E- Governance Initiatives in India:
A Case Study of Union Territory, Chandigarh

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Abstract

Public Administration is passing through a process of crucial change all around the Globe from last few decades. The Traditional model of administration characterized by hierarchy and its greater emphasis on rules leading to rigidity has been criticized on the grounds of inefficiency, corruption, lack of transparency and non-responsiveness. It is being substituted by a new model of Administration "New Public Administration". The government has taken many initiatives for Good Administration. And E-Governance is the key tool for SMART Administration.. The introduction of electronic governance leads to effective governance system in India. It has been observed that the e-governance initiatives have not only enhanced the efficiency and effectiveness of the administrative systems but has also resulted into a mechanism of information sharing vertically and horizontally within as well outside the administrative systems. It also provides transparent, accountable, responsive, hassle free, corruption free and citizen centric services to citizens and also leads to knowledge society in the era of 21st Century. This paper examines the impact of e-Governance initiatives and has been divided into five parts. Firstly, it deals with the concept of e-Governance and secondly, an attempt has been made to examine e-Governance initiatives at national level. Thirdly, try to discusses e-Governance initiatives in Chandigarh and finally an attempted has been made to discuss the benefits of e- governance to the citizens.

Introduction

Electronic delivery of public services or electronic governance is perhaps the second revolution in public administration after NPM, which may transform not only the way in which most public services are delivered, but also the fundamental relationship between government and citizen.

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Broadly, e-governance involves the use of Information and Communication Technologies (ICTs) to transact the business of government. At the level of service, e-governance promises full service available to its citizens 24 hours a day seven days a week online and capability to obtain government services without visiting their offices, and reduced service cost. Today, e-governance is being recognized widely as having the potential to change the shape and character of Government to Citizen (G2C) relationships. Governments across the world are initiating an array of measures to ensure that the concept of e-governance takes root firmly. These range from economically advanced nations such as the United Kingdom to developing nations such as India.

Concept of E-Governance

E-governance means use of Information and Communication Technology (ICT) in government agencies, public sector and beyond, for the purpose of enhancing governance, improved interactions with business and industry. According to Mathew Symonds "After e-commerce and e-business, the next will be e-governance".

Defining e-Governance

Although the term 'e-Governance' has gained prevalence in recent years, there is no standard definition of this term. Different governments and organizations define this term to suit their own aims and objectives. Sometimes, the term 'e-government' is also used instead of 'e-Governance'. Some widely used definitions are listed below:

I. According to the **World Bank,**
"E-Government refers to the use by government agencies of information technologies (such as Wide Area Networks, the Internet, and mobile computing) that have the ability to transform relations with citizens, businesses, and other arms of government. These technologies can serve a variety of different ends: better delivery of government services to citizens, improved interactions with business and industry, citizen empowerment through access to information, or more efficient government management. The resulting benefits can be less corruption, increased transparency, greater convenience, revenue growth, and/or cost reductions."

Thus, the stress here is on use of information technologies in improving citizen-government interactions, cost-cutting and generation of revenue and transparency.

II. **UNESCO** defines e-Governance as:

"Governance refers to the exercise of political, economic and administrative authority in the management of a country's affairs, including citizens' articulation of their interests and exercise of their legal rights and obligations. E-Governance may be understood as the performance of this governance via the electronic medium in order to facilitate an efficient, speedy and transparent process of disseminating information to the public, and other agencies, and for performing government administration activities."

This definition visualizes the use of the electronic medium in the exercise of authority in the management of a country's affairs along with articulation of citizens' interests leading to greater transparency and efficiency.

In simple words, E-Governance may also be defined as delivery of government services and information to the public using electronic means. E-governance is a shorthand term for the use and impact of technology, in particular information and communications technology (ICT) is governance systems. E-governance involves the use of information and communication technologies (ICTs) to transact this business of government. It is the application of electronic means in the interaction between government and citizens and government and business as well as internal government operation to simplify and improve democratic, government and business aspects of governance.

