are the advantages you faced after merging with these companies?

After the mergers, our network has become much stronger as we now have a cumulative client base, who were earlier exclusively associated with the SMEs. We have now captured the entire market in the cities where we have deployed project Milaap. Growing network means growing opportunity. We have added the value of our brand and expertise to the network and strong clientele of the SMEs. Last but not the least; we can add much diversity in our clientele, as well the organisation. Another aspect was, while these SMEs were focussing only on the accounting, after associating with Marg ERP, these companies are offering holistic products and services.

How are you developing and updating the products and services of Marg ERP?

Unless we move with time, we will get redundant. Hence, we are moving towards SaaS based products. Over time, I have realised that you have to be on time. If you are too advanced, then your clients or customers will not be ready for your product. On the other hand, you can't afford to be late as well. Indians need hand-holding as they are not able to use the software on their own. We plan to now utilise technologies like Artificial Intelligence, blockchain etc. in the products and launch it when the time is right.

Don't you think deploying technologies like AI, Blockchain, etc would be expensive for your associate SMEs in terms of cost as well as skill development?

Technology is never expensive. We made it expensive or out of reach for certain sections of the industry. We at Marg ERP aim to provide our products to the masses and create volume. We either make expensive software and sell it to a single big company or price it moderately to sell across various medium industries and create an impact. Let me give you an example of how we have involved technology in our product. We have created an app which has the data of all the companies we are connecting with. It has created convenience for us along with our clients. We believe in creating ease of doing business.

"Our competition is mainly with the SMEs in tier-II or tier-III cities like Kanpur, Udaipur or Agra. They have captured the market owing to their personal connections and affordable products and services. We, on the other hand, despite offering upgraded products and services, are unable to capture these markets."

How has been the growth rate of Marg ERP this year?

We have achieved 25 percent growth this year. I must also mention that our attrition rate is also negligible. We offer a conducive environment to our employees, the number of which is around 600 at the moment. We are also planning to expand our team.

What are your plans for the future?

We are expanding our company to the international level. Marg ERP is already functioning in 20 countries including the SAARC countries, some countries in Africa, which we have been operating from India itself. Now we are planning to open offices in Australia, Singapore, Dubai, Kenya, Bangladesh etc. Our concept is the same, which is to support the local companies. We are also working with six states—Uttarakhand, Odisha, Uttar Pradesh, Maharashtra, Madhya Pradesh and Gujarat—under the 'Skill India Mission'. Mentoring is one of the most crucial roles we play. A lot of youth from rural areas come to us whom we mentor well and make them employable.

There is a gap between need and delivery. I have a strong observation that the government is not able to deliver as per the need. Rather, they are delivering first and then urging to create the need. Ideally, it should be the other way around. We have submitted a proposal to the state governments of Bihar, Uttar Pradesh and Rajasthan that envisages teaching the youth as per the market demands. This would address the problem of unemployment to some extent. The state governments have accepted the proposal and employment opportunities will be created. We are working on this project for the next year. With Skill India, we are already working in the states of.

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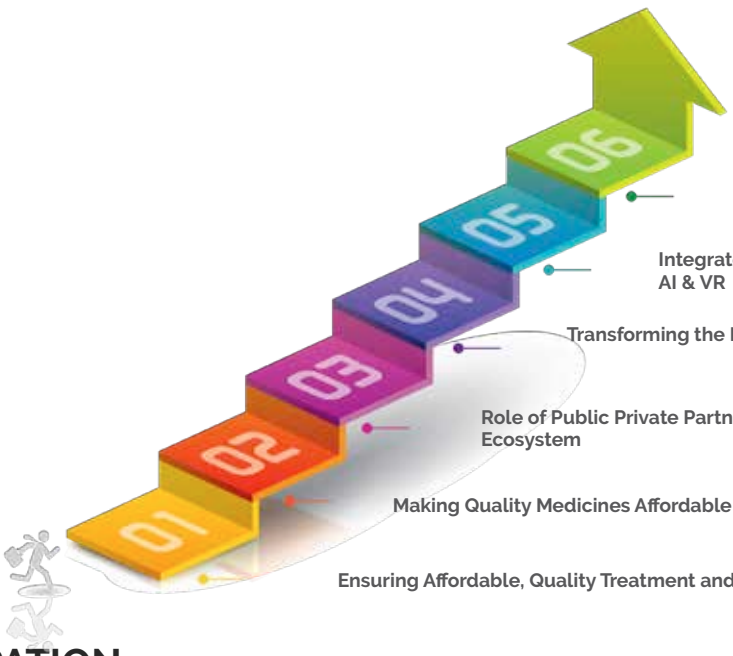

06 Role of Emerging Technology for Building Smart Hospitals

05 Integrated Healthcare Deliver: M- Health, Telemedicine, AI & VR

04 Transforming the Diagnostics and Lab World through Technology

03 Role of Public Private Partnership for Developing Sustainable Healthcare Ecosystem

02 Making Quality Medicines Affordable

01 Ensuring Affordable, Quality Treatment and Meeting up with Patients' Expectations

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Sudhindra Holla
Director, Axis Communications

Axis Communications: Driving Indian Cities & Businesses towards a Connected Future

There are different solutions which go into a smart city tender and surveillance becomes one of the components in the overall agenda. Talking about smart city tenders, as you know, most of the smart cities have already been listed by the government and depending on what a city's needs are the cities float their tenders, says **Sudhindra Holla**, Sales Director, Axis Communications, in conversation with **Rajneesh De** of **Elets News Network (ENN).**

"Earlier, audio was solely analogue, and our customers are looking to transition to IP. Ever since surveillance systems have begun using IoT as a platform, we have able to integrate IP audio into it, which we see a lot of traction for."

