

## E-governance: Tackling the Hurdles

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### Introduction

E-governance uses technology to reach Governmental services to the masses. Recent developments in the web technologies and networking technologies have reduced the time and cost of information acquisition, maintenance and dissemination thereby making e-governance an obvious choice over conventional delivery mechanisms of governmental services.

While e-governance is as old as, if not older, the Internet itself, except for a few states, no remarkable change is seen in the efficiency of government system because of e-governance implementation. The paper critically analyses the bottlenecks preventing India from benefiting out of e-governance. Inference is drawn from successful implementation of REGINET (Tamilnadu Government's Registration Department) in regional language overcoming such hurdles.

### Objective of E-governance

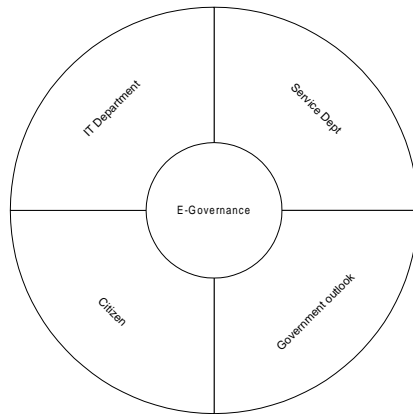
E-governance is the process of service delivery and information dissemination to citizens using electronic means. By virtue of advantages of electronic medium, e-governance provides the following benefits over the conventional system:

- Improved and faster service delivery to citizens and business.
- Increased efficiency in other Governmental processes, viz, purchase, disposal etc.
- Transparency and anticorruption in all transactions
- Citizen empowerment through Information

Where there is a significant gap between expected and existing efficiency delivery mechanism that can be rectified by IT enabling, there is scope for e-governance. Use of regional language in e-governance will increase the efficiency of delivery mechanism.

E-governance is not restricted just to large processes like registration department or telemedicine. Consider a mid-sized initiative like the Electronic Voting Machine which revolutionized election administration by speeding up voting time and counting.

### The E-governance Ecosystem



#### Stakeholders

Government Service Department  
IT Department / IT Consultants  
Citizens & Business Entities

#### Environment Variables

Social Environment  
Political Environment  
Economic Environment

### Hurdles in Implementing E-governance

Implementation of e-governance architecture in a developing country like ours is a formidable task. The hurdles faced when implementing e-governance in India are analyzed in the following paragraphs.

#### 1. Lack of Clarity of Objectives

Lack of planning and unclear objectives result in poorly designed systems and cost overruns. A clear motive and understanding of the benefits of computerization is required.

E-government initiatives should be financially self-sustained. This does not necessarily eliminate the low-revenue areas. It is just an early-phase prioritization of 'bankable projects' so that success of these efforts catapults the e-governance movement further. Failures will set a bad precedence diluting the interest in the e-governance phenomenon. Hence pilot projects should precede full-scale implementation. The mantra is "Start small and scale up gradually"

REGINET, for example, started with a package called STAR, a client-side VisualBasic Software with SQL Server Database with TAB Tamil encoding support for archiving database. Now they have almost computerized 325 registrar offices and are ready for complete centralization.

To appreciate the benefits of e-governance, it is advisable to take up projects that would have sizeable manual operations, citizen interface and revenue potential. Consider citilight.com. a portal to monitor streetlight operations in Tirunelveli. It was conceived to 'bring about transparency, accountability and prompt & efficient complaint redressal'. While small initiatives like this are welcome, a specific critical mass is required for the efforts to be commercially viable.

#### 2. Inadequacy of Funds

Though funds are available in plenty for developing nations under various heads, project cost underestimations are common, resulting in unfinished projects and higher maintenance costs.

Hence careful funds flow planning for short and long-terms should be done.

### **3. Human Resources Aspect**

Dearth of quality IT personnel is typical of an underdeveloped country, but uniquely, not faced by India. However, the existing manpower mostly is not IT-ready to be deployed into e-governance projects. Training costs might be high due to geographical spread. A favorable element is availability of versatile manpower who can be relocated, or re-trained to other functions.

Re-allocation of existing manpower to the new hierarchy is an organizational challenge. The archaic resistance to computerization namely 'retrenchment fear' has to be carefully preempted and combated, by attractive golden handshake schemes or training in other functions.

In REGINET the SROs and DROs were trained to use MIS reports and e-mail. The data entry operators were trained to work with STAR package with their existing typewriting skill.

### **4. Data Backlog**

Piled up historical data has to be archived initially. Often, this mammoth task makes people hesitate to take the first step. Ideally the process can be outsourced as a one-time activity.

### **5. Leadership and Change Management**

The e-governance implementation leader should be strong in project management and man-management. More than technical issues it is management of change that is of prime concern. Reasons for resistance are many. It could be because the concerned branch will lose ownership of data once shared. Or it could be just resistance to computerization concerning job security.

A project manager at Computer aided Administration of Registration Department (Andhra Pradesh) describes his distribution of time and effort as below:

- 45% - Change Management
- 35% - Re-engineering of Processes
- 15-20% - Software
- 5% - Other Factors

This clearly goes out to prove that change management and process reengineering play a vital role in e-governance implementation.