It is a shorthand term for the use of Information and Communications Technology (ICT), in governance systems. Throughout the world, we see governments, businesses and NGOs working together to bring about e-governance. These are not just experiments in new modes of service delivery. E-governance inevitably also embraces- and is driven by-new models of policy formulation, new forms of citizenship, new patterns of relationship and power, new options for economic development, and the search for new ways to connect people with the political process.

Dr. APJ Abdul Kalam, former President of India, has visualized e-Governance in the Indian context to mean:

"A transparent SMART e-Governance with seamless access, secure and authentic flow of information crossing the interdepartmental barrier and providing a fair and unbiased service to the citizen."

Stages of e-Governance

It is evident that e-Governance is intrinsically linked with the development of computer technology, networking of computers and communication systems. In developing countries, such technologies and systems became available with a perceptible time lag as compared to developed nations. However, in the case of India, with the liberalization of the economy from the early 1990s onwards, there has been a convergence in the availability of cutting edge technologies and opportunities in the field of e-Governance. Generally speaking, the Indian experience demonstrates that the onset of e-Governance proceeded through the following phases:

(a) Computerization: In the first phase, with the availability of personal computers, a large number of Government offices got equipped with computers. The use of computers began with word processing, quickly followed by data processing.

(b) Networking: In this phase, some units of a few government organizations got connected through a hub leading to sharing of information and flow of data between different government entities.

(c) On-line presence: With increasing internet connectivity, a need was felt for maintaining a presence on the web. This resulted in maintenance of websites by government departments and other entities. Generally, these web-pages/web-sites contained information about the organizational structure, contact details, reports and publications, objectives and vision statements of the respective government entities.

(d) On-line interactivity: A natural consequence of on-line presence was opening up of communication channels between government entities and the citizens, civil society organizations etc. The main aim at this stage was to minimize the scope of personal interface with government entities by providing downloadable Forms, Instructions, Acts, Rules etc. In some cases, this has already led to on-line submission of Forms. Most citizen-government transactions have the potential of being put on e-Governance mode.

Scope of E-Governance

E-Governance is the use of information and communication technologies to support good governance. It has the following main dimensions:

Government to Citizen (G2C): aims at connecting citizens to government by talking them to, by listening to their problems and improving public services. It involves better services to the citizens through single point delivery mechanism.

In this case, an interface is created between the government and citizens which enables 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. It gives citizens the choice of when to interact with the government (e.g. 24 hours a day, 7 days a week), from where to interact with the government (e.g. service centre, unattended kiosk or from one's home/workplace) and how to interact with the government (e.g. through internet, fax, telephone, email, face-to-face, etc). The primary purpose is to make government, citizen-friendly.

Citizen to Government (C2G): mainly constitutes the areas where the citizen interacts with the Government. It includes area like elections when citizens votes for the Government; census where he provides information about himself to the Government; taxation where he is paying taxes to the Government.

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

Government to Business (G2B): includes both the procurement of goods and services by the government as well as the sale of surplus government goods to the public online. There are two motivating forces behind G to B. Currently; the business community prefers to carry out its activities such as sales, procurement, and hiring through electronic means. There are large numbers of software companies, which are producing number of products focusing on performing routine business activities on line. Thus, many companies like to extend the cost savings realized through Business to Business (B to B) transactions to their business with union, state and local level governments. The second reason for the growth of G to B is the demand for cost cutting and efficient procurements in the government. Developing countries, where there is great pressure to minimize costs due to shortage of funds, G to B are being encouraged by the governmental agencies.

Government to NGO (G2N): implies building interactions beyond the boundaries of government by developing communities, by building government partnerships, and by building civil society. It also involves building various associations and interest groups that ensures the betterment of the society. Such initiatives deal particularly with the relationship between government and citizens: either as voters/ stakeholders from whom the public sector derives its legitimacy, or as customer who consume public services.

