

# E-Government Systems in Developing Countries: Issues and Concerns – Discussion

Rahul De'

*Developing countries, and India prominently among them, are investing heavily in e-governance and e-government systems, driven by the promise of efficiency and transparency in governance, and of using ICT to leapfrog the slow progress of development. Over the last decade hundreds of e-government systems have been deployed in India. However, according to World Bank estimates almost eighty five percent of the systems fail, indicating a loss of thousands of crores of rupees.*

*The IIMB Management Review Round Table Discussion on E-Government Systems in Developing Countries brought together a panel of stakeholder representatives, policy makers and academics in an attempt to understand the issues that are central to the success of e-government systems in developing countries. After establishing the difference between 'e-governance' – using electronic means to exercise discretionary powers within the public space of governance, and 'e-governments' – systems built within government departments to do the work of governance, and which vary from country to country depending on its level of 'development', the panellists focused on such issues as the Indian e-government policy and its implications; the government-citizen interface, the government-citizen-business interface; the role and impact of service providers in this space; and the need to carry all the stakeholders involved to make e-governance projects a success.*

Rahul De' is the Hewlett-Packard Chair Professor in ICT for Sustainable Economic Development at the Indian Institute of Management Bangalore. rahul@iimb.ernet.in

Prof De' anchored the Round Table Discussion and is the Guest Editor of the Round Table Discussion on E-Government Systems in Developing Countries.

## Srikanth Nadhamuni

### Municipal E-Governance

The mission of the eGovernments Foundation ([www.egovernments.org](http://www.egovernments.org)) is to improve governance in Indian cities through the use of IT tools and technologies – eGovernance. We have created a suite of Municipal eGovernance products that bring efficiency and effectiveness in service delivery. We provide these products free-of-cost to cities throughout India. A large number of volunteers (IT experts) from around the world contribute to the cause. The Foundation has also helped several central government agencies and commissions in policy making initiatives.

### Negative Vicious Loop of Urban Governance

In many of our cities public services are poor or dysfunctional and hence the credibility of the Urban Local Body (ULB) drops. This makes citizens reluctant to pay taxes and fees and consequently the revenue of the city government plummets. Inefficiency and corruption further debilitate the ULB and this results in poor infrastructure and networked services (such as water, electricity, roads etc). Compounding these factors is the issue of fragmented city stakeholders. Other bodies such as the development authority, the water and the electricity companies and the police department often do not work in close conjunction with the ULB which compounds citizens' woes. Further, the opaque, non-transparent municipal government seems to have little accountability which leads to citizen apathy and little or no participation in governance – contributing to further worsening of services ... this negative vicious loop continues.

How does one convert this vicious negative loop into a positive virtuous circle?

The key to addressing the above problems are robust systems that run the various departments of our municipalities be it property tax management, engineering works or financial accounting. Secondly we need to bring in appropriate and effective IT and communication technologies to improve record keeping and speed of service delivery. All of this public data needs to be put in the hands of the people so that this transparency will bring in much needed accountability.

### Problems of City Municipalities

Urban areas in India account for 55-60% of the country's GDP while occupying less than 5% of the land area of the

The panellists in the Round Table discussion on E-Government Systems in Developing Countries were:

**Mr P K Gopalakrishnan**, Vice President (Strategic Sales – Government Vertical), Wipro Infotech.  
[gopalakrishnan.palakkil@wipro.com](mailto:gopalakrishnan.palakkil@wipro.com)

**Mr Srikanth Nadhamuni**, Managing Trustee, The eGovernments Foundation, Bangalore. [contact@egovernments.org](mailto:contact@egovernments.org)

**Prof Balaji Parthasarathy**, ICICI Assistant Professor, International Institute of Information Technology, Bangalore.  
[pbalaji@iiitb.ac.in](mailto:pbalaji@iiitb.ac.in)

**Mr R Sekhar**, Principal Architect, E-Governance, Intel Solution Services. [sekar.r@intel.com](mailto:sekar.r@intel.com)

**Mr Tumul Sharan**, Advisor, Datamation Foundation Charitable Trust. [tumul007@yahoo.co.in](mailto:tumul007@yahoo.co.in)

