Government Transf⊙rmation Forum 2009

27-28 July, 2009 Taj Mahal Hotel Mansingh Road, New Delhi

TRANSFORMING
Public Services for
NEXT GENERATION

Report and Recommendations of Government Transformation Forum 2009

"Transforming Public Services – e-Governance and Tax Reforms"

Vikas Kanungo
The Society for Promotion of e-Governance

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Accenture Public Services

Executive summary

Over the past few years, governments in developing countries have formulated National e-Governance strategies and have been actively pursuing the deployment of various projects under these plans. Many of these projects have been successful in enhancing efficiency and reducing corruption; while there have been few projects that also warranted amendments in the processes. The governments of developing and developed countries now have rich experiences and learning practices which can be shared regionally and globally to further enhance the success of e-Governance projects. The advent of new technologies, especially mobile and wireless technologies and the sheer level of penetration of mobile devices at the rural level, there is a strong need to re-look at the national e-Governance strategies in the light of new tools available. This requires a transformation in the way government agencies have been strategizing their e-Governance plans as well as capacity building of the e-Government practitioners on cloud computing, mobile governance and other transformative tools.

However, the task of transforming governments is not easy. While technology alone cannot transform governments, it is a commonplace knowledge that technologies have a great role to play in the march towards next generation of services for the citizens. In the fast paced world of technology, new approaches have constantly been extending the boundaries of what is possible. The pace of change is evidenced by the fact that terms like SOA, WOA, community sourcing, cloud computing, software as a service, mobile government and Web 2.0 that seem almost common place today, were not in the lexicon only a few years ago. It would therefore be valuable to step back and take a view of where the practice of government is heading and what mid term corrections are required in the view of emerging technologies.

 Government Transformation Forum 2009 was hosted on July 27-28, 2009 at Hotel Taj Palace, New Delhi by The Society for Promotion of e-Governance with a view to enhance collaboration and exchange of learning practices among the industry, academia, civil society organizations and the public sector on the latest developments that have the potential of impacting the delivery of inclusive government services to the citizens in rural as well as urban areas. The conference was supported by Accenture Public Services as the Platinum sponsor and Bharti Airtel as the associate sponsor. Honorable Minister of state Shri Sachin Pilot inaugurated the conference and shared the government agenda with the participants during the inaugural session of the conference. The organizers and the sponsors attempted

to keep the stakeholders abreast of the latest trends and cutting edge technologies so that the e-Government programs are designed keeping in view the needs of the next generation citizens. Special tracks on Cloud Computing, Web 2.0 technologies, Mobile Transformation Initiatives, e-Revenue Administration were some of the highlights of Government Transformation Forum 2009. The conference was well received by all sections of the stakeholders with the participants from Department of Information Technology, Government of India, Department of Income Tax, Government of India, Department of Custom and Excise, Department of Commercial Taxes, Department of Technical and Higher Education, Government of Delhi, IIT Delhi, UNESCO, USAID, The World Bank, IGNOU and the industry representatives taking part in two day deliberations.

Following key issues were taken up for deliberations during the two day conference:

- How is mobile, web 2.0, cloud computing and other new media technologies impacting the e-Governance strategies globally? What lessons can India learn from these developments? The opportunities for transforming the government services for the next generation were discussed.

- The government of India has recently announced implementation of GST nation-wide from April 2010. The conference had dedicated sessions where the global experts from Accenture shared their Learnings of implementing similar systems in other countries.

- The policy makers from Department of Income Tax, Department of Customs and excise and department of commercial taxes shared their Learnings and the current state of affairs of e-Governance deployment in the country with gthe global experts and stakeholders from India.

- Department of Information Technologies, Government of India shared the state of affair of NeGP projects and collected feedback from participants on the way forward.

65 invited participants consisting of senior policy makers from government of India, The World Bank, UNESCO, USAID, domain experts from prominent academic organizations, civil society organizations, and industry took part in the deliberations that for two days.

The success of the Government Transformation Forum 2009 is illustrated by the fact that it clearly identified and articulated each of these overarching issues as well as many others of

importance. GTF became, already on its first day, a forum for the discussion and sharing of practical ideas, lessons and solutions among all the participants.