Government to Employees (G2E) – Government is by far the biggest employer and like any organisation, it has to interact with its employees on a regular basis. This interaction is a two-way process between the organisation and the employee. Use of ICT tools helps in making these interactions fast and efficient on the one hand and increase satisfaction levels of employees on the other.

E-Government Initiatives at the State Level

The number of state governments has initiated measures to introduce information technology and its tools in the governance process. Most of these states are using these applications for improving service delivery to their citizens. They are moving from manual processes to on-line delivery by using conveniently located service centers in public places. Counters at these service

centers are manned by public/ private agencies and multiple services are provided on-line at each location. Empirical evidence reveals that it has not been an easy task to implement ICT related reforms particularly at the state level and hence needs to be planned carefully for their successful implementation. In this regard, it is, therefore, of utmost importance to study and examine the various experiences for evolving effective strategies for future.

Project "Bhoomi" in the State Of Karnataka

Karnataka, being an agrarian state, was faced with the problem of maintaining immense land records and the work was done manually by the revenue officials.

The project 'Bhoomi' facilitated computerizations of entire 20 million records of land ownership of 6.7 million farmers in the state of Karnataka. At present, computerized land record kiosk popularly called "Bhoomi Center" is functional in all the 177 talukas in the state. These kiosks are used to provide RTC on line to farmers at a fee of Rs. 15. Consequently, a request for change in land ownership due to sale or inheritance can be made at these 'Bhoomi Centers'. The computer on receiving application generates notices automatically, and is handed over to the 'patwari'. The process of issuing notices by 'patwari' to interested parties remains the same. However, the revenue inspector is expected to approve these changes in a specified time i.e. within 30 days after serving the notices. As the approval reaches the 'Bhoomi Center', it is scanned and 'patwari' present at each center maintains the record. The new owner can receive a copy on demand.

With this techno savvy system, it is very easy to determine the number of executed and pending mutations orders besides fixing responsibility and holding officials accountable, there by curtailing corruption, where as "Before Bhoomi, the process took weeks and was riddled with corruption. Farmers claimed they had to pay anywhere between Rs. 100 and Rs. 200 in bribes to officials" (Kaushik, 2004). In addition, the project has also improved the revenue contributions to the state treasury:" What's more, the project has already started earning large revenue for the state as much as 7 – 7.5 million rupees every month (ibid.)".

Being difficult to introduce this scheme in all 177 talukas spread throughout the state, the Government of Karnataka launched the scheme in phases. Initially, it was introduced only in four talukas on a pilot basis and later on it was extended to one pilot taluka in each of the twenty-seven districts. Finally, it was implemented in all the 177 talukas in the state. The daunting task

of implementation of the project, in spite of poor work culture and the oppositional attitude of the revenue staff, was achieved successfully with the active involvement of the private data entry agencies. Further, the selections of the officials (patwaris) were done very carefully. Youngsters/ fresher from the colleges were recruited and trained to regulate the Bhoomi Centers under the project leader-additional secretary of the department.

Thus, project 'Bhoomi' came to be a success, as it resulted in: simplification of procedures; reduced the hardships of the poor farmers: in terms of delays; put an end to corruption; and ensured a more accountable, transparent, and responsive system.

Project "Gyandoot" in the State of Madhya Pradesh

"Gyandoot" was launched on 1 January 2000, in poverty stricken, tribal-dominated rural areas of Madhya Pradesh after gathering information from the villagers regarding their problems. Lack of information about the rates of agricultural produce, difficulty in accessing information on land records; and absence of grievance redressal mechanism were their main problems. The Government selected villages, which function as block headquarters, or where weekly markets were held, or villages along the major roads, for establishing information kiosks equipped with computers connected through Internet. These information kiosks were run by rural educated youth having matriculation with working knowledge of computers. The services provided at these kiosks include:

(i) Supplying information regarding current rates of crops at the local and other auction centers in the country at a very nominal fee of Rs. 5;

(ii) All documents containing information of land records to be given on the spot at a fee of Rs. 15;

(iii) All applications with regard to domicile or income or caste certificates can be sent through e-mail at a cost of Rs. 10.

