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Technology Implementation in Public Sectors units of Andhra Pradesh

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Abstract

In this paper we have discussed about computer-based information and communications technologies like mobile technology that distribute the fundamental development to the transfer of public services. Now a day's several types of electronic devices are used to share the information to common people by GUI (Graphical User interface) like tablet-PC and smartphone etc., by using technology government of Andhra Pradesh has started services to urban and rural people for providing quicker services. All these openly specify the increasing public interest in mobility and various services relating to being mobile. At this development the objective of the paper is to explore the probable for e-Governance and m-Governance in Andhra Pradesh, next section throws about light on case studies on e-Governance, third section concentrates and policy and governing issues pertaining to e & m –governance in India and finally ends with conclusion.

Keywords

e-Governance, M-Governance, ICT: Information and Communication Technologies, Services, and Technologies

1. Introduction

In recent times, IT has an unlimited impact on how diverse Indian Government departments function. Administrations around the India are progressively interested in the potential for delivering government services through Internet. Models of large transition to electronic service delivery can be found in some segments in some countries [1], however most government services have failed to evolve from enhanced information-based web pages. One of the important factors to provide efficient government services is accessibility of all government services over a single point delivery platform. Using the government services in India [6] is not that much appropriate and an easy task. The administration divisions should have an united platform with a protected access control system. It is thus important to design a clear enterprise architecture framework for the government divisions.

• e-Governance means Invention in Management Excellence in customer oriented services distribute at lower cost with best operative and efficient way by using :
E=MC3
E= e-Governance,
M = Mass (people),
1st C = Computer,
2nd C = Connectivity,
3rd C = Content/Information [2].

2. Phases of e-Governance

It is evident that e-Governance is essentially connected with the development of computers, networking of computers and communication systems. In emerging countries [1], such technologies and systems became available with a noticeable time lag as related to developed Countries. However, in the circumstance of India, with the liberalization of the economy from the early 1990s onwards, there has been a meeting in the accessibility of cutting edge technologies and opportunities in the field of e-Governance. India have skilled following phases while introducing e-Governance in country.

(i) Computerization: In the first phase, with the availability of personal computers, a large number of Government offices got furnished with computers. The usage of computers started with word processing, rapidly followed by data processing.

(ii) Networking: In this phase, some components of a few administration people got connected through a hub leading to division of information and flow of data between different government objects.

(iii) On-line existence: With growing internet connectivity, a need was felt for continuing a presence on the web. This occasioned in maintenance

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of websites by administration departments and other entities. Usually, these webpages/ web-sites contained information about the organizational structure, contact details, reports and journals, objectives and vision statements of the respective administration entities.

(iv) On-line interactivity: A natural importance of on-line incidence was opening up of communication channels between administration entities and the citizens, civil society establishments etc. Most citizen-government communications have the potential of being placed on e-Governance mode.

A. Ethics of e-Governance Applications

- To ensure level flow of information among citizen, business and Governments (State and Central) by requiring interoperable systems which are scalable for future transaction volumes and frequencies.
- To make necessities and specifications available in the civic domain
- To promote drop of struggle (cost by variety reduction) and risk leading to economic solution.
- To protect customer interests by enabling adequate and consistent excellence of Information and Services with human centric design of systems.
- To provide users a common terminology and a framework for communicating technologies across different domains.
- To avoid Seller lock-in.

B. The downsides of manual Government:

- Overall excellence of service, rated by a five-point scale, also with questions regarding likely attributes to the quality of service, for example, receptiveness of staff, convenience of office location, office hours and facilities at the service centre.

- **Long Queues**: At any government service centre in Andhra Pradesh there are many long queues, and the people availing the services must go through that. So results in waste of time. Quality of overall governance, for example, transparency, corruption, equality of treatment, value of feedback, and levels of accountability.

These are some disadvantages which a common citizen face every day at government service centers of Andhra Pradesh. Which cause the wastage of precious time and money. These drawbacks can be overcome by technology. The welfares of the e-Governance are as monitors Speed, Efficiency, Convenience, Increased Transparency, Reduced corruption and reduced cost of running these proves that the e-Governance is better than the manual governance. It is suitable and cost-effective for businesses, and the public welfares by getting easy access to the most current information available without having to spend time, energy and money to get it. e-Governance helps simplify processes and makes access to government information more easily accessible for public sector agencies and citizens.

C. Experience of e-Governance in India

e-Governance started in India during the 70's with a concentration on in- house government applications in the areas of defense, economic monitoring, arrangement and the deployment of ICT to manage data rigorous functions related to elections, census, tax administration etc. After the early 90's, e-governance has seen the use of IT for wider sector applications with policy emphasis on reaching out to rural areas and taking in greater inputs from NGOs and private sector as well. The Indian government is using IT to facilitate governance. The IT trade is doing its bit to help as public-private partnerships become the order of the day. The last couple of years have seen e-Governance drop roots in India. IT enables the distribution of government services as it caters to a large base of people across diverse segments and geographical locations. The effective use of IT services in government administration can greatly enhance existing competences, drive down communication costs, and increase transparency in the functioning of various departments. It also gives citizens easy access to real benefits, be it through simple applications such as online form filling, bill sourcing and payments, or complex applications like distance education and tele-medicine. And now the latest Unique Identification Authority of India (UIDAI) scheme launched under Nandan Nilekani, which gives Unique ID to each and every native of India. It will be a robust support to e-Governance in India. But converting all the manual services to e-Services is a bit though job. It has been tried by many of the association across the country and many State Governments in India have taken step ahead for the growth of e-Governance in many of services.