What have been the focus areas for Axis Communications in the last one year? Which are the verticals that have witnessed maximum traction and what are the solutions that were offered by Axis?

Over the last year, the focus for Axis has been on government as a segment. Axis has always been very strong in the commercial and enterprise segment, but we see that the government-led consumption is at an overall high level. The sub segments of government are plenty—critical infrastructure, airports, smart cities, and so on—which are our key consumption segments. From a products and solutions standpoint, Axis has typically been a product-centric organisation. Over the last 12 months, we have launched a couple of end-to-end solutions such as the perimeter defender, retail suite and our access control solutions, which can all be integrated with our IP audio solutions. These launches have broadened the Axis offerings that we provide to our customers.

What kinds of organisations have adopted the solutions offered by you?

The Axis Retail suite offers a great deal of solutions to retailers. The retail suite offers analytics which provide queue management solutions and helps understand customer demographics and buying behaviour. Another component of our retail suite is heat mapping, which enables retailers to identify the store's hot spots and dead areas to help with the store's operations. The retail surveillance system can also provide the store owner with comparative studies or quarterly reports of the conversions of visitors into customers. Any retailer who wishes to automate his retail business operations is a potential customer for Axis.

How has been the response from your clients in India?

Adoption is happening in India because more and more people want to move and streamline their processes. People would definitely want these kinds of solutions.

You said the government vertical was Axis Communications' focus segment in the past one year. Could you tell us about certain verticals where adoption had been maximum during the same period?

One example of the government as a segment is Hyderabad city, where there are multiple projects running. One is community surveillance project under which each and every establishment is required to have surveillance and it is connected to a cloud background that can be used by the city administration or the security forces.

There is another project which is being run by the police for city surveillance. Axis has been part of both these at project level. So, Hyderabad is one city where Axis has been part of multiple projects. The enterprise segment is something in which Axis has always been strong and has a global customer base. Being a global company, Axis have got global customers who are present in India too.

City surveillance has been part of most of the smart city projects and in many smart cities actual deployments that have happened were around surveillance. So, how far Axis has been successful in getting into this space and how many smart city projects actually you are part of now?

Well, smart cities go for consolidation of different solutions. Surveillance is just one small component in the entire gamut of solutions. It could be automation of traffic, metering, parking solutions or smart poles or multiple environmental sensors.

There are different solutions which go into a smart city tender and surveillance becomes one of the components in the overall agenda. Talking about smart city tenders, as you know, most of the smart cities have already been listed by the government and depending on what a city's needs are the cities float their tenders. Now if a city wants automation at meter level for their water and electricity consumptions, they've gone ahead and done modernisation in that. Similarly, if a city's need is traffic congestion analysis and related processes, they've gone for surveillance. So, it is not one formula that fits every city.

Looking ahead in terms of products and solutions as well as industries, what are going to be the focus areas for Axis in the next few months?

About a year and a half ago, Axis had acquired a French company called Citilog, which is mainly into highway and city traffic solutions. It provides city administrators with data and helps highway authorities instantly detect discrepancies and determine the course of action. Since Axis has acquired Citilog, the focus is will remain on cities. Cities are looking for solutions to ease and help their administration make better decisions. Another focus segment for Axis is retail – it has been so in the past year and it will continue to be our focus for 2019.

Speaking of solutions that we have our focus on, Axis is a pioneer in introducing IP audio solutions and we are working towards increasing the adoption of it as well. Earlier, audio was solely analogue, and our customers are looking to transition to IP. Ever since surveillance systems have begun using IoT as a platform, we have able to integrate IP audio into it, which we see a lot of traction for. For example, IP audio integrated surveillance systems can be deployed at any premises or perimeters to communicate on ground directly from the command centre – we can automate the announcements as well. Without any human intervention, the moment there is someone trespassing, a pre-recorded announcement could be made or an alarm could go off.

These are some of the solutions which will continue to drive the change in every segment.

How many adoptions have happened here in India? Which are the sectors they belong to?

We've got two-three customers in the last 12 months and these are sizeable ones. The adoption has happened in various sectors including government, manufacturing and education.

What typically will be the average cost of deployment?

The way you would have to look at costing is the total cost of ownership and whether a solution is on an IoT platform or a non-IOT platform. It really is a non-comparable solution and it depends upon the size of the deployment and other such factors.

Shree Harsha
India Marketing Director
Dassault Systemes

Manufacturing and Simulation are two pillars for Dassault Systemes

In this interview with **Elets News Network (ENN)**, **Shree Harsha**, India Marketing Director, Dassault Systemes talks about the initiatives taken by the company over the past year in terms of expansion, acquisition and initiatives. He also shares the industries which are gaining traction and has growth potential.

What are some of the recent projects or plans taken up by Dassault Systemes?

