

# Implementation of E-Governance in India: Opportunities and Challenges

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## Abstract

E-Government means different things for different people. Some simply define it as digital governmental information or a way of engaging in digital transactions with customers. The word Governance in relation to the country, means proposing the societies a system, capable to deliver various services for a excellence existence. Governance similarly means controller and power. Wherever these two are to be trained, they should be exercised keeping in mind the interests of people. Traditionally, the interaction between a citizen or a business and a government agency took place in a government office. With the emerging Information and Communication Technology (ICT) it is now possible to locate service centers closer to the clients. In this Paper we discussed about the sustainable e-Governance Programs and usage of the ICT in Rural Areas of Punjab and their Challenges. It has endeavored to evaluate Punjab's attempt to develop its e-government infrastructure on the lines of as implemented in Chandigarh. In particular area the local language of the people, Personal Data privacy, etc., are the main challenges which are more responsible for making failure of e-Governance in India.

## Keywords

e-Governance, ICT, Growth of ICT, Rural Punjab

## I. Introduction

### A. Fundamentals of E-government

Countries, businesses and individuals seek to integrate the internet into their day-to-day activities. Governments worldwide acknowledge the potential of the internet and ICT by offering efficient and effective public services, through e-governance. According to Hasan (2003), ICT offers three processes to promote governance:

- automation: computerization of clerical functions
- informatisation: using information systems to support decision making and to enhance communications
- transformation: implementing new ICT-based information processes and process reengineering.

E-government is not about implementing a new IT system only, but rather it aids to enhance and re-engineer work processes and systems for greater productivity (Kim et al, 2004). The Organization for Economic Co-operation and Development (OECD) described ICT: "as ICT incorporated into a package of modernization, organizational change and related reforms that challenge public governance frameworks" (OECD, 2003).

### B. E-Governance Platform

E-government infrastructure is another crucial issue that can sometimes be costly to build and manage. Infrastructure construction can be outsourced to alleviate the heavy financial burden on governments, but this can be the least preferred option for some governments that prefer to retain control of internet development and the internet flow of information (Huff, 2001). Security and online legislation, which could be considered as basic infrastructure requirements, are also important factors for

e-government. "If implemented properly, security is a way of life (Heiman, 2003)".

A society's e-readiness is another issue that should be closely planned and measured to ensure that e-government systems are used by the majority of potential users. Alsawafi and Sridhar (2003) point out that "E-government vision requires a community that is informative and technologically literate to access the information they require." Bui et al (2003) define e-readiness as "the aptitude of an economy to use information and communications technologies to migrate traditional businesses into the new economy." E-readiness can be measured by eight main factors:

- knowledgeable citizens
- skilled workforce
- macro economy
- digital infrastructure
- industry competitiveness
- culture
- ability and willingness to invest, and
- cost of living.

This emphasizes the importance of measuring the society's e-readiness as part of a government's main IT strategy, and to construct a profile of those segments of the community that are more likely to be able and willing to use online systems and ICT in general.

In addition, continuous e-government monitoring is crucial to identify minor defects before they can cause a major failure. Government policy makers measure e-commerce and e-government performance worldwide, with the OECD is working to provide measurement indicators for e-commerce readiness (WPIIS, 1999). Despite the OECD's massive effort, it has been argued that its readiness indicators are very much technically oriented (Deiss, 2002). De Graaf and Muurling (2003) extend the OECD's readiness framework to include mindset indicators that describe the attitudes of stakeholders toward e-commerce. These indicators are an initial attempt to address the effects of cultural factors on e-commerce.

### C. Research Objectives

1. To study the ICT usage for sustainable e-Governance in Rural Areas of Punjab.
2. To know about the Various e-Governance Programs implemented by the Punjab Government.
3. To discuss the Issues and Challenges for sustainable e-Governance in Rural Areas of Punjab.

### D. Research Methodology

A questionnaire was developed with the research questions in mind. Simple English will be used. Different segments of the Punjab's society will be chosen to provide a fair representation of people with good education and income.

### E. Analysis

#### 1. Performance Expectancy

Performance expectancy is one of the important factors to examine

technology adoption by the service provider and the service availing public. The degree to which individuals believe that using a system will help them to improve their job performance. The questionnaire had various questions to evaluate performance expectancy.

The result shows that 61% of citizens favor corruption free dealings for the good quality administration and governance. Which is followed by citizens' centric services in a responsive manner 57%; maintaining rules of law; applying the same rules to anyone 55% respectively. Only 23% citizens favor total freedom for administration and governance. People expect good governance in a responsive manner.

The results depict that 48% people have personal TV with cable connection for entertainment and also 44% use mobile phone for entertainment.

