Focus@skoch I Converged Infrastructure for Speeding e-Governance

Converge, But in a Timely, Schematic Manner

'Converged Infrastructure for Speeding e-Governance' is something that all policy-makers, the industry and bureaucrats realise is a necessity, even as they realise that the history that legacy systems carry with them will need more coordinated efforts.

Delivery of e-governance services to the general public, especially the unreached, can be hastened if both the government and the industry start pooling their infrastructure-both hardware and software. This was the thought that flowed through a recent discussion on 'Converged Infrastructure for Speeding e-Governance', organised by the Skoch in New Delhi recently.

All speakers agreed that such convergence would enable efficient and productive delivery of government services to individuals and the public, even as it reduced wastage, cut costs-financial and material-and improved manageability. More importantly, it would bring in increased transparency and responsiveness in the system leading to better accountability. An issue of concern that emerged was ensuring not only suitable, but also synchronised, convergence at all levels -- networks, data centres, hardware and service delivery. Here, they agreed on the need for a strategic architecture, which was open, scaleable and fundamentally interoperable.

Initiating the discussion, Raghu Raman, Secretary and CEO, NATGRID, pointed out that while the targets that everyone - banks, telecom companies and the government, among others -were common, each was doing so with their own agenda in mind. To disperse resources in a more inclusive manner, "it was important that the government, the financial services industry and industry in general start chalking out common agendas, enabling all of them to achieve their objectives, much more efficiently and much faster".

Raman was, however, clear that such convergence was only a tool to achieve the objective of taking e-governance services to the people, especially the unreached. "But even for this to become an effective instrument, a paradigm shift in defining agendas needs to be looked at, with the end-users or the public also being made a part of this planning process. Improvement of technology per se without the underlying improvement of social connectivity and process connectivity will render little benefit."

Pointing out that the 'silo approach' would continue to dog the Indian system, N Vijayaditya, Controller of Certifying Authorities (CCA) said that it was clear we need to introduce some form of standardisation for any convergence initiative to succeed. "More importantly, you have to ensure a mechanism of accessing the data, the security and access are issues that need to be first resolved if one is seeking to speed up delivery of e-governance services to the people."

For Ravi S Saxena, Additional Chief Secretary (Science and Technology), Gujarat, the subject of convergence was deeply linked to costs. According to him, today massive IT expenditure was being incurred in procuring IT hardware and software by different branches of the government or a company. Advocating the "need to be ahead of the times when it came to IT expenditure," Saxena said "the days of virtualisation have started and we need to use this technology to effectively converge our IT infrastructure." For this, it was important that the Government evolves some policies and norms for taking the e-governance initiative forward. "The power of information actually needs to be spread to the person at the bottom as it is this that will ensure that the intended benefits actually reach them."

N Vijayaditya
Controller of Certifying Authorities

Raghu Raman
CEO & Secretary- National Intelligence Grid, Ministry of Home Affairs

Ravi S Saxena
Principal Secretary, Government of Gujarat

Siddharth Secretary Government of West Bengal

Ram Sewak Sharma Director General & Mission Director Unique Identification Authority of India

Debi Prasad Dash Additional Director General - Systems Central Board of Excise and Customs

Santanu Paul Distinguished Fellow Skoch Development Foundation

Detailing the convergence that was taking place at various levels of the government, both Central and State, D Krishnan of Department of Information Technology (DIT) noted that this was however taking place only at the enterprise level. "It is at the application level that we must speed up this process. Today, when a project has to be developed, the initial focus is on infrastructure procurement. This initial energy-spend diverts attention from application delivery. So, if we can bring converged infrastructure available off a central platform, the focus of e-governance will shift to actually re-engineering processes and ensuring delivery."

Raising the question of attitude of the people behind the government's e-governance initiatives, Siddharth, Secretary - IT, West Bengal, said that more than technology, what would boost the spread of e-governance in the country was a change in the mindset of the people involved. He also raised the issue of convergence at the delivery point. "Services being offered to the people must have a common delivery point otherwise their very efficacy will be affected."

Agreeing that infrastructure alone could not speed up e-Governance, Neeta Verma, Senior Technical Director, NIC, however, emphasised on the doubts that remained among policy-makers and bureaucrats on using cloud services to hasten delivery of e-governance services. "This was not only a problem of attitude but also had a lot to do with security concerns. But, with the increasing spread of virtualisation, the easy ability to scale up one's operations, things will change," she added.