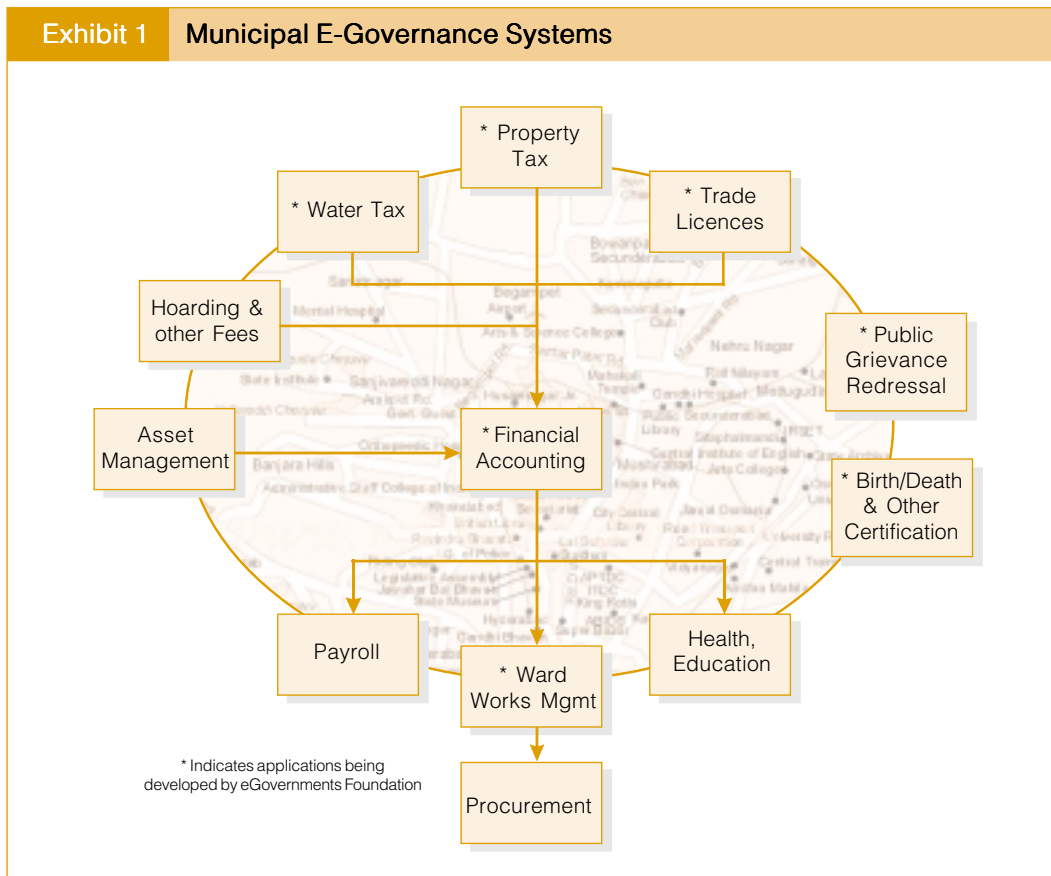
The discussion was anchored by Prof Rahul De'. Prof B Mahadevan, Chief Editor, IMR, was co-chair. Students of the Post Graduate Programme in Public Policy and Management (PGPPM), IIMB participated in the discussion.

country. But the municipal revenues account for only 0.6% of the GDP. This acute revenue shortage means our cities cannot achieve what are considered necessities in many countries – like 24 hour water and electricity supply, good roads, a good sewerage system etc. On the one hand we are starving our engines of productivity and growth (cities), and on the other, we expect them to keep delivering higher levels of output. This is obviously not a sustainable model.

One of the major problems our municipalities confront is the lack of good systems; good systems are made up of good people, appropriate technologies and efficient processes. Our city municipalities have a shortage of qualified people (for instance, the ULBs of Karnataka have not hired Municipal staff for 30 years), the existing staff are poorly trained, working with only book/pen technology and processes that are inefficient and citizen unfriendly.

Exhibit 1 shows the grid of municipal e-governance systems that are needed to streamline the municipality. These systems include: 1) a good *Property Tax Management System* – Property tax happens to be the single largest source of income in municipalities, other sources of income being trade licences, water tax, hoarding and other fees. The main items of expenditure are the civil works taken up in the wards (ward works), the employee payroll, and in some cases health and education – hospitals and schools. 2) an *Accrual Accounting System* – A good financial accounting system is essential to track money being collected and spent by the municipality.

## Exhibit 1 Municipal E-Governance Systems



The present cash-based system of accounting, for instance, only gives a partial picture of the city's finances to administrators and citizens – hence impairing decision making. 3) A good *Asset Management System* is essential without which many of the prime assets in the city might get encroached upon. Further, with municipal bond financing entering the picture, an asset register improves the credit worthiness of the city. 4) A *system to manage and administer wardworks*, that is the works taken up by the municipality. This includes the workflow of technical and administrative approvals, tendering for contractors and monitoring and paying for the work. It is important to publish the programme of works to the people so they can engage with the city in prioritisation and monitoring and give feedback on the works taken up. 5) Systems for *public grievance and redressal* to understand the problems of the citizenry and address individual as well community group complaints (such as [Complaints.mcdonline.gov.in](http://Complaints.mcdonline.gov.in) of the Municipal Corporation of Delhi), *registration of births and deaths*, and an efficient *Geographic Information System*.