We have six offices across India and we have started operations in our Mumbai office from February this year. The reason to expand in this city is not only is it the finance capital of India but is a business hub as well. We are looking at quite a few new industries such as life sciences, pharma and industrial equipment sector. We have opened our 3D experience executive centre in Chennai. This is an executive launch to have an immersive experience and gives a view on the digitisation techniques in manufacturing.

We have recently acquired quite a lot of companies including a German company which is into electromagnetic interference and electromagnetic compatibility. Simulations are one of the big areas of investment for us. We have acquired another French company, Argosim, they are into requirement simulation. We have entered into two big partnerships as well. In the Design area, we have partnered with a company from Israel. It is a start-up, named Cognata and works on autonomous car and ADAS systems providers. We partnered with them to see how autonomous cars can be validated and tested in the virtual world. In the manufacturing domain, we have partnered with ABB wherein ABB is looking at the hardware side and we are into the software side for the industrials to simulate.

What is the scenario of the 3D experience in India?

From an Indian perspective, our 3D experience adoption is going up. We have seen significant momentum since the last two-and-a-half years. Previously we had three to five automated supplies and we had gone ahead with that and now the number is has reached double-digit. Some of our clients include Royal Enfield, General Aeronautics, Bengaluru, which makes drones. They use our simulation system to design and model their tools. We have seen a good amount of traction

which has led us to invest in infrastructure and human resources.

Tell us something about your new initiatives?

3D Experience Lab is our unique start-up incubation system. We are supporting the start-ups in India with a proper mechanism where they can apply along with sharing the details about the company and idea. This is followed by a fortnightly discussion within the innovation lab to brainstorm on the viability of the projects. It is a cloud based model and it is much cost effective. The initial stages are free of cost and if they are qualified after a certain stage, then there would be a particular cost involved.

What is the ratio of your cloud based customers vis-a-vis the premise based ones?

We have reached a four-digit number of Cloud-based users now as compared to the past few years. The ratio of premise based and cloud based customers would be 1:10 in terms of big users. The big projects are mostly dealt on premise. Within big groups, there are smaller groups which work on advanced product engineering or innovation lab or focus on the futuristic things.

What are the criteria based on which you decide whether a cloud based or premise based interface would be the right fit?

We have a clear categorisation of industries and segments and the applicability of the cloud solutions in those segments. Let me give an example. Conception cities and territories in India is a growing market. Investment on infrastructure is going up and new metro systems, smart city, architecture etc. have a lot of scope for us. That's the market we are targeting which is more attuned towards the cloud as these are more project centric in the investments. Their customers' interests are also project-centric. We analyse whether our customers' business is for a long term cycle or a short term cycle. Secondly, we analyse whether the customer is more project-centric or product-centric. The third category is the type of company. If it is a start-up, whether it is at the nascent stage or received the venture capital or going to the manufacturing phase. These criteria decide whether they will go ahead with cloud or on-premise interface. At present, the industry categories which are more viable for a cloud system include construction cities and territories, industrial equipment, medical devices, life sciences and pharma. On the other hand, the core industries like automotive aerospace and defence have a higher scope in the on premise system.

Which are the top industries where you are witnessing the deployment of digitisation?

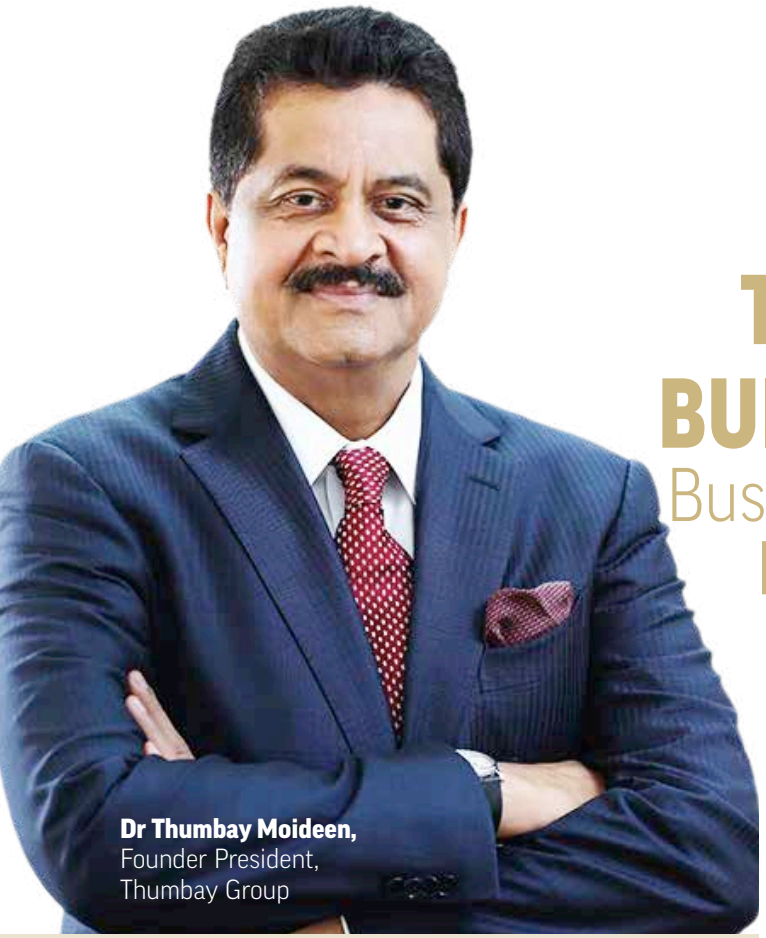
Retail is an area where digitisation has been adopted in a big way. Skill development is another area which has a lot of scope and we are observing significant progress. We are working with state governments of Karnataka and Andhra Pradesh in developing skills for the engineering graduates by creating 3D Experience Innovation Centres. Railways is another area which has a lot of traction. There are constant works on upgradation of tracks, signalling and stations and system validations which have a lot of scope for us.