Agreeing with Verma, S Ramasamy, Executive Director, Indian Oil Corporation, said that convergence for his company basically had four dimensions to: starting from policies related to internal regulatory and compliances, delivery of the services and lastly, technology. "It is these four factors that have guided convergence in IOC and have resulted in centralisation of major IT activities of the company. Starting with converged infrastructures, we first went for data centre consolidations - instead of having 52 data centres, we now have 3. Then, we went in for server and storage virtualisation. We then went in for complete standardisation."

D Krishnan   *Mahesh Chandra,*   *Neeta Verma*   *Hemant Sethi*   *S Ramasamy*   *Durgadutt Nedunga*

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Executive Director Indian Oil Corporation Ltd

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According to Hemant Sethi of Bharti Airtel, it was this lack of standardisation that was affecting the e-governance movement in the country. "Today, similar projects are being carried out by different states, using different and incompatible file formats and application standards, resulting in a lot of duplication." Reiterating the point raise by Krishnan, Sethi said that reverse computability of applications with legacy systems is missing in many projects. This was because "the IT infrastructure is procured much before fabrication and digitisation of data. As a result, the e-governance initiative in India is more project specific and state-specific, and the implementation and integration with different states is not there."

For V S R Krishnaiah, NIC, there were 10 types of resources that were needed to roll out e-governance applications to the people and there was need for synergy between them. These were: the digital network, the data centre infrastructure, the public infrastructure, the delivery point or the common service centres, the number of government departments digitising their data, the government process infrastructure, the mobile infrastructure, the human infrastructure, and lastly, the application service infrastructure.

Giving the banking industry's perspective on the issue of convergence, Antony Kottackal, GM-IT, State Bank of India, bemoaned the lack of convergence and standardisation in the industry. "We have come across cases where two departments in State Bank, say, core banking or foreign offices, for enterprise data warehousing, the vendors are quoting different rates for the same applications because the tenders are coming out from different departments." It is only now that "we are implementing a high profile, ambitious enterprise data warehousing project for the group as a whole."

Highlighting the issue for the government to have a holistic perspective on the issue of e-governance, Bhaskar Prasad, Senior VP, IL&FS, said that currently the entire approach appears to be vendor driven. He also raised the issue of duplicity of efforts between different governments and departments. "So, when one approaches the public with some e-governance initiatives, you need to have a convergence of ideas. We need convergence so that each department knows what it is supposed to do, there is no duplicity of work, and that is a challenge which we face."

Defining e-governance as taking the government to the doorsteps of the common man, Ram Sewak Sharma, Director General, UIDAI, pointed out that the legacy systems were today becoming a kind of bottleneck to reaching the goal of converged infrastructure. Citing the example of 35 applications for dealing with the Public Distribution System, he said that "this was surprising when the process was common to all states. What should happen is that the entire process must be integrated with this common application whereby the allocation and the movement of grain must be recorded as it proceeds online so that there is complete transparent picture across the country as to where grain is and how is it being distributed."

Talking about the transport sector, the computerisation of which he was undertaking, Mahesh Chandra, Deputy Director General, NIC, said that standards should be treated as part of the infrastructure and not something that you formulate as a project proceeds. "But, for any project to succeed at the ground level what was important was to ensure connectivity, which even today remains a major barrier to taking e-governance services to the people." Highlighting the problem of duplicity of driving licences, he said that it was one that would only be solved once you had in place a system like the UID.

Making e-inclusion the primary aim of the e-governance initiative, B N Sathpathy, Economic Advisor, DIT, pointed out that currently none of the IT policies of different state governments had e-inclusion as a specific objective. "Given the framework of planning that is faster inclusive growth, it is useful to have e-inclusion as a specific objective in the IT policies of the state governments. According to him, "the best way to accelerate e-governance is to achieve inclusion, which will push up demand for e-governance services."

Concluding the roundtable, Durgadutt Nedungadi of HP India, noted that convergence meant breaking down the silos that we have created. This will give us the ability to maximise utilization, maximise efficiencies and then maximise the return of the infrastructure that one has invested in. The discussion was chaired by Santanu Paul, Distinguished Fellow, Skoch Development Foundation, who noted that lots of legacy systems were built in an era where convergence was not possible. But convergence actually creates better value for all in the long term and makes for a better ecosystem. The three major benefits of convergence includes lowering of the cost of ownership of the technology we create, improves the agility of the system in creating new solutions and it improves customer or user experience. "We should either cut costs or improve agility and/or improve agility and/or improve the experience of the end-user and provide them a better service, a better quality of experience. That, I think is the goal of any convergence."