Keynote presentations and Inaugural Address

Inaugural Address

Shri Sachin Pilot
Honorable Minister of State, Ministry of Communications and Information Technologies, Government of India

Keynote Speakers

Mr. Krishna Giri, Managing Director Asia Pacific, Accenture Public Services

Mr. G. Narendra Kumar, Secretary Technical and Higher Education, Government of NCT of Delhi

Ms. Iskra Panevska, Communications and Information Advisor for South Asia, UNESCO

Mr. Vikas Kanungo Chairman, The Society for Promotion of e-Governance, India

Inaugural Address by Shri Sachin Pilot, Minister of State for Information and Communications Technologies, Government of India

The honorable minister started the address by congratulating the organizers for organizing the timely discussion on the key issues related to acceleration of e-Governance deployment in the country. He informed the participants that over past three years, Government of India had provided special impetus for e-Governance through the National e-Governance Plan (NeGP). He reiterated the government's mission of providing special emphasis on the needs of the common man by making access to the government services less cumbersome, transparent and efficient with equal importance given to services rural as well as urban population. He also informed the audience that with the availability of access to information technologies for the rural citizens through mobile phones, the definition of common man is changing fast. Given the developments globally and India's need to be at par with the global developments in provisioning state of the art public services, the minister stressed that even though the speed of deployment of e-Governance is of important, the real essence lies in ensuring that we are moving in the right direction. The speed of deployment can vary based upon the impact of the programs under NeGP, it is important that the direction is not lost in order to haste the deployment; commented the honorable minister. He also shared that deployment of MMPs under NeGP required management of cultural change capacity building and overcoming resistance from the sections of the government officers who are not willing to relinquish the powers they have in the present manual system. Some of the key highlights of the National e-Governance program that the honorable minister shared with the audience were:

- INR 23,000 crores has been committed to deployment of National e-Governance program by the cabinet.

- 100,000 Common Service Centers are deployment in the rural areas to ensure the delivery of public services to the rural citizens. The efforts to ensure concurrent alignment of objectives among the central government agencies, line ministries and state governments are on to make CSCs the epicenter of activities for delivery of public services.

- The positive change that e-Governance can bring will benefit the people at the bottom of the pyramid the most. Our aim is that e-Governance does no longer remain a tool in the hands of elite only, but reaches out to the poorest. CDAC has done commendable work in developing software in all the regional languages of India. This will go a long way in enabling people buy-in of e-Governance services

- There is need to research, develop and invest in building India's competence in the hardware manufacturing sector which is going to generate a demand of around 300 billion USD by 2015 , while simultaneously making all the efforts to retain our competitive edge in the software and services segment.

Finally, the minister invited the participants at Government Transformation Forum 2009 to provide the inputs to the ministry in achieving the mentioned goals emphasizing that the government was well aware of the need of collaborating with all sections of stakeholders for success of National e-Governance Plan (NeGP).

Highlights from the Keynote Presentations:

Mr. Krishna Giri, Managing Director Asia Pacific, Accenture Public Services

Mr. Krishna Giri started his address by acknowledging the fact that India has grown by leaps and bounds in past few years and a lots of transformation has happened in the way government interacts with citizens and businesses. He emphasized that there was a need to fast pace the deployment of state of the art e-Governance services and it was possible to leap- frog by learning about the best practice models other countries. This transformation, he commented will require careful strategy building, capacity development and change management. According to his, the development of ICT infrastructure and deployment of innovative applications will play of key role in ensuring successful deployment of GST from 2010 as announced by government of India. He expressed willingness to share the knowledge gained by multi country deployments of GST by his company to help the government agencies achieve their aim. A book titled "Public Services Value", was presented to the honorable minister as well as all the participants of the conference.