Where do you see Dassault Systemes in the next couple of years?

We believe that medical devices, pharma and life sciences will be big markets with a lot of potential at a global level. We have done acquisitions around that space. India has a very apt market for that. These are the long term perspectives that we see. In the short term perspective, we see e-vehicles and railways as potential business areas. Industrial equipments is another rising area owing to the amount of positioning that the industrial equipment companies do right now, they don't just sell a product, but sell the total cost of ownership to their customers.

What are the focus initiatives in terms of Indian market that you are looking at?

The primary area is manufacturing, especially the Make in India. According to us, it should be create in India. When you say create instead of make, there is scope generating investment, R&D, design, material research etc. which may lead to increasing the number of patents. This would make India an innovation hub, rather than a manufacturing hub. We believe in manufacturing with a perspective of creating design. In order to move towards this direction and following the best practices from global as well as local companies. The second area is simulation. We believe that the simulation is an area where we have just touched the surface area. Simulation is important as it gives confidence in the quality, design alternatives and has a direct impact on the sustainability. We provide 3D Experience Business Platform. It touches every phase of business of the value chain including product strategy, engineering, manufacturing, sourcing, sales and marketing and after-sales services. The platform provides the foundation and depending upon the customers' choice we provide apps. The platform is not only bridging the company, but also the global R&D centres. The collaborative community is kicking in, which is a knowledge management system. We have to operate across global boundaries.



Dr Thumbay Moideen,
Founder President,
Thumbay Group

THUMBAY GROUP BUILDING FUTURISTIC

Business Model in Education, Healthcare & Research

From being an environmentalist by heart to a crusader who drove Hyderabad to emerge as the leader of recycling initiatives in India, **Hari Chandana Dasari**, Zonal & Additional Commissioner, GHMC has always been an inspiration for many. **Sudheer Goutham** of **Elets News Network (ENN)** in conversation with the iconic IAS officer tries to find out more about her multifaceted personality and career milestones.

Driven by a futuristic medical education model, state-ofthe-art facilities and cuttingedge research, Thumbay intends to significantly bolster healthcare delivery system in the UAE and its adjoining region.

From a single entity company to a globally established player in many prominent sectors including healthcare, Thumbay Group has come a long way

With over 5,000 employees, the Group today operates in multiple brands across 20 sectors including education, healthcare, medical research, diagnostics, retail pharmacy, health communications, retail opticals, wellness, nutrition stores, hospitality, real estate, publishing, technology, media, events, medical tourism, trading, and marketing & distribution.

Dr Thumbay Moideen, the Founder President of this iconic business group, has a vision to have global presence and scaling up business to the tune of 10 X in next few years. In addition to emirates of the UAE, the Group now also boasts of a presence in India and Africa, along with upcoming projects in the Europe.

"We stand apart as we dispense medical services, and are one of the best. We are involved in a whole range of healthcare-related issues comprising treating patients to teaching doctors and indulging in professional research. None can match us. Though we may not be as big as others, we are invincible," says Dr Moideen.

"At Thumbay, we are developing an effective and reliable network of healthcare services ranging from hospitals to clinics, pharmacies and laboratories where patients can repose their trust," Dr Moideen adds.

CARVING NICHE IN HEALTHCARE LANDSCAPE

The Gulf Medical University (GMU) was Thumbay Group's first venture. The need to take care of the clinical training requirements of GMU led the Group to foray into healthcare, giving birth to the first private academic hospital in the country– Thumbay Hospital, Ajman, in 2002.

It was followed by the establishment of a network of academic

hospitals and clinics under the healthcare division, with presence at multiple locations in the Emirates of Dubai, Sharjah, Ajman, Fujairah, Ras Al Khaimah and Umm Al Quwain. A state-of-the-art research facility was also set up at GMU. Education, Healthcare and Research became the core sectors of Thumbay Group. Subsequently, the Group started diversification, mostly venturing into areas related to its core sectors.

Outside the UAE, the Group established an academic hospital, pharmacies, and diagnostic labs as well as an outlet of Blends & Brews Coffee Shoppe in Indian city of Hyderabad. Its educational/healthcare projects are at various stages of completion in various countries across Africa and Europe.

Dr Moideen, who remains abreast of developmental issues, believes sky is his limit. Mentioning about his pet project, he says 'Thumbay Medicity' in Ajman has medical university campus, housing facilities for staff, faculty and students, as well as specialized academic hospitals and other medicare accessories.

Talking about the nature of his role, a modest Dr Moideen says, "I'm just a facilitator. My goal is to see success is achieved and the lofty objectives we have set are met. I have a great team, and they are good leaders in their individual capacity.