The result depicts that 45% of total citizens respondents have access to internet at cyber café/mobile phone and 40% of total citizens respondents have a personal computer with internet, whereas 32% respondents do not have access to a computer. The services can be availed as the population has the necessary tools to access the services through the information technology tools. 43% of respondents use the internet occasionally, 21% respondents use the internet daily and 9% of respondents use internet monthly. This is due to the fact that the population belongs to rural areas, and there is lack of interest due to all information published in English language despite of regional/local language.

The result indicates that most of citizens emphasizing on improvement of services in the sector of land records, registration and transfer of property, copies of other records, property tax, revenue related cases through computerized ICT/use of e-governance. The results depict that there is expectation for in favor in political will, commitment and leadership for e-governance services. The result shows that maximum citizens favor in nearby access point from citizen's home for e-governance services. The citizens are supporting online services as the most appropriate measure for making effectiveness of e-governance services.

## 2. Effort Expectancy

The degree of ease associated with the use of the system; effort expectancy is made up of, perceived ease of use, complexity and actual ease of use. The questionnaires are used for evaluating effort expectancy in e governance.

The result shows that 72% of citizens are having trust on online services. The result shows that the trustworthy e-governance services is the most important factor for citizens; which is followed by timely service delivery, transparency and 24\*7 availability of e-governance services.

The result depicts that approximately 50% of citizens favor services like downloading application forms and submitting application forms online and make free payment through credit card/debit card. Only 10% of citizens supporting present method and say that there is no need of any computerized government services. Maximum citizens supporting the use of Punjabi language and multilingual for computerized government services/ ICT led e-governance services respectively.

The result highlights that the maximum (55 %) people favor free computer education in primary level for creating awareness of using computerized government services/ e-governance services in the effective manner. Around 45% of citizen supporting the opinion of having Computer education at the high school level and college level for a nominal fee. The result depicts maximum citizens are in favor of basic computer literacy should be provided

to the existing government staff and made compulsory for all future promotion in government staff.

## 3. Social Influence

The degree, to which peers influence use of the system, is positive or negative. Unreasonable delay, multiple visits even for small services as well as non-responsiveness of government staff to the needs of urgency of citizens and lack of information/guidance for the correct procedures, form, rules, etc. are the most common reason or difficulties that are being faced while getting the citizen services from various government departments.

29% citizens favor that political will support and patronage is important in effective good governance framework. 15% people are in favor of problem identification in each department/service and around 10% people are in favor of public affordability of cost service public accessibility, reachability and coverage of service building, electricity, regular monitoring and feedback to enforce accountability system under the rule of law for effective good governance. Quick obsolescence of technology, huge cost of up gradation and privacy of citizens are considered as major direct risk/threat while implementing good governance through the use of IT/e-governance respectively.

Maximum citizens prefer free of cost even if services have to be directly taken through the government Offices only at the same quality level of computerized citizens' services/e-governance services. 123 of the total respondents favor with through bank, community centers, Panchyatas, public kiosk and other similar agencies in my locality duly authorized. Around 101 of the total people favor private and personal services, even if provided through unauthorized dealers/brokers/touts etc. 148 of the total citizens favor Online self service through the internet, Cyber Café, Internet Kiosk at community centers free, at cost as well as Online service through common service centers or call centers at a reasonable cost for effectiveness good governance.

28% people favor pressures from vested interest groups like politicians that is significant barrier and is a challenge for effective computerized services/e-governance service. 13% of citizens consider lack of training to government staff/their capacity to handle the technology for good governance.

## 4. Facilitating Condition

The degree to which an individual believes that an organization and technical infrastructure exist to support the system are facilitating conditions. These are comprised of three roots: perceived behavioral control, facilitating conditions and compatibility.

The result highlights that most of the respondents are in favor of getting computerized citizen services in District office HQ at basic cost. The result highlights that maximum percentage (41%) of respondents favor on online payment/online bank transfers on the internet.

The result illustrates that 187 of the total respondents are in favor of six months to one year timeframe at the cost to be paid by the citizens, whereas 43 of the total respondents are supporting five to ten years time frame at no cost to the citizens for availability of computerized services/governance services.

## 5. Behavioral Intention to Adopt

Intention is an immediate predictor of belief. The result depicts that 44 % and 44% citizens are supporting the opinion that e-governance increases the efficiency in government services and increases citizen empowerment respectively. The maximum percentage of respondents favor implementation of governance

as it brings the radical change in the way government functions and would bring in real benefits to the citizens.