(iv) complaints of poor quality of seeds/fertilizers, drinking water, functioning or nonfunctioning of schools or panchayats, village committees, etc can be lodged at a cost of Rs. 10;

(v) auction facility for land, machinery, and any other durable commodities at a fee of Rs. 25 for three months; all information on government development programmes and grants on various development projects; and

(vi) data regarding families below poverty lines. Some of these centers were also rendering miscellaneous services including online matrimonial advertisements; Photostat STD, PCO and horoscope services.

'Gyandoot' is instrumental in establishing a link between government and the local population residing in the remote villages. It has also provided an opportunity to marginalized tribal citizens to have an access to knowledge at a little cost.

Project Smart Government in the State of Andhra Pradesh

The Government of Andhra Pradesh, in its endeavor to provide simple, moral, accountable, responsive and transparent governance to its people, launched 'SMART GOVERNMENT' (Smartgov) at the secretariat level. This project resulted in an automatic workflow in the secretariat and ensured not only internal efficiency but also provided an effective tool for performance evaluation. With it the leitmotif came to be efficacy. In Smartgov, on receipt of a document, it is scanned to generate a number for the file and is e- mailed to the concerned officer. The official notings are done electronically. The system being automatic enforces the desired checks and balances. It curtails negativism and over rides all hurdles of resistance and opposition to change.

The project Smartgov has helped in introducing paper less file processing system in the Andhra Pradesh secretariat. It has not only helped in reducing the time consumed in processing the files, but also significantly improved the quality of decisions besides decrease corruption.

That the new governance improvisations/systems because of their faster, efficacious, efficient and effective remedial implications have evoked a positive response from the public in general and the administrative set up in particular speaks volumes for its acceptability. It can, thus, be safely inferred that the total success of effecting changes can only be ensured if it is preceded with requisite training and orientation programmes for the end users. This will minimize resistance.

FRIENDS project in the state of Kerala

The Project FRIENDS (Fast, Reliable, Instant, Efficient Network for the Disbursement of Services) is part of the Kerala State IT Mission. FRIENDS counters handle 1,000 types of payment bills originating out of various PSUs. The payments that citizens can make include

utility payments for electricity and water, revenue taxes, license fees, motor vehicle taxes, university fees, etc. Firewalls safeguard data from manipulation. The application has provisions for adding more modules and for rolling back incorrect entries without affecting the database even at the user level. One important feature of FRIENDS is a provision for adding more modules and a queue management system.

Lok Mitra Project of the State of Rajasthan

Lok Mitra is the first of its own kind of Electronic service in the state of Rajasthan. It aims to deploy Information Technology for the benefit of the masses. It is a onestop, citizen friendly computerized centre located in the heart of the city at Government Hostel, Jaipur. This has provided relief to a common man as he gets efficient services through
IT driven interfaces at a single window.

It is an e-governance project in which the computer server is linked to different Departmental servers through Dedicated Leased Line & Dial-up Network with multiple ecounters, which can handle all services. It has facility of making payments through Internet using Credit Card.

Project Sustainable Access in Rural India (Sari) in the State of Tamil Nadu

People in a tiny village called Pathinettangudi, 35km from Madurai, Tamil Nadu, a state in South India, are enjoying the fruits of IT revolution. They are using e-mails, voice mail and web cams courtesy the Sustainable Access in Rural Internet (SARI) project. Around 30 other villages around Pathinettangudi are also covered under this project and are being provided with similar facilities through 'Public Access Internet Kiosks'. These kiosks are established by private initiative of enterprising individuals who have taken the risk of investing money in computer, multimedia and other accessories and have installed user-friendly software's, which can be easily understood and used by local illiterate population. The project has received excellent response from the government and the public and with the result its patronage is growing gradually. These Kiosks are a huge success and the local population is making their use for downloading application form for caste, birth and death certificates and forwarding it through e-mail to the 'tehsildar'. Normally, it takes a week to process this application and issuance of certificate. Further, as a large number of youths from the area have gone abroad, the family members of