Our experience in the 57 cities in Karnataka including Bangalore and Delhi show us that proper monitoring, putting better processes and systems in place and implementing them

on the ground can show tremendous results. The city of Mahadevapura (a city near Bangalore) has experienced an 800% increase in property taxes collected in the span of 1 year after the *eGov Property* module and processes were adopted. The Bangalore Mahanagara Palike has collected over Rs 600 crores in property taxes using *eGov Property*. More than 60,000 complaints have been filed using the *eGov Grievance* module in the 57 cities across Karnataka, some 85% of them have been redressed – the patterns and trends that this data reveals with regard to the problems that people are facing, are very useful for re-targeting of scarce city funds and resources – The number one problem of Delhi residents is 'water logging', the consistent number one problem that city dwellers all across Karnataka complain about is 'poor street lighting'.

While IT is the enabler, it forms only one part of the equation. It is equally important to reengineer government processes before launching into computerisation. There are many instances where e-governance has been implemented in cities, which has actually slowed down perfectly good manual systems and the zeal to bring in computers has made the same operations two to three times more expensive. A thorough reengineering of processes to exploit IT and

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communication technologies is needed to see quantum leaps in operations efficiency instead of simply 'computerisation'.

Further, better revenues and delivery of services by urban local bodies (ULBs) to citizens do not in themselves solve the problem of governance. For we need citizens' participation and transparency in operations. Other than capacity building, training and providing better systems which go into the input side, citizens need to be able to act as watchdogs. The 74<sup>th</sup> Constitutional Amendment envisioned people's participation through ward committees through which citizens give inputs on the works that have been taken up, monitoring and so on, for the betterment of the ward. Unfortunately, the ward committees have been largely dysfunctional in India, excepting for pockets, interestingly enough, in West Bengal and Kerala. Empowering these ward committees and involving people in local decision making (such as prioritisation of ward works) will go a long way in improving services.

## Discussion

**PGPPM Participant:** There could be many causes for the failure of e-governance systems. Given the large floating population in our cities, it is difficult to create sustainability. Further, my experience as a member of the Kerala cadre shows that while e-governance systems can be created, maintenance is a problem. Further, people still want hand written documents, they don't seem satisfied with computerised copies.

**Srikanth Nadhamuni:** While I take your point, citizens' apathy or lack of involvement often arises out of lack of transparency in the proceedings. At the end of the day, it is

the citizens who are to be judges about whether things have improved or not. Improvements in the delivery of essential services will not materialise overnight and there might always be some lags. But if we don't commence efforts, we will be asking the same questions twenty years from now. So we have to start now, even though we might not see any visible signs of progress right now.

**R Sekar**

## Service Interfaces in E-Governance

My presentation on the service interfaces in e-governance will take a top down perspective. I will look at things from the perspective of how processes can be made simpler for the citizen. I would like to cover all possible transactions between the government, business and the citizen, and at the service levels that are being offered by various government departments.

A citizen's interaction with government services can vary from the simple to the complex. It could be as basic as seeking published information; filling up a form online; a more regular transaction where the citizen looks for a return service from the government; or the seeking of a complex service from the government involving coordination with multiple services and transactions at various back-end departments. It is very important, from the point of view of the citizen, that the services of various government departments be integrated. Integrated service delivery should be a top priority. For integrated service delivery to be a reality, depending on the service levels, the kind of technology required has to be determined.

Interactions in government offices are still contingent upon submission of physical documents. We must change from a document-centric to a data-centric system, and also separate the data storage from its presentation. While technology would make this possible, it is hardly ever used. Yet another problem with government services today is the tight integration between applications developed and services offered in the government departments. Under such circumstances, information and services available cease to be accessible over time. So, architecturally, e-governance systems are not addressing this issue of separating the front from the back.

The interface process – which includes people related interfaces, technology related interfaces and process related interfaces – envisages various options. These include digital

convergence, the voice-video-visual option, and interactive modes such as the operator supported keyboard-mouse option, text-to-speech, touch screen with voice prompts – so that it would not be necessary for people to be literate to use the PC, eye movement activated and voice activated interface which is language specific.

The channels for the delivery of service depend on the nature of the service.

It is important that several *channel strategies* are in place. A channel strategy represents a set of business-driven choices about how and through what means services will be delivered to customers.