Dr. APJ Abdul Kalam, former President of India and a visionary in the field of e-Governance has aptly summarized the basic challenge lying before the country in this regard *[12] "e-Governance, has to be citizen-friendly. Delivery of services to citizens is considered a primary function of the government. In a democratic nation of over one billion people like India, e-Governance should enable seamless access to information and Seamless flow of information across the state and central government in the federal set up"*

The essential elements:

The will to change on implementing e-Governance.

- Political guidance and support at the highest level to implement e-Governance.
- Incentives by implementing e-Governance.
- Awareness on apply e-Governance.
- Overcoming resistance to change.

3. Gaps in implementing e-Governance

- Lack of proper understanding of capacity building requirements.
- Lack of data on the human resource requirements to support the state e-Governance implementation.
- Personnel with relevant background and aptitude as a major issue.
- Inappropriate skill set of personnel already employed.
- Policy gaps while sourcing from private sector.
- Shortage of expertise and Lack of skills within the state training institutions. While conducting training programs.
- Inappropriate standards, policy guidelines for e-Governance.

Current challenges in implementing e-Governance:

- Inadequate funding support for Project Preparation & Planning.
- Lack of Objectivity in Selection Projects.
- Change in Government's is a major issue on e-Governance Policies to ensure continued leadership throughout the Project Life cycle.
- Lack of focus on Redesigning Services with citizens utilities.
- Improper estimation of project length and project schedule.
- Skills updating of employees on capacity building.

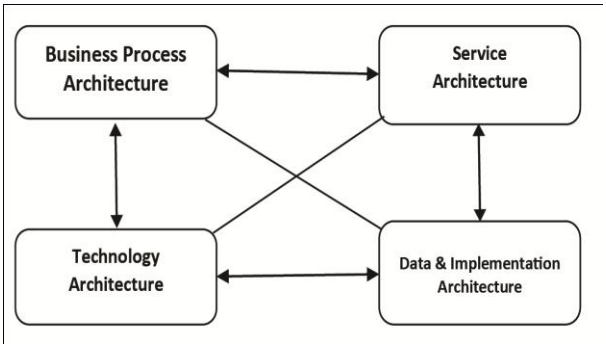

Figure 1: E-Government Enterprise Architecture

Types of Communications in e-Governance

G2G (Government to Government) – In this case, Information and Communications Technology is used not only to restructure the governmental processes involved in the functioning of government bodies but also to increase the flow of information and services within and between different bodies. This kind of interaction is only within the range of government and can be both horizontal i.e. between different government agencies as well as between dissimilar functional areas within an organization, or vertical i.e. between national, regional and local government agencies as well as between different levels within an organization. The primary objective is to increase effectiveness, performance and output.

G2C (Government to Citizens) – In this case, an interface is formed between the government and citizens which assists the citizens to benefit from efficient delivery of a large range of public services. This expands the availability and accessibility of public services on the one hand and improves the quality of services on the other.

G2B (Government to Business) – Here, e-Governance tools are used to aid the business community – suppliers of goods and services – to smoothly interact with the government. The objective is to cut red tape, save time, decrease operational costs and to create a more apparent business environment when dealing with the government.

4. m-Government

m-Government also known as "Unplugged Government" is basically used of all kinds of

wireless and mobile technology to deliver the government services at the door step of the citizens. Considering the rapid penetration rate of mobile phones in rural areas the m-Government is having lots of scope to deliver a plethora of services to the rural poor [2]. The following are some of the advantages:

• Investment is very less
• Accessible is Rural areas
• Can be used in local language
• Creating a mobile platform so that all these mobile applications can be applicable for the purposes of G2C services. In today's world, where mobile and wireless technology [1], [8] are growing without bounds, the extension of e-government facilities to m-Governance seems to be not a detached reality [2]-[3], [9]. m-Government is itself a complex business strategy for the efficient utilization of all wireless devices providing for instant availability of services and information for better benefits to users.

Information and communication technologies have possible to support governance services in different dimensions such as citizens, businesses and governments. e-Government is the result of public sector business reforms to justify government activities and launch e-Government services that serve as a catalyst for the change of existing services to different parties [5],[8]. Governments and their private business allies are pursuing the delivery of government services via the Web. Presently, majority of existing efforts are focused on desktop computers running on wired network in e-Government computing atmospheres.