these youths are saving huge money on telephone bills. They are paying Rs. 25 an hour for interaction and watching them live on screen by using web cams. Also, free counseling to farmers on line on agricultural problems is being made possible with the help of experts from Tamil Nadu Agricultural University and other research institutes in the region.

Research Problem Introduced:

This Research Paper is related to the case study of the **Union Territory, Chandigarh**. It is the 1st planned modern city of India designed by the French architect Le Corbusier, also called The City Beautiful. Total area of the Union Territory is 114 sq. km. The district at present comprises of one Tehsil and equal number of community development blocks. Chandigarh is divided into 55 Sectors, 5 towns and 25 villages. The total population of Chandigarh Union Territory according to the 2001 Census is 9,00,914, with 508,224 Males and 392,690 Females. It is one of the very high literate parts of the country with Literacy rate at 81.76%. From 1966 (the year Haryana was carved out of Punjab) Chandigarh is the capital of two states Haryana and Punjab. Chandigarh Administration is committed to provide a responsive and effective administration for the welfare of the public keeping in view the national objectives. It recognizes the need to harness the growing power of IT for the betterment of the life of the residents of Union Territory of Chandigarh and has announced it's IT Policy in April 2000 in order to encourage the use of Information Technology for applications in the field of government, education, industry, commerce and other fields.

Because, before the introduction of e- governance the citizens had to run from one government office to another government office for their work , and they had to wait in long queues for many hours.

The vision of Chandigarh Administration is to create a knowledge-based society through extensive use of Information Technology. Chandigarh Administration envisages a scenario wherein every citizen shall be able to access the benefits of Information technology by the year 2005. The ultimate goal is to use I.T. as a medium for effective interaction between the Administration and the public so that exchange of information and access to government departments is speedy and easy, leading to a better quality of life. Chandigarh Administration is committed to provide better public service to its citizens through e- governance, which is efficient, speedy, simple and cost effective.