Mr. G. Narendra Kumar, Secretary, technical and Higher Education, Government of NCT of Delhi

Mr. Narendra Kumar shared his experiences of serving as the IT secretary in Government of Delhi as well as his current assignment as the Secretary for technical and higher Education with Delhi Government. He opined that the government opinion has changed in recent years towards more active participation in increased number of sectors after the recent global financial crisis. Some of the key highlights of his key note address were:

- Recent global financial has provided an opportunity to the Indian IT companies to focus domestically and use their global experiences in developing applications for the domestic market. Government can prove to be one of the major buyers and Indian It players should work closely with the government to development e-Governance applications.

- The governments in India have succeeded in achieving the goal of information dissemination through their e-Governance initiatives. However the actualization of the services has not yer been achieved. The nest phase of operations should focus on end to end delivery of services to citizens of rural areas in addition to dissemination of information.

- A series of e-Governance initiatives are planned for the higher and technical education domain staring with an initiative to link all the IITs and IIMs along with key educational institutes through a high capacity broadband network.

- Most of the states that have succeeded in advancing with e-Governance initiatives have also shown higher economic growth thus demonstrating that successful deployment of e-Governance initiatives leads to higher economic growth.

- Convergence of mobile devices as the computing will pave the way for next wave of innovation in delivering government services to the common man.

Mr. G. Narendra Kumar concluded with the statement that India is poised at the take off stage because of the four key e-Governance initiatives which are Common Service Centers, High Speed connectivity among the educational institutes, Mobile Telephony and the National ID card project which would ensure the effective interaction between the citizens and the government as well as among the citizens themselves.

Ms. Iskra Panevska, Communications and Information Advisor for South Asia, UNESCO

Ms. Panevska focused on the prospective of e-Governance in International context which according to her was enhancing the connection between Internet Technologies and democratic renewal through e-Governance programs. She informed that the mandate of UNESCO was to work closely with the country governments to ensure that the stakeholder needs, especially of the disadvantaged and the marginalized communities were adequately addressed while formulating strategies on e-Governance. She stressed on the need for ensuring universal access to information and education for all sections of the society. She agreed that innovative use ICTs were of the central value in achieving the Millennium Development Goals and for the fulfillment of the governments' commitment to service the needs of the disadvantaged and marginalized communities. She also informed the participants of UNESCO initiative Solution Exchange that was aimed at gathering the voices of community and communicating them to the policy makers. She also emphasized that Internet was not suited to serve the needs of all sections of the society; hence the potential of mobile and wireless technologies which have a huge penetration in the rural areas should be utilized for the next generation of e-Governance initiatives. She concluded her address with the comment that in order to realize the true benefits from the e-Governance initiatives, a bottom up approach rather than a top down approach is the key.

Session I: e-Governance in India – The Journey so far and the Road Ahead (Stakeholders' Perspective)

Session Chair & Moderator

Mr. Prakash Kumar
Director Public Sector, Cisco

Speakers

Mr. Ashis Sanyal,
Sr. Director e-Governance
Department of IT, MoCIT,
Government of India

Mr. S. P. Singh, Sr. Director
e-Governance, Department
of IT, MoCIT, Government of
India

Mr. Mehul Patel, Accenture
Research

Prof. K. Subramanian,
Advisor to CAG and Director
IGNOU

Dr. Basheerhamad
Shadrach, Sr. Program
Officer, IDRC

Mr. Prakash Kumar, Director Public Sector, CISCO

Mr. Prakash Kumar has been the Joint Secretary with Minsitry of Science and Technology, Government of India as well as Secretary IT, Government of Delhi before joining Cisco. He shared his experiences of implementing e-Governance for government as well as his learnings from working with the corporate sector. He briefed the conference participants on India's e-governance journey from 80's when all the district headquarters of government were connected by National Informatics Centre through NICnet to 90s when the applications for various state government agencies were deployed for computerizing manual operations to the 21st century conceptualization and roll out of USD 7 billion National e-Governance Plan (NeGP) with a mission to make the public services available at the door steps of the citizens, especially in rural India. He shared how the e-Governance services have partially succeeded in reducing the red tape and corruption in delivering government benefits to the end users. He informed that many of the Mission Mode Projects (MMPs) such as MCA21, Income Tax, Customs and Excise, Pensions, DGFT, Registration of Vehicles, Passports, Land Records Computerization etc. are now fully functional in many states and have started delivering positive results. Some of the key highlights of his address were:

- The Impact Assessment study conducted by DIT in association with Indian Institute of Management, Ahmedabad (IIMA) has shown encouraging results though more comprehensive impact assessment studies need to be carried out. The e-Government Assessment Framework created by DIT (EIF 2.0) needs to be applied to the projects with a large sample base for measuring the impact of initiatives under NeGP.