In formulating an enabling channel strategy for service delivery to customers, the government must provide best value and 'joined-up' services; maintain a balance between customer and business needs; provide a choice of devices – PCs, telephones, digital TV, mobile devices and kiosks to facilitate pervasive online access; define standards for interfacing with government processes, encourage competition and maximise customer choice; and develop the social infrastructure. The government must consider partnering with intermediaries to create opportunities, where such partnering provides a more appropriate route for delivering improved customer service and value for money. Partnership decisions should seek to open up the government and not exclude competition in the intermediaries market, which is necessary to drive innovation, improved customer service and value for money.

There must be a clearly orchestrated strategy to encourage take-up of electronic channels. This would require an effort to build customers' confidence and trust in those channels by promoting the benefits of using those channels, reassurance about privacy and security, and access to online and offline personal assistance. The strategy must combine different media content and use a mix of electronic and traditional channels to ensure customer accessibility. This channel mix should change over time with greater acceptance of electronic channels and advances in technology. The channel strategy must promote social inclusion, so that cost, skill and lack of confidence are not impediments to channel use.

Delivery channels must act as data capture units and information delivery points. For example, Internet kiosks should become good data capturing units on behalf of the government. While connectivity would not be an issue, service delivery by the government could become an issue in the future. The government would not be in a position to deliver more than 20 percent of the services. The rest must come from private businesses.

In formulating an enabling channel strategy for service delivery, the government must provide best value and 'joined-up' services; maintain a balance between customer and business needs; provide a choice of devices to facilitate online access; define standards for interfacing with government processes, encourage competition and develop the social infrastructure.

## Discussion

**Rahul De' :** Your point about the tight integration between services and data is very valid. In a developing country like India, typically, departments will not share data. How does one overcome this?

**R Sekar:** In Andhra Pradesh we implemented a standards compliant messaging component that isolates the front and the back ends. The Government of India has now agreed to launch a national gateway on a similar framework which would make it possible to completely separate the back end. The back end has a certain set of primary data and the processing required to access that data is different. The UK and the US have similar gateways for message brokering. This could be one mechanism of linking between government departments.

**PGPPM Participant:** I am a DIG of Police, presently participating in a programme in IIMB. I notice in both presentations that the government employees are not treated as stakeholders in the entire initiative. Similarly, the e-governance initiatives that I have seen, taken by the government or the NGOs, have not been able to convince the employees who function there. A majority of the government employees want to work, they are highly qualified and many of them take initiatives on their own to bring in changes. Many of these experiments/ initiatives have actually increased the work load of the subordinate staff in the government. They feel that it is an additional burden which they have to carry – and they don't see the facilities that come out due to this increased efficiency. This problem requires to be addressed.

When we conceived an e-governance project, the questions that were constantly asked were — Shall we outsource surveying? Shall we outsource the collection of data? Shall we get private companies to manage the front end? However, eventually if we don't build the capacity within the ULB, it defeats the whole purpose.

**Srikanth Nadhamuni:** In some sense, governments right now, because of their inability to deliver services very well, are in a big hurry to start outsourcing work to private companies. This is a wrong move – private companies are not in the business of running strategies, their job is to make money for their shareholders. The authorities can outsource small portions – micro outsourcing – but they must do the job of governance themselves. When we conceived an e-governance project along with the Urban Development department of Karnataka, the questions that were constantly asked were – Shall we outsource surveying? Shall we outsource the collection of data to other parties? Shall we get private companies to manage the front end? However, eventually if we don't build the capacity within the ULB, it defeats the whole purpose. So we decided that even if it took five years to completely clean up the data and get it to hundred percent accuracy, it is better to let the ULB start learning to do it themselves.

As for the enthusiasm of the staff in performing their duties and whether their work is reduced, first of all they should be looking at what services they are delivering to the citizens – because that is their job. However people do have a personal interest in their work loads and with the right implementation of IT many repetitive jobs will be reduced. To give you an example from property tax, every day after all the collections are made, the revenue officer has to make a manual note of every collection that he has made in a report, which is very time consuming. IT can do away with the need for this.

On the other hand, rent seeking behaviour is also a fact. Employees must be given percentage increases based on their performance, particularly in the revenue department. If IT is

increasing the workload, I would say that the system has not been engineered well.

**R Sekar:** The necessary change management is being brought in gradually into e-governance. In jobs such as record keeping, where electronic processes have been introduced, staff are being retrained depending on the level of qualification, experience and age. As regards rent seeking behaviour, here too things cannot be changed drastically overnight but if the system is appropriately and strategically thought through, and positioned towards development, things can be overcome in time.