Old Typical Citizen Interface
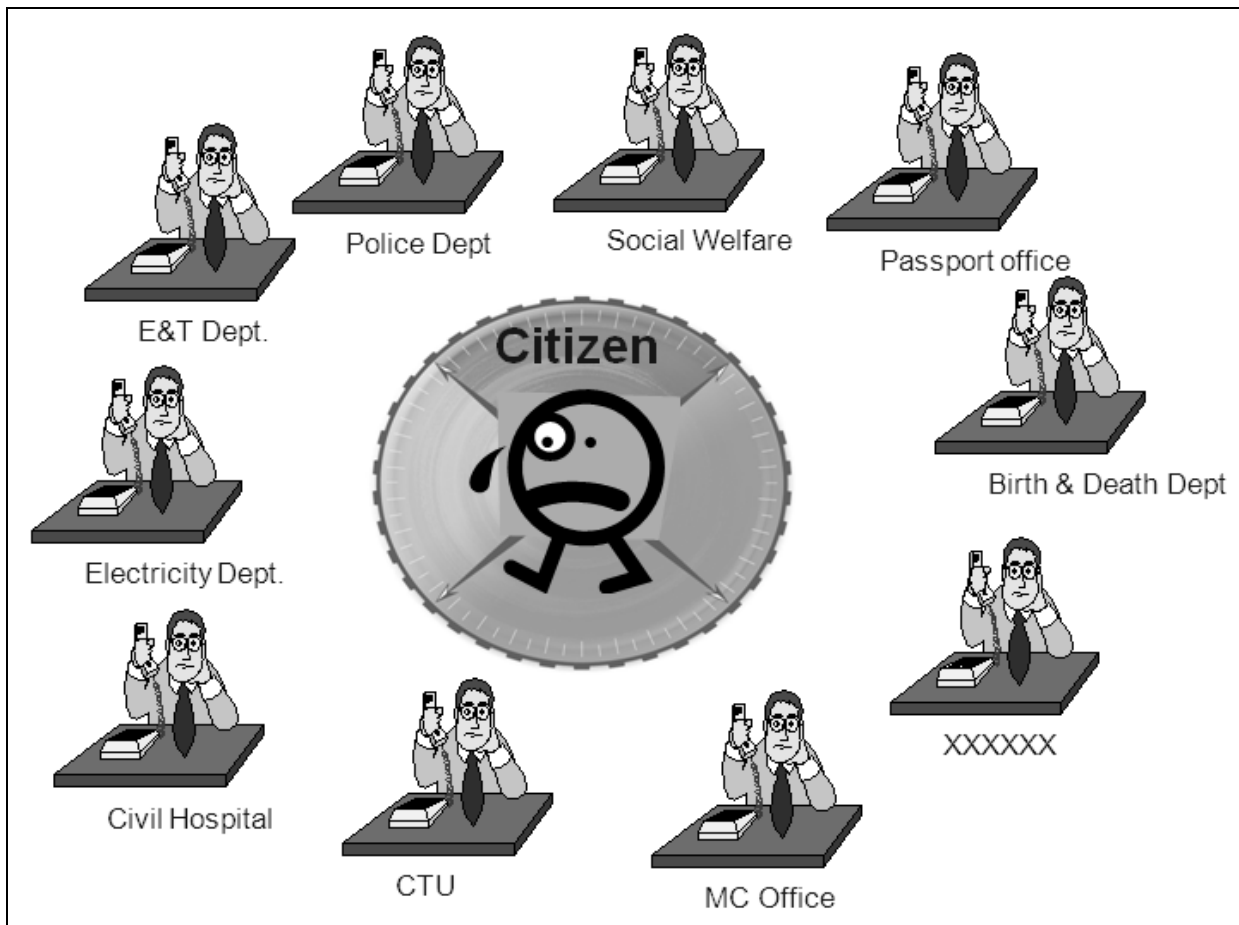
To achieve this objective, the Chandigarh Administration has decided to set-up an interactive web portal and Electronic Citizen Service Centers across the city. This initiative is named as **Project Sampark,** under which electronic Citizen Service Centers have been established in the city by the name `Sampark' at different locations (Sector 10, 15, 18, 23, 43, 47, Mani Majra and Industrial Phase-1). Sampark Centers envision providing different government services under a single roof eliminating the problem for citizen to go different government offices. These are multi-services single window system providing integrated, efficient and quick services.

e-Sampark Citizen Interface
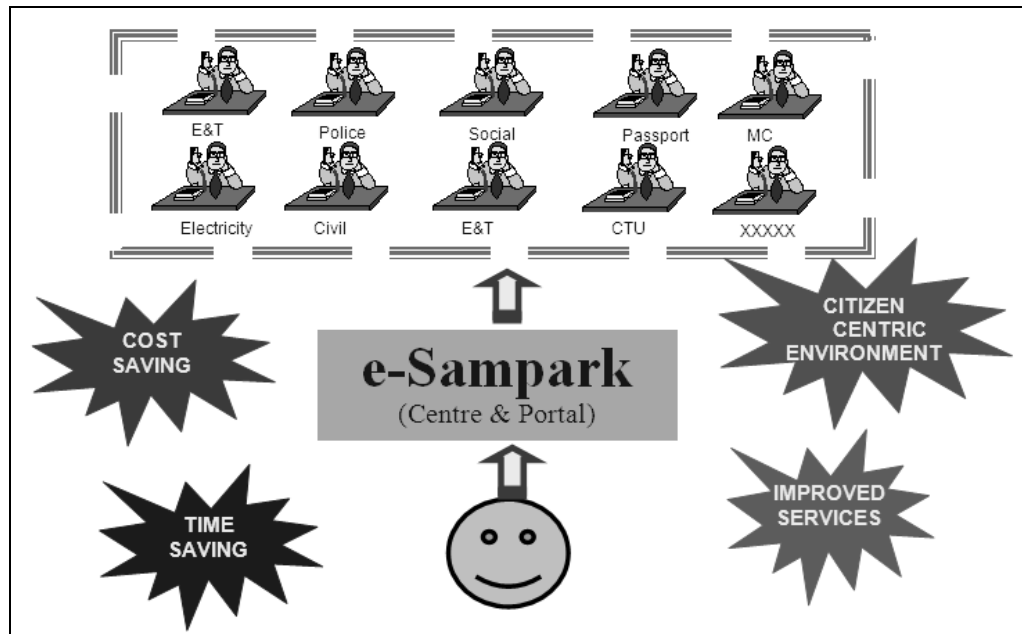
The following services have been integrated and offered from Sampark Centers for the people are:

Table 1.1

SAMPARK CENTRES	
S.NO	**LIST OF SERVICES**
1.	Payment of Taxes
2.	Payment of Water & Sewerage Bills
3.	Payment of Electricity Bills
4.	Payment of Sticker/Postal Challan
5.	Issue of Bus Passes
6.	Issue of Senior Citizen Cards
7.	Issue of Disability Identity Cards
8.	Issue of Birth & Death Certificates
9.	Space Bookings
10.	Tenant Registrations
11.	Domestic Servants Registrations
12.	Passport Applications
13.	Telephone Bills Payments

Source: Yearly Report of Department of Information Technology Chandigarh, 2003-2004

After the succession of Sampark centres, the Chandigarh Administration has also introduced e –Jan Sampark Centre in each sector of city to provide following services:
Grievance/ Complaint Redressal System, Form and procedures to avail of different government services, Address and contact information of government offices, non government sector & details of Services and Property Details etc. The required information / services may be obtained in printed form for a token price of Rs. 2 per page.

Benefits of E-Governance

By embracing the new possibilities of ICTs the service delivery are improved with the introduction of E-Governance, the quality and efficiency of the service are improved.

First, services are delivered more rapidly, the fact that it is possible to process and retrieve more information in less time increases the quality and efficiency of service delivery. The time it takes for client to complete their transaction with civil servants can be reduced. The speed of service delivery also increased, specially related daily routine.

Second, e- governance are used to increase public access to service agencies. Information Kiosks facilitate a better access to public services. People who want to get government information are able to visit the web pages of a department whenever they want. Citizens are also able to apply electronically for permits or benefits, without leaving their homes. It is also increased the transparency and openers in government department (Zordis and Prissen, 1995 a).

Third, new technologies are able to facilitate remote communication and transactions. Thus new ways of communication and transaction have already been developed together with the new ICTs. It is also increased the people participation in the government affairs.

Fourth, the use of e- governance for public service delivery may also be directed towards enhancing the transparency of citizens. E- Governance is sometimes used to register and process the needs and preferences of citizens. It facilitates better targeting of policy programmes and a more tailor made services.

Fifth, the integration of public services and the destruction of the administrative walls between bureaucratic department and government agencies are further stimulated by the communication potential of ICTs. New technologies can be used to encourage linkages and communication across organizational boundaries, both within and between organizations.

Generally the use of e- governance for a more efficient service deliver might become a value which serves the vested interest of the citizens and stakeholders.

Conclusion:

In the end we can say that e-Governance is used at all levels of the Government in order to provide services to the citizens, interaction with business enterprises and communication and exchange of information between different agencies of the Government in a speedy, convenient efficient and transparent manner. It has changed the way of working of the Government. After the introduction of e- governance in Chandigarh, the Administration becomes more responsible and transparent to the citizen.

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