- One of the issues that he highlighted was that deployment of e-Governance does not find enough space in the debates in parliament as well in national media.

- There is too much emphasis on procurement of hardware and software as opposed to better project management methodologies. The citizen interface with government has not been improved to the desired level. Even though there are 40,000 Common Service Centers in place in various states, not enough applications have been developed to utilize these CSCs for delivery of public services.

- The mobile / wireless technologies, web 2.0 and new media technologies have a very great potential to engage citizens in policy making. The potential of these is not currently leveraged by the government agencies to the extend it is done in some of the developed countries. The web 2.0 and social media technologies are being used in many countries for monitoring citizen preferences, carrying out stakeholder consultation. Crowd sourcing of the policy making process requires a mind set change which has currently not picked up in India.

- Finally, e-Governance can succeed only if governance is improved. Hence need for improving governance is urgently required. If the e-Governance is implemented without process reforms, it will

only magnify the glaring gaps that exist in delivery of public services to the most disadvantaged groups of the society.

Mr. Ashis Sanyal, Senior Director e-Governance, Department of IT, MOCIT, Government of India

Mr. Ashis Sanyal has been involved in implementing the key infrastructure projects under the NeGP and is one of the senior-most members of the team overseeing the implementation of various Mission Mode Projects. He provided the background on the government efforts. In his address, Mr. Sanyal mentioned that contrary to the belief, the government was actively working to upgrade the e-Governance deployment strategies and a serious effort to utilize the potential of mobile, web 2.0 is already under consideration by DIT. He informed the participants that National e-Governance Plan has the support from the highest level in government of India. The sighted the example of the full cabinet approval of NeGP along with all the budget requirements by government. Some of the key highlights of his presentation were:

- In the presidential address of August 15, 2009, the number of Common Service Centres has been increased from 100,000 to 240,000 by the President of India. It is envisaged that each Panchayat will have a CSC which will be the epicenter for delivery of government services as well as government citizen interaction.

- Selection of the mission mode projects under NeGP has been made based upon the citizen centricity of the projects. The Apex body for NeGP implementation is headed by the Prime Minister of the country.

- There is very strong emphasis on service levels in NeGP. The clear focus is on improving service levels and not on procurement of hardware and software. The success of MCA 21 project is evidence of the government priorities on service levels. A separate National e-Governance Division (NeGD) has already been created as a separate entity whose sole focus will be on aiding and monitoring the progress of deployment of MMPs under NeGP.

- It is being ensured that the PPPs are not one sided agreements with due emphasis on sharing the risks and rewards among the government and private players. The website of Department of IT is continuously updated with the current status of infrastructure projects like SWAN, SDC and CSC put on the website every fortnight. CSCs in Himachal Pradesh, Asam, Bihar, Meghalaya and Tamil Nadu are already in place. The people are being made aware about CSC programs and NeGP through advertisements in national dailies as well as through electronic media.

- The number of services available through CSC is continuously increasing and the regulatory reforms are being carried out in consultation with line ministries and state governments.

Mr. S.P. Singh, Senior Director e-Governance, Department of IT, MOCIT, Govt. of India

Mr. S.P. Singh is one of the foremost members of NeGP team of DIT and is entrusted with the charge of many mission mode projects including State Data Centers, e-Procurement, capacity building, industry interaction and international cooperation. . He emphasized the DIT was involved in proactive interaction with various line ministries on implementing various mission mode projects. He agreed that the transformation in government takes a little longer time compared to corporate entities. He said the DIT has worked for a long time to conceptualize each component of NeGP as extensive and inclusive stakeholder consultations were carried out by the government. The key highlights of his presentation were:

- State Data Centre project is well on track and by the end of 2010, each state will have their Data Centers up and running. He ensured that once SDCs are in place, the developments of applications for public services will accelerate at a much faster pace. He also informed the delegates that the aspiration levels were different in different states and line ministries which has resulted in some states being ahead in implementation than the others.

