

National e-Governance Plan: Vision, Challenges and the Way Forward

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E GOVERNANCE IN India owes its origins to the in-house development of applications during the 1970s and 1980s in defence, economic planning, census, tax administration and elections. Subsequently, massive efforts were made during the 1980s by the National Informatics Centre (NIC) to connect all the district headquarters in the country through a VSAT network. However, all these efforts were mainly government centric with the primary objective of exploiting information and communication technologies (ICTs) for automating internal government functions. Citizen centricity with a focus on improving delivery of services to the citizens was not the primary goal during this period.

In the late 1980s, a few computerization initiatives in the government started making an impact on citizen services. The most prominent among these was the computerization of the passenger reservation system by the Indian Railways (Ramani, 1991). E-governance during this period received a major thrust with the launch of NICNET in 1987, followed by the launch of DISNIC

that aimed at computerizing all the district offices in the country (2nd Administrative Reforms Commission, 2008). During the 1990s, several government departments at both central and state levels launched projects aimed at deploying ICTs for improving services to citizens. Initial attempts were made by some government departments during the latter half of this decade to use the World Wide Web mainly for providing information to the citizens. Several states, particularly the southern states, achieved significant successes in using e-governance to improve delivery of services to the citizens during this period. This trend continued during the early years of the last decade with several states across the country implementing citizen-centric e-government projects. However, these initiatives were isolated and fragmented due to lack of adequate and integrated ICT infrastructure reaching down to the block and village levels, lack of comprehensive backend computerization, lack of connectivity, and lack of adequate capacity at all levels of government to efficiently deploy ICTs for improving the quality of governance. The National e-Governance Plan (NeGP), conceptualized in the early

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part of the last decade, aimed at addressing all these deficiencies.

In this paper, I examine how the NeGP has performed against its original aims and objectives and the challenges that the various Mission Mode Projects (MMPs) under it have faced during their implementation. I also discuss how its effectiveness and citizen-centricity in terms of delivery of public services can be improved through adoption of new and innovative technologies and processes.

National e-Governance Plan

The National e-Governance Plan (NeGP) is the most significant initiative taken in India during the last decade to mainstream ICT in governance at both central and state levels. It lays emphasis on creating the right governance and institutional framework within the country, establish the core IT infrastructure, and implement a number of Mission Mode Projects at the central, state and integrated levels. The original vision of NeGP was to “Make all Government services accessible to the common man in his locality through common service delivery outlets and ensure efficiency, transparency and reliability of such services at affordable costs to realize the basic needs of the common man”.

The plan, consisting originally of 27 Mission Mode Projects (MMPs) and 8 Components, was approved in May 2006. Subsequently, during July 2011, four new MMPs on Health, Education, Public Distribution System (PDS) and Posts were added. The respective ministries and departments in Government of India are responsible for overall formulation, financial approvals and implementation of the MMPs.

Integrated Approach to Implementation

The overall strategy for implementation envisaged an integrated approach focusing on six key aspects and seven guiding principles (Chauhan 2009). The six key aspects included connectivity, capacity building, content creation, cyber law, citizen interface, and capital. The seven guiding principles included the following: centralized initiative and decentralized implementation; delivering public value; think big, start small, and scale fast; change management; common core and support infrastructure; capacity building; and public private partnerships (PPPs).

Governance Structure under NeGP

NeGP has conceptualized a well-defined governance structure to ensure its implementation as a comprehensive and integrated plan cutting across various central line ministries and state governments. At the highest level, there is a Committee headed by the Prime Minister to provide the overall leadership for the implementation of the NeGP. A National e-Governance Advisory Group headed by the Minister of Communications and IT has been constituted to seek views of the various stakeholders and deliberate on the policy issues and interventions needed to mainstream ICT in governance in the country. An Apex Committee on NeGP chaired by the Cabinet Secretary has also been constituted to monitor its implementation, provide policy directions and resolve any inter-ministerial issues. For the actual conceptualization, financial approvals, and implementation of the MMPs, the respective line ministries and departments are responsible. DeitY serves as the

secretariat for the Apex Committee in managing the NeGP and provides technical advisory and appraisal services to the various departments implementing the MMPs. It is also responsible for implementing the core infrastructural and other technical support components of the plan.

Components under NeGP

The NeGP consists of eight components. The three main core components consist of State Wide Area Networks (SWANs), State Data Centres (SDCs), and Common Service Centres (CSCs). All these three projects are being implemented by DeitY. The other five components comprise standards, awareness and communication, capacity building, assessment, and research and development. DeitY plays a pivotal role in these areas as well.