We brainstorm on a regular basis, and I try to facilitate things at my end. It goes without saying that the project is close to my heart."

OTHER OBJECTIVES

- The Thumbay academic hospital network will have a total of 1,000 beds in the UAE, 1,500 beds in India, and 750 beds elsewhere in Gulf and Africa by 2023
- Gulf Medical University (GMU) is soon to add engineering and management courses
- Plans are afoot to open three new University Campuses across three countries
- To add 25 labs, 100 pharmacies, 40 Zo & Mo optical outlets (100 Blends & Brews coffee shops, 25 Body & Soul health clubs, 50 Nutri Plus Vita stores)

THUMBAY GROUP TO GO PUBLIC BY 2023

In addition to its new and upcoming healthcare projects across the world, Thumbay Group is keen to acquire existing hospitals, either on long-term lease or on management basis.

THUMBAY MEDICITY: REDEFINING STANDARDS OF EDUCATION, HEALTHCARE, AND RESEARCH

Thumbay Group's success stories in its core sectors of medical education, healthcare, and research has given shape to 'Thumbay Medicity' in the UAE to serve 20,000+ people daily, with advanced facilities.

Built with an investment of over a billion Dirhams, the Medicity is spread over one million square feet and has a built-up area of 1.1 million square feet.

A regional hub of futuristic medical education, state-of-the-art healthcare and cutting-edge research, Thumbay Medicity is one of the latest additions to the UAE's healthcare sector; the first such project in the private sector. Located in Ajman emirate, this Meidcity features advanced technology and global expertise. It will be officially inaugurated soon.

Thumbay Medicity houses the Gulf Medical University, Thumbay University Hospital, Thumbay Dental Hospital and Thumbay Physical Therapy and Rehabilitation Hospital and outlets of Thumbay Pharmacy and Thumbay Labs, in addition to Body & Soul Health Club and Spa, Thumbay Food Court, Terrace Restaurant, Blends & Brews Coffee Shoppe, and the Thumbay Housing Project to accommodate 2,500 staff and students.

Gulf Medical University– The biggest private medical university in the region with 6 colleges and 26 accredited programmes: Ranked among the top 50 medical universities in the region, Gulf Medical University (GMU) boasts of advanced training/teaching facilities, international collaborations with

GULF MEDICAL UNIVERSITY (GMU)
A Vision for Distinction in Medical World

Be it State-of-the-art training/teaching facilities, international collaborations and recognitions, a full-fledged academic system, and newly launched programmes and colleges, have consolidated GMU's stature and fame as the most sought after medical university in the region for cutting-edge medical education.

Gulf Medical University – Ajman, one of the most popular medical education destinations in the Gulf region, has emerged as the biggest private medical university in the region with addition of new programmes, prestigious regional and international collaborations, multiple global accreditations, increasing student numbers and its transformation into the region's only private Academic Health System.

BACHELOR S & MASTERS PROGRAMMES

The Gulf Medical University comprises six colleges, offering 26 accredited programmes. The undergraduate programmes include Bachelor of Medicine and Bachelor of Surgery, Doctor of Dental Medicine, Doctor of Pharmacy, Bachelor of Physiotherapy, Bachelor of Science in Healthcare Management and Economics, Associate Degree in PreClinical Sciences, Bachelor of Biomedical Sciences, Bachelor of Science – Medical Laboratory Sciences, Bachelor of Science – Medical Imaging Sciences, Bachelor of Science – AnesthesiaTechnology and Bachelor of Science in Nursing.

Masters programmes include: Joint Masters in Health Professions Education with FAIMER, US and CenMEDIC, UK; Master in Public Health in collaboration with The University of Arizona, United States; Executive Master in Healthcare Management and Economics; Master in Clinical Pharmacy with Virginia Commonwealth University, United States & Clevel and Clinic Abu Dhabi; Master of Dental Surgery (Endodontics); Master of Dental Surgery (Periodontics); Master of Physical Therapy; and Master in Environmental Health & Toxicology.

INTERNATIONAL COLLABORATIONS

GMU enjoys a robust collaboration with 60+ prestigious universities around the world, such as the University of Arizona, Virginia Commonwealth University, Medical College of Wiscons in Milwaukee -USA, University of Saint Joseph School of Pharmacy in Connecticut, German Heidelberg University, American University in Cairo, University of Ghana, Medical University of Lublin, Tokyo Medical & Dental University, etc., as well as research institutes such as the Gustave Rossi Cancer Research Institute – France.

ADVANCED TEACHING / TRAINING TECHNOLOGIES

An important aspect that differentiates GMU is its use of the latest technologies in teaching and training students across all majors, to ensure their workplace readiness once they graduate from these institutes. One of the most prominent uses of technology in teaching is the Virtual Patient Learning (VPL), a simulation programme that enables medical students to diagnose, treat and observe a patient's progress, based on Artificial Intelligence technology.

more than 60 partner universities worldwide and a full-fledged academic health system.

Thumbay University Hospital– The biggest private academic hospital in the region: Equipped with the state-ofthe-art facilities, the 500-bed hospital offers quaternary care facilities through 120 clinics, a first-of-its-kind special robotic pharmacy and a radiology department with PET-CT scan.