## Tumul Sharan

### Creating Sustainable E-Governance Models: A Multi-stakeholder Citizen-centric Approach

Our organisation, Datamation Foundation together with its patrons and mentors has been involved in the implementation of over one hundred e-governance projects at the central and state levels. For the past few years we have been evaluating the government and private initiatives of e-governance and making suggestions on how to improve things for all the stakeholders. From our experience I can say that Indian e-governance projects have been a mixed bag. Very few projects have been successful and sustainable. The lack of an independent evaluation and monitoring framework leads to accounts of successful projects being only anecdotal. Further, lack of project documentation and transparency makes sustainability assessment complex. The successes in e-governance have been driven by 'champions' so much so that the exit of these champions seems to have imperilled the existence of the project itself.

## Sustainability Parameters of E-Governance Initiatives

**Parameters for the Government:** Our experience in the field has revealed the following sustainability parameters for the government. There must be a high degree of awareness about the project and an interest in utilising citizens' services. The project must be citizen-centric resulting in time and cost savings for citizens, and savings for the public exchequer as well. The e-governance model must be scalable and replicable. There must be a strong buy-in from all sections of the bureaucracy including the top level. An effective business process re-engineering study must be carried out prior to

project implementation and the e-governance project must finally replace the old legacy. A multi-stakeholder platform must be set up. The government cannot deliver all the services by itself and there must be a mix of government and private services, with services being delivered in the local languages and reaching out to the poor, to the physically disadvantaged and women. The requisite change management must be carried out if the project has to be successful.

In all our projects, both with the government and the corporate sector, what has come to light repeatedly is the need to be aware of ground level realities, and to involve the employees and the local people in the initiatives. If not, when projects are replicated, they fail in real turnaround time. Employees must be trained gradually (and not through a short crash course) as often, concepts become clear only during training and not during the planning stage. Care must be given to budgeting at the ground level as this involves costs other than that of digitisation, and these costs may add to the turnaround time or result in the redesign of the system.

**Parameters for Citizens:** For e-governance projects to be sustainable for citizens, they must provide cost-effective services, reducing red tape and corruption. A basket of one-stop citizen services should be available under one roof ranging from registrations to bill payments and the services should be available uninterrupted regardless of technology issues. The format should be easily understandable and available in local languages. Working in Kerala, we realised that if many of the projects had been in Malayalam instead of English, it would have benefited both the government and the citizens more. Very often this could lead to the failure of a project. Effective handling of complaints should be built into the system.

**Parameters for the Local Service Provider:** The sustainability parameters for the local service provider or the kiosk operator include a high degree of entrepreneurial capabilities; the ability to deliver uninterrupted a large number of citizens services; an integrated focus on ICTs other than the Internet such as mobile telephony, direct cable to home and community radio for service delivery; a constant re-engineering of the business model to encompass all services including citizen services, education, BPO work and tele-medicine; and a level playing field to ensure sustainable livelihoods irrespective of rural-urban divide.

## Discussion

**R Sekar:** Data migration is a major inhibiting factor before a project can go online. In a country like ours, where we have

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close to 50 years of data, it is unimaginable to think how we are going to get the entire backlog of data in a digitised form, and whether it will make sense to do so.

**Tumul Sharan:** Hundred percent digitisation is possible but it should be a hybrid system. Local hybridisation should be possible, with some data in manual mode, depending on the requirements. Further, there is very little standardisation in the systems being implemented. Particularly, major e-governance projects need to be standardised so that they can be implemented in the whole country.

**PGPPM Participant:** Other than the issues of incomplete computerisation, standardisation and so on, people still feel that they have to hold back information in order to maintain their hold. For instance, with the computerisation of land records people are still holding out against e-governance. With computerisation, all the data and information would be freely available and would reduce their importance and influence. Often, the human attitude and angles do not match with the technology.

**Rahul De'** – You are raising a very important issue – the issue of resistance to e-governance systems

P K Gopalakrishnan

## The National e-Governance Plan – An Industry Perspective

E-governance today is deemed a clear business opportunity by Indian IT companies. My perspective is that of an Indian IT company looking at this business opportunity and in the process, the kind of issues IT companies or vendors face. IT

The government has a key role in the e-governance plan in setting up a shared vision, the policy, the regulatory framework and in setting standards. The private sector can provide the ICT infrastructure; advisory services like feasibility studies and programme management services; co-own risks and rewards to an extent; facilitate change management; and share best practices.

companies also have their own charter of corporate social responsibility, but they may handle it differently.

The National e-Governance Plan (NeGP) has been the framework used by the Government of India over the last two years to administer the e-governance plan for the country. Managed by the Department of Information and Technology (DIT), it is a centrally administered programme with emphasis on decentralised implementation. The NeGP has proposed 26 'Mission Mode' projects and far from being a re-branding exercise, there is a strategic intent behind the NeGP, aiming at improving transparency, efficiency of government processes, and bringing other government institutions closer to the citizens. The programme has a vision, and though the expected action has not happened, we hope to see improvement in the next few years.