Mission Mode Projects under NeGP

The 31 MMPs under the NeGP consist of 11 central, 7 integrated and 13 state projects. The 11 central MMPs are as follows:

1. **Banking** - This MMP has been led by the banking industry and aims at integrating the core banking solutions across various banks in the country.
2. **Insurance** – This is another industry led initiative that focuses on services in the insurance sector being provided by the public sector insurance companies.
3. **MCA 21** - This project provides various services of the Ministry of Corporate Affairs such as registration of companies, filing of documents, etc. through a secure portal. It has 8 service categories.
4. **Income Tax**: It aims at providing all income tax

related services to citizens and businesses under 18 service categories.

5. **Central Excise:** It provides excise and customs related services such as online filing of service tax and excise returns, e-payment of customs duties, etc. under 16 service categories.
6. **National ID/UID:** It aims at providing unique identification numbers to all the residents in the country.
7. **Passports:** It offers all passport related services under 17 service categories including applications for new passports, renewal of passports, tracking of status of applications, etc.
8. **Immigration and Visa:** It provides immigration and visa related services under 9 service categories at the Indian Missions abroad.
9. **Pensions:** It provides pension related services to pensioners under 2 service categories.
10. **E-Office:** It aims at automating all internal file management processes within government departments.
11. **Posts:** This new MMP focuses on providing all postal services in the country including postal savings accounts and postal insurance.

Out of the 11 central MMPs mentioned above, 10 have gone live and are offering services to their stakeholders. However, not all services under their defined service categories may be operational.

The 13 state MMPs are as follows:

1. **National Land Records Modernization Programme (NLRMP):** It aims at comprehensive

computerization of land records, integration of registration and mutation processes, automatic updation of land records, etc. under 16 service categories.

2. **Commercial Taxes:** It provides online filing of returns and taxes, automatic refunds, etc. under 22 service categories.
3. **Transport:** It includes services like vehicle registration and driving licenses under 18 service categories.
4. **E-District:** It provides district and tehsil/block level G2C services such as various certificates, welfare services, etc. under 10 service categories. While five categories are defined, states can add five categories specific to their requirements. An E-District pilot project has been implemented across 41 districts in 16 states and now the project is being rolled out across all the states.
5. **Treasuries:** It includes all payment related services through treasuries under 13 service categories.
6. **Municipalities:** It provides municipal level G2C and G2B services such as birth and death certificates, payment of taxes and fees, licenses, etc. under 8 service categories.
7. **Police – Crime and Criminal Tracking and Networking System (CCTNS):** It aims at comprehensive automation of police and criminal administration system in the country with 23 service categories.
8. **Agriculture:** It provides services such as market prices, crop diseases and management, best practices in agriculture, horticulture, sericulture, etc. under 12 service categories.

9. **Gram Panchayats:** It includes services like house taxes, trade licenses, certificates, etc. under 12 service categories.

10. **Employment Exchange:** It includes services such as registration of job seekers and guidance to them, potential employers and online registration of vacancies, etc. under 6 service categories.

11. **Health, Education and PDS:** These three MMPs have been added in July 2011 and aim at providing a comprehensive range of services in their respective sectors.

Out of the 13 state MMPs four MMPs, i.e., NLRMP, Transport, e-District (Pilot), and Commercial Taxes have gone live and are delivering various services. Two MMPs, Treasuries and Municipalities, have become live partially. Three MMPs, CCTNS, Gram Panchayats, and Agriculture are under implementation and Employment Exchange MMP is yet to be launched. The three new MMPs are under conceptualization stage.

The 7 integrated MMPs are as follows:

1. **India Portal:** It aims at providing a single window access to all government services under various departments at both central and state levels.
2. **National Service Delivery Gateway (NSDG):** It is a messaging middleware to route intelligently and securely all service requests to the relevant backend databases and the processed services to the service seeker. It facilitates exchange of information across various backend databases of different departments. It has 6 defined service categories.

3. **Common Service Centres (CSC):** It provides ICT enabled front end kiosks for delivering various G2C and G2B services to citizens in rural areas.
4. **E-Courts:** It aims at automating court related services such as e-filing of cases, online availability of judgements, etc. under four service categories.
5. **Electronic Data Interchange (EDI) for Trade:** It enables online filing and clearance of import and export documents, online payment of charges and fees and exchange of documents among different government departments and agencies such as ports, customs, etc. It has four service categories.
6. **E-Biz:** It aims at providing integrated services through a single window for businesses and investors related to approvals and permissions, payment of various fees through one lumpsum payment, etc. under 29 service categories.
7. **E-Procurement:** It provides all procurement related services to various government departments and agencies.

Except the e-Biz MMP, all the other MMPs listed above have gone live though not all the services under various categories might be operational. E-Biz MMP is expected to go live shortly.

Cross-Case Comparative Analysis: Issues and Challenges in Implementation of NeGP

Though several projects under the NeGP have achieved significant success in implementation and have started delivering services to their stakeholders, many projects are facing challenges in implementation. What are these issues and challenges?