- The awareness generation is a key factor for citizen buy-in of e-Governance projects. Awareness and communication is a key part of NeGP implementation strategy.

- NeGP progress is very tightly monitored at the highest level in central as well as state governments. Feedback from the monitoring is built into the course correction of MMPs.

He informed the audiences that no country in the world has attempted to implement such a big program in an integrated manner and NeGP has already become a model for many countries for formulating their strategies on e-Governance.

Prof. K. Subramanian, Advisor to CAG and Director Indira Gandhi National Open University

Prof. Subramanian has been the Deputy Director General of National Informatics Centre of Government of India and advisor to Comptroller and Auditor General of India. He has been part of many key projects and a renowned expert of security. He shared his learnings from implementation of numerous IT and e-Governance projects for NIC and CAG. Some of the key points he shared were:

- Post implementation correction of ICT projects can be much more expensive than the mid term correction. Hence reviewing the project progress at each stage is necessary. Emphasis on the management aspect of technology is more important than the technology itself.

- While planning e-Governance projects, national development has to be the real focus and ICT should be used for integration of silos that exist within government departments.

- The need of the hour is restructuring from the hierarchical structure of governance to the flat structure. Project management and governance is an important aspect for ensuring success and timely implementation of NeGP.

- Sustainability should be the key focus of PPPs though the benefit of the citizens is supreme priority.

- Committed leadership is there in India. Affordable and robust technology options need to be looked into for the rural projects. Skill balancing in education and effective resource utilization is important.

Mr. Mehul Patel, Accentur Research

Mr. Mehul Patel started his address by asking whether "m" is the new "e" in road ahead for e-Governance projects in India and other developing countries. He explained the three layers of Government – technology – Citizens for e-Governance project deployment as well as four layers of technology deployment viz Governance content – infrastructure – connectivity – user device. He emphasized that the citizen profile in India is highly diverse thus necessitating multi-pronged strategies for deployment of e-Governance in the country. He shared his learnings from the vast research work

that Accenture has been doing globally on accessibility and affordability, usability and cost effectiveness for success of e-Government strategies. Some of the key highlights from his presentation were:

- Mobility is the key priority of majority users of government services as they aspire to access the government on anytime/anywhere basis. Based upon the penetration levels, mobile is the key device the citizens are likely to use for interacting with government and across services.

- Localization of content and creation of device sensitive interfaces will drive the future e-Governance applications

- e-Governance solutions will need to be scalable, reliable and cost effective with consideration of green solutions especially for the rural areas.

- Factor the fragmented connectivity solutions and leverage mobile as the key connectivity type as more and more citizens will rely on them. Right mix of user devices based upon the citizen profiles will ensure better buy-in of government initiatives. The governments should enable citizens to use the devices they possess rather than prescribing devices.

Mr. Patel also dwelled upon the challenges that the governments and the implementers will have to overcome for ensuring delivery of inclusive public services. Some of them are as mentioned below:

- Diverse citizen profile will impact the cost and speed of deployment of e-Governance solutions.

- It is tough to create applications that will run on diverse devices. No single technology can address all the requirements. Road ahead for e-Governance is exciting as well as challenging. Heavy and deep customization will be required for future government applications.

Dr. Basheerhamad Shadrach, Senior Program Officer, IDRC

Dr. Shadrach has been associated with various innovative national development projects for past 15 years and is one of the renowned development professionals. He was instrumental in starting Lifelines India and Mission 2007 projects that have resulted into the CSC projects. He currently heads the Telecentre.org, a global telecentre initiative by IDRC. He informed the participants that the first nationwide consultation on reaching the un-reached was initiated under the civil society banner when IDRC sponsored M.S. Swami Nathan Research foundation on Mission 2007. The initiative paved the way for many successive government programs on rural development. The key highlights from Dr. Shadrach's presentation were:

- As per the view of the civil society, the progress under the National e-Gov ernance Program (NeGP) has been experimental so far even though some success stories and early breakthroughs have been there.