## **F. Challenges for e-Governance in India**

India does have an inspiring vision of where e-governance is going; there is a gap between service delivery and reality in that country. The challenge of e-governance in India lies in providing the service to about a billion people. At the moment, India is ranked 87th in the global e-government readiness ranking of 2005 (CIOL, 2006), which indicates significant room for improvement. There are a large number of obstacles in the implementation of e-Governance in India. These can be categorized under the following titles: Environmental and Social Challenges, Economical Challenges and Technical Challenges. These challenges are explained below:

### **1. Environmental and Social Challenges**

#### **(i). Different Language**

One of the major constraints is language. In India 70% of the population still living in villages India's national language is Hindi after that there is more than 26 languages and more than 100 local languages are used to communicate. The people belonging to different states speak different languages. English may not be understandable by most of the people. This is one of the major reasons for the least acceptance and adoption of e-government.

#### **(ii). Low Literacy**

Literacy can be defined as the ability to read and write with understanding in any language. A person who can merely read but cannot write cannot be considered as literate. Any formal education or minimum educational standard is not necessary to be considered literate.

#### **(iii). Recognition of Applications**

The next major challenge for e-government adoption is identification of e-government facilities by the citizens. It is a big challenge to have all the citizens well aware of the facilities offered by the e-government.

#### **(iv). Services are not accessible easily**

The concept of e-Governance is claiming for increased efficiency and effectiveness of the government, but these goals will be achieved only if the service will be available to the 100% of the citizens. So, every service should be accessible by anybody from anywhere and anytime. Even if the users of the Internet are growing but still there is a major part of Indian population which is not able to access e-Governance activities.

#### **(v). Lack of Awareness in People**

Unawareness is a major challenge in the implementation of e-Governance projects. Most of the people of Punjab are not aware of the advantages of e-government services. The government also does not pay much attention to make the people conscious about e-government applications.

### **2. Economic Challenges**

#### **(i). Cost**

E-governance projects are the costly affairs; these require large amounts of money to implement. Overall economic condition of India is not so good, but if we will talk about the state wise than there are different economic conditions. Many projects on

e-governance are still on the waiting lists because of the limitation in financial resources.

#### **(ii). Applications Must Be Transferable From One Platform to Another:**

e-governance applications must be independent of hardware or software platforms. Therefore, these applications can be used on any platform irrespective of the hardware or software, and from one platform to the other platform.

#### **(iii). Maintenance of Electronic Devices**

As the Information Technology changes very fast and it is very difficult for us to update our existing systems very fast. Maintenance is a key factor for long living systems in a rapidly changing technical environment.

#### **(iv). Low per Capita Income**

Per capita income means how much each individual receives in terms of money, of the yearly income generated in a country or state. As compared to other states, per capita income of Punjab is low. Therefore, people cannot afford on-line services provided by the government, which is a challenge for the implementation of e-governance. (Mittal & Kaur, 2013)

### **3. Technical Challenges**

#### **(i). Scale of Applications**

E- Governance projects have to be designed to scale from the day one. e-Governance is supposed to affect every citizen of the country, so e-Governance applications must have the scale to interface with every citizen.

#### **(ii). Multimodal Interaction**

Multimodal interaction provides the user with multiple modes of interfacing with a system. An e-Government application can be really effective, if its users can access it using different devices.

#### **(iii). Interoperability**

Interoperability is the ability of systems and organizations of different qualities to work together. The e-Governance applications must have this characteristic so that the newly developed and existing applications can be implemented together.

#### **(iv). Privacy and Security**

A critical obstacle in implementing e-Governance is the privacy and security of an individual's personal data that he/she provides to obtain government services. With the implementation of e-government projects, some effective measures must be taken to protect the sensitive personal information of the people.

#### **(v). Scope of Applications**

The very first step in creating a good application is to define its scope very well. The applications which are provided by e-Government, their scope must be known in advance for the accurate implementation of e-Governance projects.

#### **(vi). Local language**

The acceptance of English language in India is very low. The e-governance applications are written in English. That is why e-Governance projects do not get success. Hence, the e-governance applications must be written in the local language of the people so that they may be able to use and take advantage of these applications.

## VII. Conclusion

As we know the usage of Computers or Information Technology is growing very fast, Indian government is doing many efforts to provide more services to its citizens through e-Governance. Although the Indian government is spending a lot of money on e-Governance projects, but still these projects are not successful in all over of India. Unawareness of these services in people, In a particular area the local language of the people, Personal Data privacy, etc., are the main challenges which are more responsible for making failure of e-Governance in India. Government must take some strict actions to create awareness about the e-Governance activities among the people so they may take full advantage of these activities and the e-Governance projects can be implemented successfully in the future.

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