Thumbay Dental Hospital– The biggest academic dental hospital in the region: Attached to the College of Dentistry, Gulf Medical University (GMU), the hospital has 60 dental chairs. Specialisations include General Dentistry, Endodontics, Paedodontics, Periodontics, Invisalign, Veneers & Lumineers, Dentures, Crowns and Bridges, Simple & Complicated Extractions and Hollywood Smile and a dedicated Central Sterile Services Department (CSSD) for infection control. The upcoming facilities include stem cell treatment for dental diseases, and an advanced 'DentalStem Cell Bank'.

Thumbay Physical Therapy and Rehabilitation Hospital – The biggest state-of-the-art rehabilitation hospital in the country: It features advanced technology like Zero-gravity Treadmill, Wearable Technologies, Hydrotherapy Pool, Neuropsychology, Advanced Robotics, Hi-Performance Training Gym, Driving Simulation, Full Body Cryotherapy Chamber, Applied Virtual Reality, Speech Therapy, etc. Operating in collaboration with internationally renowned Villa Beretta Rehabilitation Center, Italy, it is attached to Thumbay University Hospital, with 50 dedicated beds. It has a unique 'Therapeutic Garden', for earliest recovery in a holistic manner.

Thumbay Research Institute for Precision Medicine– Leading research in cancer biology and immunology: In collaboration

ACADEMIC HEALTH SYSTEM

The Gulf Medical University Academic Health System (GMUAHS) links healthcare, medical education and research functions on its own. Part of GMUAHS are the Thumbay Hospitals and Thumbay Clinics operated by the healthcare division of Thumbay Group at multiple locations in Dubai, Ajman, Sharjah, Fujairah, Ras Al Khaimah and Umm Al Quwain, as well Thumbay Hospital – Hyderabad, India.

The latest additions to the GMU Academic Health System includes Thumbay Dental Hospital – the first private dental hospital in the country and the largest academic dental hospital in the Middle East region's private sector, as well as Thumbay Physical Therapy and Rehabilitation Hospital – the biggest and most advanced hospital for physical therapy and rehabilitation, the recent additions to Thumbay Group's academic hospitals.

RESEARCH

With research being a vital strategic aspect of GMUAHS, the Thumbay Research Institute for Precision Medicine leads research in the field of cancer biology and immunology, with international collaborations with France, Poland and South Korea. In terms of advancing healthcare practices in the UAE and globally, GMU has launched three medical researches: Cancer Immunology and experimental oncology; Tumor genetic instability and immunogenicity; and biomarkers and functional genomics.

FUTURISTIC MEDICAL EDUCATION

"The Gulf Medical University is the medical university of the future," says Prof Hossam Hamdy, the Chancellor of GMU. "It aspires to transform into a research-based university by 2025."

GMU attracts students from across the globe. The university has a strength of approximately 2,000 students, from over 80 countries.

With each passing year, the student strength is soaring. The well-organised alumni network has professionals, pursuing successful medical and healthcare careers around the world. Further, the Gulf Medical University's enhancing stature is evident from the regional and international recognitions it keeps receiving.

In 2017, GMU featured among top 50 medical universities ranking in the Middle East, and bagged Gold at the prestigious Sheikh Khalifa Excellence Awards, 2018. The university has also secured top positions in e-learning regionally and globally at the Wharton QS-Stars Reimagine Education Conference & Awards 2018 in the USA, in addition to obtaining 5-stars in teaching and community engagement by QS.

The university also received the prestigious Dubai Quality Appreciation Award this year, for the 2017 assessment cycle.

With such an inspiring list of features bespeaking the university's significance, the Gulf Medical University (GMU) is today a major charm all around. Today, it witnesses an unprecedented demand for admissions, drawing top-class students from different parts of the world. All wish to pursue futuristic medical education courses in GMU's colleges and institutes.

with France, Poland and South Korea, the institute has three ongoing research programmes including cancer immunology and experimental oncology; tumor genetic instability and immunogenicity; and biomarkers and functional genomics.

Thumbay Labs– The largest network of CAP-accredited private diagnostic labs in the region with international presence: Thumbay Medicity houses the central reference lab of Thumbay Labs, with the state-of-the-art facilities for neonatal screening, next generation sequencing and genomics.

Thumbay Pharmacy– One of the fastest-growing retail pharmacy chains in the UAE with international presence: A full-fledged Thumbay Pharmacy outlet is operational at Thumbay Medicity. The pharmacy chain has tied up with Gulf Medical University (GMU) for training and employment of the students of the College of Pharmacy, GMU.

According to Dr Moideen, Thumbay Medicity, with an investment of more than a billion UAE Dirhams (over 18.77 billion Indian rupees), is the result of our continued efforts to bring the best of healthcare to the region, making it a hub of world class healthcare with state-of-the-art technology, experienced medical practitioners and superior facilities.

"As one of the most sophisticated medical cities in the region, Thumbay Medicity offers end-to-end tertiary and quaternary healthcare services to patients, with an improved access by way of strategic location and affordability," he says.

With a total area of 1 million sq. ft. and built-up area of 1.2 million sq.ft., Thumbay Medicity will serve 20,000+ people daily.

SEQURETEK - SIMPLIFYING CYBERSECURITY FOR BUSINESSES

With the expansion of technology and magnitude of complexity, the risk of cybersecurity breach increases, says **Pankit Desai**, Co-founder and CEO of Sequretek. In this interview with **Elets News Network (ENN),** he talks about the looming threat of cyberattacks and the simple solutions provided by Sequretek to mitigate the risk.