- The ideas of PPP for e-Governance projects have been tried and the learnings from them as well as the feedback from the stakeholders are now available with the government. These learnings need to be analyzed and used for the future e-Governance initiatives.

- Since the inception of NeGP in 2003, a great technology leapfrogging has been witnessed, the most prominent of them being the leapfrogging in the mobile and wireless technologies. These changes need to be incorporated in the original strategy for NeGP so that the solutions envidaged are in tune with the technological developments.

- New governance models are the pre-requisite for e-Governance projects to succeed. Integration of the CSC and PRI programs is a welcome idea as announced by the President of India recently. He informed that the civil society was happy with the programs for rural and urban development converge under the Bharat Nirnman initiative of Indian government.

- Mobility only enlarges the scope of e-Governance rather than substitute it. Public access computing will continue to coexist as is witnessed in many parts of the world. According to him, no single models should be considered to be panacea to all the problems and the focus should be on convergence of various technological options available.

- New models of service provision will emerge in future. Capabilities of web 2.0 , mobile and new media technologies has not been explored by the government to the extent it is desirable. Evidence based governance will happen through active feedback from citizens through social media technologies in future.

He concluded his address with the view that scaling up of the successful initiatives will be the key to the success of NeGP for next five years with adequate emphasis on the socially relevant projects. The citizen participation in policy formulation can be enhanced by innovative use of CSCs.

Feedback from Participants:

- There is a need to device an incentive structure for the government agencies for deploying successful e-Governance initiatives on one hand and for citizens for using the online services on the other.

- Finance management and budget standardization is required for effective utilization of taxpayers' money. Digital literacy initiatives to familiarize citizens will need to be undertaken if the buy-in of e-Governance programs is expected to be enhanced.

- The last mile connectivity is still a problem especially in rural and remote areas. The applications will need to be designed using other connectivity options such as mobile devices in mind. PPPs should be used only when necessary and should not be used as a way by the government to transfer their responsibility of serving citizens onto the private partners. The distinction between outsourcing and PPP needs to be made clearly.

Session II: Cloud Computing, Mobile Governance and Web 2.0 technologies – Moving towards next generation public services

Conference Proceedings Report

Session Moderator

Mr. Vijay Kumar
*Commissioner Income Tax,
Government of India*

Speakers

Mr. Carl Ward
*APAC Director- Customs
and Revenue Practice,
Accenture Public Services*

Mr. D.Krishnan
*Principal Consultant, PMU,
DIT, Government of India*

Prof. K.R. Srivathsan
*Pro Vice Chancellor, Indira
Gandhi Open National
University*

The session on next generation public services was organized to build the capacity of the government agencies on leveraging the potential of web 2.0, mobile, cloud computing and new media for enhancing the public service delivery. The session was very well received with the speakers from industry, government and academia sharing their views. The highlights of the presentations made by various speakers are provided below.

Mr. Carl Ward, APAC Director – Customs and Revenue Practice, Accenture Public Services

Mr. Carl ward shared with the participants the learnings from the extensive research work carried out by Accenture in the domain and presented a view of next generation of e-Services as well as how governments may be restructured in future. According to him the key features of next generation public services will be:

- Citizen Centric – Most of the work of various country governments is still not geared to look at the policy making from citizen perspective. Change in the perspective of governments will require real change in thinking as well as structure of governance.

- Government Restructuring – The current structure of governance is based upon the principles dating back to 1800. The governments have to move from the regime of exercising full control over everything to delegating the responsibilities for services delivery to appropriate players and agencies. He sighted the CSC program of India as one of the examples of decentralizing delivery of services.

- Making it Measurable and Transparent – Citizens are increasing becoming more aware about the government work and in some of the developed countries, have also started participating in policy making. One of the examples being that of California where citizens vote on how much money is being given to each of the agencies in the state. This has enhanced the trust of citizens in government work as well as resulted in increased buy-in of government programs. Transparency and ability to measure the outcomes and impact of government programs will be the key features of next generation public services.