A 2005 survey ranked India 87<sup>th</sup> in global e-governance readiness and the question that comes to the fore is, are we really ready for e-governance? If most of the citizen-facing departments are ready for it and the government can answer the question unambiguously in the positive, the planned initiatives will get off the ground faster.

## Key Factors for Success of NeGP

The key success factors for the NeGP are: shared vision and goals between the political leadership, the bureaucracy, the employees, the citizens and private industry; the right institutional framework to administer and monitor this programme; time bound measurable action plans; regular progress reports in the public domain; a committed partnership with the private sector; and speedy

implementation and delivery of projects.

The NeGP must make note of certain aspects if it has to be effective and successful. Common standards and processes must be evolved for common projects with the same set of problems. Key projects must be more visible, with a 'beginning of the year' planning exercise like the annual departmental budget. Moreover, there is no universal single plan of what governments want to do in e-governance. And if the government wants to interest and involve the private sector, it is important that they show the big picture, with the key issues outlined, so that the private sector can see the investment it has to make to get its share of the pie. Single point accountability is lacking. Many opportunities are being lost on account of delayed decision making.

The government and the private sector have clearly defined roles that they must play. The government has a key role in the e-governance plan in setting up a shared vision, the policy, the regulatory framework and in setting standards. There is often a misconception that the whole e-governance concept is about technology. But the focus is on sourcing services and not on technology, which is only an enabler. Unless the government carries the private sector along, laying down standards and frameworks and showing its commitment to reforms and change management, projects are likely to fail. However, of late there has been a change in attitude and a change management programme is conceptualised right at the beginning of a project when tenders are invited. The government must provide steady, stable and committed leadership. Decisions taken by one incumbent in a department must not be overturned by the next, which leads to projects being derailed or blocked.

Even when private investment is involved, the government cannot outsource strategy, and must drive reform and institutionalise the capacity for absorbing and managing change. Changing the mindsets of employees has to be done by the department head, and the political leadership, and cannot be done by the private sector.

The private sector too has a clear cut role in NeGP. It can provide the ICT infrastructure; advisory services like feasibility studies and programme management services; co-own risks and rewards to a certain extent – the risk-reward ratio today is skewed in favour of the government; facilitate change management; and share the best practices in e-governance from developed countries.

Private industry can bring in more momentum and become a true partner to the government by investing in acquiring domain knowledge, which it has not done adequately at present. It must commit itself to a business plan/resources

for NeGP, develop replicable and innovative frameworks, bring in knowledge management, recognise the shortage of public funds by selling what is needed in the market, contribute to improving e-literacy and technical standards, collaborate with other private product companies and develop a consortium approach, and finally, recognise the compulsions of the government as the custodian of public funds. There are certain rules, processes and frameworks within which government departments operate and they need to be recognised. Moreover, despite the compulsions of the market, the private sector must look at e-governance as a segment to invest and reap benefits and the government on its part must move to 'inclusive governance'.

## Moving NeGP to Higher Gear

The NeGP can be moved into higher gear by incorporating certain changes.

**Structural Changes:** The structural changes include: a comprehensive integrated pan-India plan, an e-governance think tank for each state with an exclusive e-governance secretary, a cadre of 'champions' or Chief Information officers who will drive e-governance initiatives within each department, empowered committees for contract administration which will bring in transparency, expertise and accountability and improved decision making, and a regular system of progress reports and follow through of initiatives.

**Prioritisation of Projects:** There are too many projects in various stages of implementation across the country. It is important to make an inventory of successful pilot projects and see whether they can be replicated, and have a time-bound plan for roll-ups. A knowledge repository of all successful projects will provide a common framework/reference point for the state governments. The present emphasis on front-end implementation must be balanced with an equal focus on back-end automation.

**Contract Administration:** This is very important in private sector-government collaborations as investment by private industry depends on the transparency, fairness and speed of decision making. Government decision making by its nature and the fact that it is subject to outside influences often falters on these counts. Specifically, there must be fairness and transparency in the selection of vendors; decision making must be speeded up with a moratorium on the time-lapse; a framework within contract administration to include change requests – the scope and the details of projects are liable to change and this often increases the work for the

While a single window counter for the payment of bills is a very good concept, the government has to take the responsibility of demand generation till the system stabilises. In Andhra Pradesh, the e-seva initiative was successful because other service centres were closed down and people had to go to e-seva counters compulsorily for payment of bills.

implementation partner; and quality cum cost criteria must be adhered to as in the World Bank funded projects rather than the current practice of only cost based projects. Demand generation must be a joint responsibility and it cannot be achieved by the private party. For instance, while a single window counter for the payment of bills, like Bangalore One is a very good concept the government has to take the responsibility of demand generation till the system stabilises, that is, the average citizen starts using it regularly. In Andhra Pradesh, the e-seva initiative was successful in Hyderabad and Secunderabad, because service centres run by other departments were closed down and people had to go to e-seva counters compulsorily for payment of bills. Empowered committees must steer things and the focus should be on 'partner relationship'.