Pankit Desai
Co-founder and CEO of Sequretek

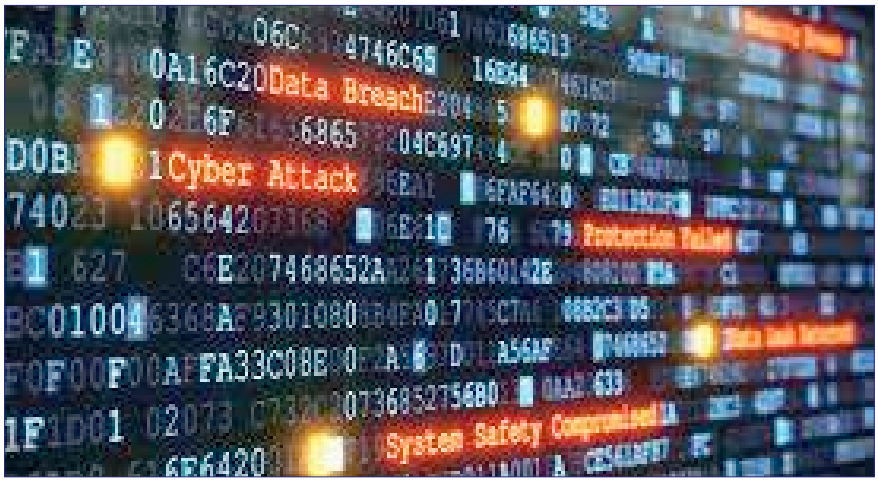
How has the concept of cybersecurity changed over the years? What has been Sequretek's role in it?

Most of the industries start with a problem statement and later commoditise and simplify it. Security has remained elite which has created a problem in understanding the areas. India is a prime target of cybersecurity today. The smaller companies are also not spared from the data breach. While starting the company, our objective was to simplify the way of security solutions offered to the businesses. Security is always linked to how much technology the companies use. The higher the complexity of the technology, higher risk is involved.

The situation is like a double edged sword as companies cannot work devoid of technology and with that a higher level of cybersecurity risk is involved. Security becomes the ancillary to the answer than to become the main answer. When we started the company, we tried to explore if there is a way to simplify the technology consumption methods. That was the ethos of what the company wanted to be—to simplify security. When we started the company, the concept of cybersecurity was comparatively new and hence we faced the difficulty to communicate our concept to the potential clients.

How has the industry perception on the cybersecurity changed over the years?

The awareness has increased over the years. There has been widespread media coverage and reports on how the industry is being susceptible towards cyberattacks. Hence, companies have increased their investment in cybersecurity manifolds. The CEOs are getting involved instead of just designating a technology professional, which was the earlier scenario. This has eased our endeavours.



"When we started the company, we tried to explore if there is a way to simplify the way technology is consumed. That was the ethos of what the company wanted to be—to simplify security."

What are the factors that induce cyberthreats in a system?

This depends on what part of the company has the ability to create maximum impact. People, devices, value chains are most likely to change and churn the system. Along with these comes a certain risk. The people in the front desk are replaced with technology and the technology location is shifting from devices to clouds. A lot of technology has come in the front end to ensure that dependency on people goes away.

In spite of the technological advancements, there will always be people in the organisations as not all functions can be dealt with technology. These individuals are given access to technology. These accesses are further linked to the individuals' roles and locations. In case there is a change in the role, companies face a significant challenge in ensuring that the role and the individual are always aligned. There has to be a mechanism to recognise the churn at the source. The companies have to check the level or magnitude of technological access an employee is given and must ensure to terminate the same once s/he leaves the organisation to avoid potential risks. There should be checks and balances in terms of providing access to the individual members.

Every employee would need a certain asset to interact with the company. It could either be a desktop or a laptop or a tablet. That form is also undergoing a significant transformation, in terms of hardware or software. Earlier, these systems were more homogenous in nature, but now these are getting more heterogeneous and bringing in more challenges with it.

What are the classifications and sources of the potential threats and what are the ways to curb them?

The threats are classified into various areas and sources. These can either generate from devices or external or internal networks to name a few. Earlier, when the external threats were identified, the approach was to observe a signature pattern and put an antidote. The legacy antivirus technologies evolved from signature behaviour. After that, there were advanced persistent threats, which were not visible earlier, and were orchestrated and had multi-layer attack patterns. Techniques like sandboxing and Endpoint Detection and Response (EDR) technologies were evolved. Technologies like Artificial Intelligence and Machine Learning came handy in developing these cybersecurity systems.

Enterprise visibility concept stems from the ability to look at how organisations have morphed themselves into dynamic entities where ingress and egress points have become multifold. Take for example, banks. Earlier, the customers had to visit the bank for transactions or other related purposes. Then came the internet banking, followed by mobile banking, UPI etc. where the boundaries are completely getting morphed. While the boundaries are diminishing, the responsibility to provide security is increasing manifold.

One of the challenges in this system is the manual intervention which causes a delay in identifying as well as curbing the threats. The industry is moving towards an automated response or orchestrated response. The threat intelligence engine generates a threat report along with a set of fixes. It creates a ticket in the ITSM tool. It will have an approval workflow. Today, if I see that a particular behaviour is stopped, I will assume that some action has been taken against it, which is an implicit assumption.