Mr. Carl ward commented that the recent financial crisis has provided an opportunity to the governments to be more competitive and formulate innovative strategies to protect industry, citizens and improving employment opportunities. Asia governments are best positioned to take a lead in recovery process by enhancing their competitiveness. The governments should differentiate e-Governance initiatives from other infrastructure initiatives. Some of the key recommendations made for the next generation public services were:

- e-Governance initiatives should strive to offer better and personalized services to the citizens. The example to New York city where the government portals are integrated with the call center services so that any citizen experiencing issues with online service access can be directed to a call center for

assistance. Service oriented architecture for e-Governance projects will be beneficial. Citizens should be able to access the public services through multiple channels as per their convenience. All these channels will be integrated with each other in next generation public services.

- The focus of e-Governance services should be to improve citizens' lives. The Accenture model of human services was shared with the participants that described the models of service delivery on situation based, transaction based and case driven basis.

Mr. D. Krishnan, Principal Consultant e-Governance, Department of IT, MOCIT, Government of India

Mr. D. Krishnan is one of the key strategists in DIT, Government of India working on leveraging mobile/wireless technologies and new media for enhancing the reach of e-Governance programs under NeGP to maximum number of citizens, especially the rural and remote citizens. He deliberated on the transformation potential of mobile devices on enhancing the reach of e-government programs. Key highlights of his presentation were:

- The e-Governance initiatives in India are largely understood by National e-Governance Plan (NeGP). The key aim of NeGP is to make the government services available at the doorsteps of the citizens in most effective and cost efficient manners. 29 Mission Mode Projects (MMPs) are envisaged under NeGP which are further categorized as Central , State and Local MMPs. The key feature of all the MMPs is service level improvement rather than focusing on computerizing the existing manual processes.

- The key goal of any e-Governance project is inclusion which means that no individual or community should be denied access to the government services or opportunity to participate in governance process. Majority of citizens in rural areas do not have access to even banking facilities. The aim of NeGP is to reach out to these people. Mr. Krishnan sighted the election process in India through EVMs as an example of an inclusive process where ICT is being used.

- The only other inclusive penetration of ICT has been the mobile services. Never before such massive adoption of technology by rural masses has been witnessed. There is a huge opportunity to ride this juggernaut for enhancing the inclusiveness of NeGP programs. As more and more services are made available through mobile devices, the penetration of the mobile has the potential of accelerate further.

- The mobiles have the ability to pus information rather than the user needing to pull information. The UID project is a fit example for the use mobile technologies where the services can be targeted to a specific set of citizens such as those eligible for NREGA or BPL benefits. One can explore the mobile device itself being used as an identification devices with a combination of IME no, phone no and the voice biometric for authenticating a user.

One of the key observations made by Mr. D. Krishnan was that NeGP was conceptualized in Before Mobile (BM) era. The delivery of services through CSC program was formulated when the number of mobile subscribers in the country very low compared to what it is today. Additionally the technology development has come a long way since the NeGP was first formulated in BM era. There is a great need to review the NeGP program in "After Mobile (AM) Era". Some of the immediate opportunities are recrafting the Agriculture MMP looking at the mobile as the service delivery device. Use of voice based solution will allow even the illiterate citizens/ farmers to participate and avail services. The mobile technology is appropriate for the rural masses. He also deliberated on the challenges such as the regulatory hurdles that needed to be tackled before moving forward.

Key Recommendations and Feedback from participants

- Mobile / wireless technologies are the key to reach the citizens at the bottom of the pyramid and making the public services delivery inclusive.

- No one technology/ solution is fit to solve the diverse needs of the citizens and governments. The solutions designed for the inclusive delivery of services needs to be hybrid.

- Scale of operations along with sustainability is key to next generation e-services. The product functionality for the developed and developing markets will be different.

- Process innovation and creation of ambient intelligence environment will help citizens participate in policy making as well as access services through multiple delivery channel.

- The focus of next generation e-Services has to be the rural India. Inclusion of rural India is the key to success of NeGP.