Finally, there are several critical sectors that can be included in the purview of e-governance and these include healthcare, education (e-learning), e-procurement and national missions.

In conclusion, e-governance, if implemented well, can bring in change and help India grow from a developing to a developed country, but all depends on how the programme is handled. The government has allotted Rs 23,000 crores over the next few years on e-governance projects. And when such large sums are involved, the citizens must get the best value out of it.

## Discussion

**PGPPM Participant:** As the Joint Commissioner for Customs presently participating in a programme in IIMB, I would like to mention an initiative that we put through with private collaboration – Indian Customs and Excise Gateway

E-governance initiatives can be considered from three angles — as legal initiatives; as changes in bureaucratic and authority structures within the government; and as transformations of the relationship between state and society. The legal aspect is critical in a country such as ours, where the state has a virtual monopoly over the delivery of many services.

(ICEGATE), an electronic gateway. Through this, a stakeholder can get all transactions done – data and document planning, filing, tracking of shipment and e-payment to banks – without leaving his office. It is truly revolutionary and can change Indian Customs and we in the department are really eager to push it through but it is not happening. Further, other than the problem of demand generation, we have also experienced technical snags and our vendor has not been totally co-operative. We also have a programme called RMS – risk management system, wherein we do not examine the entire cargo, but check just one or two percent of the cargo on a selective basis. This is such a facilitation for trade, but people are not aware of it and even if they are aware, they are unable to take advantage of this technological initiative because of the problem of technical snags.

Coming to your point about delays in government projects, the lack of transparency and the time-consuming processes, government projects are conceived and operated on such a large scale, with such complex ramifications and so many aspects to consider that snap decisions cannot be taken. It is very different from a private company taking a decision on a single plan, working with a standardised package and replicating it. Implementing a major government initiative all over the country and standardising it involves time and I don't think they can be labelled as slow.

**P K Gopalakrishnan:** By no stretch of imagination do I want to underplay the complexity of government projects and the ramifications of its impact on a wider horizon. But even within the current framework things can be speeded up. While we cannot run away from the fact that there are

delays in decision making and implementation, there may be multiple reasons for it. These could be the lack of a plan on infrastructure, manpower resources, or even the failure of a partner to deliver.

**B Mahadevan:** The point we are trying to make is that given the complexity and some inherent characteristics of the way governments work, there is still scope to tighten things. There is merit in looking at it in this perspective.

**PGPPM Participant:** I am not sure how e-governance will really benefit the poor, the farmers, and the rural people.

**P K Gopalakrishnan:** Today, many e-governance projects are touching the lives of rural people and changing them for the better. ITC's e-choupal is one such initiative that is helping farmers access the market and trade their commodities, without going through a chain of middlemen. Information technology has been utilised to empower farmers. More such projects, which touch the average citizens will help in improving the momentum of the e-governance plan.

There is also a plan on the anvil, of setting up 100,000 common service centres in the villages, similar to the STD booths that were a revolution in telecommunications and which effectively reduced distances between people, twenty years ago. Once these service centres become operational, many more services will be delivered and we will see a different perception of e-governance. Everybody, whether it is the citizen or the policy maker or the politician, will benefit.

## Balaji Parthasarathy

### E-Governance as a Political Initiative

E-governance initiatives can be considered from three angles – as legal initiatives; as changes in bureaucratic and authority structures within the government; and as transformations of the relationship between state and society.

*E-governance as a legal initiative* is critical especially in a country such as ours, where the state has a virtual monopoly over the delivery of many services. Unless we transform legal structures, we will not going to see effective delivery of public services. For example, the Sustainable Access for Rural India (SARI) project in Melur taluk of Madurai district in Tamil Nadu, introduced kiosks that were connected to the taluk office. Although citizens could e-mail their applications for various certificates through these kiosks, the project remained incomplete as there was no provision for digital signatures and people had to travel to the taluk headquarters to collect their certificates. Therefore the service was not

popular to start with. Demand picked up only when the kiosk operators volunteered not only to send the email but also travel to the taluk headquarters and pick up the necessary documents on behalf of the applicants.

In contrast, to tie in with what Mr Gopalakrishnan said, the Bhoomi Project in Karnataka was a success as the Karnataka government, in one stroke, declared illegal any manually written record of rights' tenancy and crops (RTC). If you wanted a legally valid RTC, it had to come out of the Bhoomi kiosk. So the popularity of the programme was ensured.