How does the enterprise visibility system work?

"Enterprise visibility concept stems from the ability to look at how organisations have morphed themselves into dynamic entities where ingress and egress points have become multifold."

In the enterprise visibility process, we look at four areas which are user behaviour, entity behaviour, threat intelligence and malware intelligence. Each area has defined functionalities. The environment and threats are dynamic because of which one cannot write the rules upfront. For this, we develop Managed Detection and Response (MDR). It is the ability to collect information and run the algorithm to detect threats.

What are your upcoming plans for Sequretek?

We have a bunch of things in our pipeline in terms of automobile security, IoT security which would be functional in a year.

We have started operations in our US office with five people. We are looking to scale that activity. Beyond this, we are also building an ecosystem effect to put across the word. A Pennsylvania based company does our product benchmarking. We have also announced a prototype partnership with Intel. We are working towards making hardware relevant in the security system as today security is all about software play. Generally, security and efficiency are an oxymoron. We are trying to break it and create an efficient product.

Who are your flagship clients and customers?

We work mostly in the BFSI sector. Some of the largest banks and insurance companies have used our products and services. Manufacturing companies, petrochemical companies are also in our list of clientele. We have around 45 unique customers and overall it is around 60.

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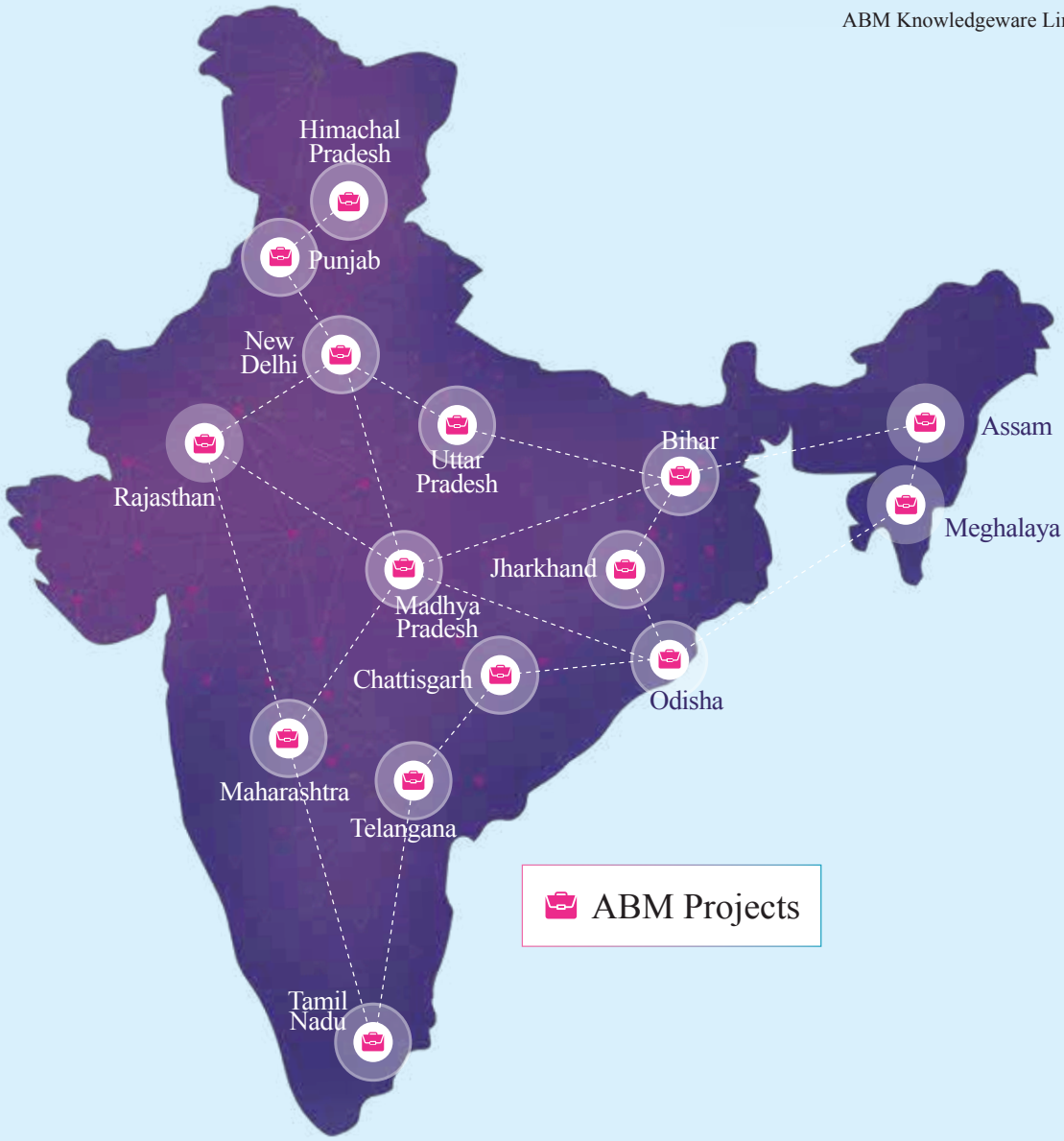

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