Operational

The main operational issues and challenges mentioned by the MMPs include lack of dedicated project teams, frequent changes in project leadership, lack of capacity and change management, inadequate engagement with the key stakeholders and issues in project management due to the sheer scale and diversity of some very large projects.

Institutional

The main institutional issues and challenges noted by the MMPs include inter-departmental coordination, duplication of infrastructure, lack of an institutionalized incentive scheme, inadequate business process reengineering (BPR), delays in obtaining necessary approvals, and exit management for PPP projects.

Legal

Some MMPs pointed out that recognition of electronic records is still an issue despite the legal mandate provided by the IT Act for the same. In some cases, BPR needed legal enactments to be implemented.

Financial

Some MMPs noted that delays in obtaining financial approvals were hampering the progress of implementation. Delays in release of funds to the states and their utilization was also mentioned by some state MMPs as a major challenge in making projects go live in those states.

Technological

The major technological challenges pointed out by the MMPs included dependency on core infrastructure for implementation, software customization, system

integration, compliance with security standards and third party audit, lack of a central network and lack of adequate disaster recovery (DR) facilities.

Critical Factors Affecting the Implementation of NeGP

We can observe from the above analysis that the issues and challenges being faced by the MMPs can be broadly classified into seven critical factors: information, people, management, process, structure, strategy and technology. This analytical framework allows us to suggest interventions to make the MMPs more effective and outcome oriented in their implementation. I attempt to do this in the next section.

NeGP: The Way Forward

How can the MMPs be made more effective in terms of their outcome orientation and how can they take advantage of the latest new and innovative technologies such as cloud and mobile to make implementation faster and more resource efficient? Based on the analysis in the preceding sections, the following recommendations can be made for the MMPs in this regard.

Redefining the Strategy: Outcome Orientation

The MMPs should redefine their service delivery strategy with a renewed focus on outcome orientation through provisioning of all feasible services through the electronic mode, well-defined service levels and measurable transactions either through CSCs or in self-service mode.

Process: Focus on BPR and Aadhaar Integration

The process interventions should include comprehensive BPR,

digital signing of all the documents, electronic authentication, integrated services and integration of the Aadhaar platform for service delivery.

New and Innovative Technologies: Cloud Computing, Mobile, and Localization

There is tremendous scope for exploiting the new and innovative technologies such as cloud computing and mobile platform for making rollout of services faster and more resource efficient. Cloud computing offers tremendous opportunities for fast-tracking the implementation of different projects and for quickly replicating the successful e-governance projects in various states across the country. Similarly, as access to mobile phones is much higher compared to the same for computers and internet,

mobile platform holds tremendous potential for widening the reach of e-governance, especially in rural areas. Use of local languages in applications can facilitate easy access to them for the people.

Institutional Structure and Management

Ensuring inter-departmental coordination and coordination among the central ministries and state government departments are sine qua nons for the success of any project. They are also vital in avoiding unnecessary duplication of efforts. Such coordination can also help in timely sanctions and releases of funds to the implementing agencies and states. There is also need for an institutionalized performance linked incentive scheme to be put in place for the MMPs. A proper management information system

(MIS) must be put in place by all the MMPs to effectively monitor the performance of the projects. Proper policies for strategic control and exit management also need to be put in place. Appropriate revenue models for ensuring financial sustainability of the projects also need to be carefully examined.

People and Information: Capacity Building and Empowering Stakeholders

Capacity building at all levels within the government is a must for the success of any project. The importance of dedicated project teams and change management cannot be overemphasized. Disseminating proper information and empowering the key stakeholders can go a long way in ensuring the success and sustainability of the projects.

Conclusions

NeGP has achieved notable successes after six years of its implementation. However, several projects under NeGP still lack a clear focus on outcomes and face a number of challenges that have prevented them from becoming fully operational and effective in terms of delivering services to the people as per the original vision of NeGP. At this critical juncture, there is a need for enhancing the effectiveness and speed of implementation of these MMPs to make them more outcome oriented. Interventions focused on BPR, adoption of new and innovative technologies such as cloud and mobile platforms, localization, e-authentication and Aadhaar integration in service delivery, capacity building, change management, and empowering the key stakeholders can go a long way in enhancing the effectiveness of NeGP and in realizing its original vision. □

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Issues and Challenges faced by MMPs	Critical Factors as per Heeks and Bhatnagar (1999) Model
Operational: dedicated project teams, project leadership, capacity and change management, inadequate engagement with the key stakeholders, project management	Information, People, Management, Structure
Institutional: inter-departmental coordination, duplication of infrastructure, lack of an institutionalized incentive scheme, inadequate business process reengineering (BPR), delays in obtaining necessary approvals, and exit management for PPP projects.	Management, Process, Information, Structure, Strategy
Legal: electronic records, BPR	Process, Management
Financial: delays in financial approvals, release of funds	Process, Management
Technological: core infrastructure, system integration, customization, Security, DR	Technology