*E-governance is about changing bureaucratic and authority structures within the government* because we know from history that the introduction of any new technology affects the division of labour. Certain tasks will be done differently, as a consequence of which the demand for certain skills will grow, and the demand for certain other skills will decline. Unless we deal with the question of changes to bureaucratic authority and its implications, we will have problems with the notion of e-governance. In the SARI project, while it was convenient for the citizens to email applications for certificates, for the employees in the taluk it meant more work. Earlier they used to process five applications a day whereas now it meant accepting 15 email applications and processing them as well. While the kiosk operators were making ten rupees per email, for the taluk employees it meant more work and nothing more. So much so that when the Internet connection lapsed, they did not renew it!

To quote another example, the kiosks franchised by the Drishti project in Sirsa district in Haryana, were authorised to sell applications for below poverty line (BPL) ration cards at ten rupees each. Whereas the district headquarters had a quota on the monthly BPL cards that could be released, for the person vending it at the kiosk, there was no incentive to reduce the number of applications issued since each was a source of revenue. Many applicants had to return disappointed from the district headquarters, something that could have been avoided by providing the right kind of bureaucratic authorisation.

Most e-governance projects require a strong champion within the bureaucracy. One reason is that the costs and benefits of the projects are often fuzzy. For instance, it is hard to put a monetary value on changes in gender relations in Madurai district as a result of the SARI project. When the cost and benefits are unclear, how are we going to drive a budget? Here we need a champion who will push the project through. Two, such projects need cooperation across government departments to be effective, and this can only be orchestrated

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effectively by a strong champion with a sense of urgency. However, the initiatives of such a champion must be institutionalised to deliver long-run benefits and the lack of institutionalisation remains a significant problem for most projects.

*How does e-governance affect the relationship between state and society?* How are we going to insert a technological system into a larger social system? What are the underlying assumptions behind these implementations? While a technological convergence is going on, not just in India, but worldwide, is there some social convergence that will follow, in terms of behavioural patterns?

This issue comes out in many e-governance projects. Bhoomi, from a technological perspective, is a very meticulously implemented project to digitise land records in Karnataka. But observation in the field reveals some disparities. Prior to Bhoomi, there was a decentralised land records system in all the villages. These were not the 'good old days'; there was corruption, manual overwriting of records and other such malpractices, and Bhoomi promised to overcome many of them. However, with the installation of information technology systems, data was effectively centralised. From the village level it moved to the taluk level and, willy-nilly, the centralisation of data led to the centralisation of power and access to that data.

Further, Bhoomi allows a person to access another person's land records, with the right ID number or the RTC number. In a situation where land is acutely in demand – and this is the case particularly at the fringes of metropolitan Bangalore – it becomes possible for large developers to assemble knowledge about small land holders (many of whom are tax defaulters)

and buy them off at less than market rates. This marginalises the small farmer even further.

To give another example, the Computer Aided Registration (CARD) programme automated all the operations in about 35 sub-registrars' offices in metropolitan Hyderabad and this enabled land transactions to be registered within a day as against seven days earlier. However, the rent seeking behaviour of the official who was the last link in the chain could not be avoided in part because money flowed all the way to politicians who saw this is another means of funding elections. So corruption could not be entirely done away with.

## Discussion

**Srikanth Nadhamuni:** In general, putting out more accurate data about properties, about citizens, about companies, about all the different aspects that government should deal with, is a good thing. Of course, it is misused as well. But this should not be used as an excuse to condone the status quo.

**B Mahadevan:** The literature of economic theory on search costs clearly says that the moment you have a search cost, however trivial it may be, the propensity for rent seeking will be quite high. So while there would be issues in the short run, in the long run search costs will be brought down by such

initiatives, creating a much better market of buyers and sellers.

**Rahul De':** Bhoomi also helps you with the mutation request. So, in an economic sense, it reduces the transaction cost of a transfer or the changing of a title. Overall, if Bhoomi is implemented in its full vision, across the state, it would reduce transaction costs, or the transfer of parcels of land. What role does it have to play in the long run? How does it change the structure of agricultural land in the state?

**Balaji Parthasarathy:** That's difficult to answer. What one could possibly examine is the initial asset allocations between the different segments of society. When you look at the success stories of post World War development, the key ingredient has been land reforms – which have been so imperfectly carried out in our country. Land reforms are important because land is the fundamental asset. When we have unequal distribution of these fundamental assets, one doesn't know what the long run implications are. So we need to be less hasty about plunging into these initiatives. We have to realise that the introduction of technology is going to rearrange the way these assets are distributed today.

**B Mahadevan:** We have had a long and fruitful discussion. I thank all the invitees for taking time off and presenting their views, and our audience, particularly the PGPPM participants who actively participated in the discussion.

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