Wireless access will comprise commercial service providers, connections to local and wide area government networks and, in some cases, public and private partnerships to extend Internet access in rural and remote areas. The early use of wireless Internet [2] appliances has been e-mail-based notification services, or one-way communication subscriptions to specific information. More and more transactional, two-way communication services are being made available through the wireless medium. As the number of Internet wireless appliances continues to grow, government services will be available via the wireless medium. m-Government [2], [3], [4], [7] is not to come for the future with the plenty of all wireless technologies appearing in the market such as 2.5G (GPRS, CDMA 2000 1X) and 3G/$G LITE WLL and WLAN, WI-MAX.

5. e-Governance in Andhra Pradesh

Mee Seva is a Citizen Service to deliver government services. It was started by Government of Andhra Pradesh. It is presently offering 45 government services. It was launched in July 2011. It delivers 45 services like issuance of birth, caste and income certificate etc. and plans to increase more them to 100 services. Mee Seva Portal, Citizen Service with a Difference e-Seva, AP Portal, AP Online, e-Procurement CFST- Transport Department Services, CARD- Computer-aided Administration of Registration Department, APSWAN- AP State Wide Area Network, AP State Wide Video Conference, SAPNET, KM-ATOM - Complete Office Tool for Paperless Office, e-Return - VAT eReturn, CDSC - Online issue of statutory Forms of CT (Commercial Taxes) Department, MGNREGS - Mahatma Gandhi National Rural Employment Guarantee Scheme, e-Suvidha - Complete Application for Municipalities, Small and Medium Enterprises (SMEs) in e-Governance Projects [11].

These are some of the Departments of state governments where e-Governance is applied. In synchronization ith the country wide initiatives taken up by e-Governance front, Government of Andhra Pradesh has also taken specific initiatives to simplify services to citizens and to bring greater transparency and accountability public services delivery. But Government of Andhra Pradesh is trying for the complete e-Governance, through the portal site the government is making aware the citizens about various services and how to access them. Information Technology opens up tremendous opportunities to provide basic government services to a much wider segment of the population at the optimal quality, time, place and cost. The Government of Andhra Pradesh is firm to leverage its strength in IT to provide anytime, anywhere people services. Meeseva, is a G2C service which is faster, easier and transparent way of delivering services to the citizens which entails central polling of all records, digital signatures of the officers concerned, storing them in a database and rendering them using a web service. Meeseva services is that the documents rendered were digitally signed and electronically verifiable. Meeseva is service system by which documents, certificates pertaining to the people are issued by Govt.

6. Information and Communication Technology (ICT)

One of the prime components for rural development in developing India is information access. Although the Information and Communication Technology (ICT) revolution in these countries [1] has gained energy, most of the farming communities still have no access to value added information. The agricultural researcher and the farming community need to enhance their knowledge by increased 'farmer participation' in research. This paper makes a strong case for the use of participating approaches involving farming community for development and adoption of ICT in the agricultural sector. It acknowledges that farmers are knowledgeable and inspires researchers to work with farmers and development workers for agricultural improvements.
The use of ICT by Government is essential for the freedom of proficient and cost-effective public services which are responsive to the necessities of the citizens. The legislature, judiciary and administration may apply e-Governance in order to progress inner efficiency, the delivery of public services or processes of democratic governance. By accessing Government services online instead of physically going down to the various government agencies, the people are saving time and adding convenience to their life. ICT does left with paper and gives a real time featureless communication instantly, compresses the hierarchical communication, the trade mark of bureaucracy. e-Governance has not only the ability to handle momentum and complexity but also to support the regulatory reform. It also refers to the citizen to government line including the feedback of policies.
Even though ICT is not standby for good policy, it empowers the citizens to question the arrangements of regulators and brings systemic issues to the forefront.

Integration of e-Governance and ICT contributes to:

- Good governance
- Trust and Accountability
- Citizen's awareness and empowerment
- Citizen's welfare
- Democracy
- Nation's economic growth

The use of ICT in private sector has shown a incredible growth in the past decade. ICT is already on roll in e-Commerce but e-Governance is yet to find its feet. It would be valuable to explore the possibility of using the e-Commerce solutions to supply the citizen centric solutions of e-Governance services. For effective operation of ICT in e-Governance the 3 stakeholders i.e. Government, Business & Citizens must walk together in collaboration.

Table 1: Per Capita Public Sector IT Spending (in US$) of countries in Asia

Country	Per Capita Public Sector
IT Spending	(US$)
New Zealand	198.78
Australia	193.82
Singapore	152.89
Hong Kong	67.22
Korea	52.96
Taiwan	45.22
Malaysia	21.92
Thailand	7.41
China	3.67
Philippines	2.94
India	1.29
Indonesia	1.1

Note: Towards an ideal e-Governance scenario in India. [10]

7. Conclusion

This paper we discuss about m-Government, e-Governance and ICT, all the three complex technologies that are used to deliver the services to common people of India and state of Andhra Pradesh. The authors propose the use of a mix of methods to solve the ICT adoption issues. With e-Governance and m-Governance the citizens of India can avail all government services in an easy and convenient manner. The expected benefits of e-government comprise efficiency, improved services, better accessibility of public services, and more transparency and accountability. Thus we can conclude that: By taking support of technologies like computers, tablets, mobile devices and networks we can provide government services, but e-Governance is not about Technology but about People.

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