### **6. Lack of Catalysts**

Evolution of e-governance evangelists is essential for handholding the e-governance effort in the initial period. They act as catalysts to accelerate acceptance process among users and to ensure rapid deployment internally, by

- Facilitating acceptance,
- Motivating the front-end service people,
- Create an awareness and curiosity among the users by explaining the benefits.

An ideal catalyst would be a computer savvy person who has power and authority in the governmental system and high credibility among service department and user communities. Many IAS officers have shown interest to take up e-governance projects for their respective

departments. Awareness is increasing in Tamilnadu because of efforts of IAS officers like Mr. Umashankar, who implemented Tiruvarur District e-governance.

The catalytic role of media to create awareness among public should not be underestimated.

### **7. Lack of Coordination**

Ideas originate as indigenous efforts of service departments. But coordination with other internal functions facilitates support from other functions. Lack of coordination across administrative and policy boundaries will affect program effectiveness and program efficiency.

In the case of REGINET organizations like ELCOT act as advisory groups to solve such coordination issues.

### **8. Internet & System Readiness of the E-governance Eco-system**

Lack of cost efficient and technically superior Internet backhaul is a drawback. Use of existing obsolete equipment that cannot support recent Internet technologies is a constraint. An empowered organization to perform as an Internet & Infrastructure Provider with operational independence could solve this problem. In Andhra Pradesh, AP Technology Services was set up with a freedom of a private company and a pay structure to attract and retain good talent.

In Tamilnadu, NIC and ELCOT have taken efforts in implementing E-governance. Most of the departments in Tamilnadu are computerized and the data archived. REGINET is a classical example of a successful e-governance project. REGINET will connect 660 Registrar offices to the Office of the Inspector General of Registration to automate activities of the Registration Department. (<http://www.tnreginet.net>)

Separate Internet backbone for individual departments might prove costly. Instead, if various departments collaborate, the cost is shared.

Database and internal processes should be reorganized to facilitate easy computerization. The applications should be future-proof. Back up and disaster recovery should be built in.

The biggest hurdle is lack of involvement of the service department concerned. Herbert Roy & Associates from ZDNet explains why even big IT companies were not able to implement software projects for government. He says, "...prime reasons include poor requirement-gathering and non-involvement of end-users during this process, poor or negligible IT awareness among decision-makers, poor management of knowledge and human resources, non-compatibility between IT projects and business processes, poor risk management, choice of technology and over-ambitious projects."

### **9. Legal Framework Readiness**

Enabling existing legal framework to authorize electronic documents and processes is another critical process. The legal system should be flexible to permit amendment of existing rules etc, (e.g. Amendment of National Registration Act, 1988 to use of computers).

### **10. Service Orientation & Motivation of Staff and Intermediaries**

Customer orientation of the existing manpower is critical. Low productivity and lack of professionalism and work ethics will prove an indirect bottleneck to implementation. E-governance eliminates corruption practices in the hallowed portals of Taluk office and the like. Hence miscreants could moot anti-establishment activities to resist change.

Mr Pramod Mahajan, Former Union IT Minister, once said 'IT in isolation cannot bring a change unless administrators at the middle level is trained and motivated to use IT tools to speed up communication and decision-making'.

Use of motivated IT-savvy intermediaries can help bridge the gap between the computer-illiterate rural masses and e-governance. The government should motivate staff and entrepreneurs to shift to rural pockets and startup activities as intermediaries.

### **11. Citizenry Readiness**

At least moderate literacy levels are required to derive benefit out of e-governance process. Poor attitude towards new technology and widespread poverty are also major bottlenecks. Computer-savvy citizens and willingness to try out new system will help easy acceptance. Cities are early adopters but acceptance and usage in villages will increase only after persistent follow-ups and training, demonstrations, free trials etc.

Tools like COMPLIT (a regional language computer literacy program by Dr. Vijay Bhatkar of ETH Research Lab & Maharashtra Knowledge Corporation) will accelerate computer literacy.

### **12. Maintenance Challenges**

Sustaining the interest levels till the critical mass is achieved is a maintenance challenge. Effort levels and monetary support tend to wane after the launch and initial visibility. Identification of continued funds source is required at the initial stage.

While taking up e-governance limitations of online delivery process should be recognized and gracefully accepted. We get myopic considering IT as an end whereas it is only a means to achieve the objectives of e-governance. It is meant to complement and not completely replace the traditional service delivery methods.

### **Role of Local Language in E-governance**

Advent of language computing has catalyzed usage and acceptance. Apart from this, availability of implementation human resources (e.g. Data entry operators) and ease of training existing manpower is now possible only because of language computing. Thus it is a critical component contributing to the success of e-governance.

Herbert Roy & Associates feel that IT enabled vernacular services are sorely needed as much as IT-enabled services for quick capitalization of technology. In the case of Tamilnadu this problem has been partly resolved.

The efforts taken by standardization committees like INFITT made it possible to arrive at a standard encoding like TAB, which is now used by all government offices to archive data. Full-fledged portability of data and compatibility with various OS would have remained a dream but for the standardization efforts.

### **Conclusion**

Since the beginning of e-governance initiatives, we have come a long way. But the pace of development is still very slow. E-governance models implemented now in the form of static websites (statutory forms, policies, rules and regulations) do not harness the real power of Internet arising out of interactivity and speed.

A clear understanding of the hurdles will help tackling them during planning and implementation. The need of the hour is a group of like-minded forward-thinking people with genuine interest in the language and the citizens of the nation.