# Effectiveness of ICT Enabled Public Service Delivery System: A Critical analysis of e-District Project in Cooch Behar, West Bengal

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#### **ABSTRACT**

The concept of governance has received significant attention in academic discourse since the late 1980s, has further expanded with the inclusion of e-governance. In the realm of the machinery of government, the e-governance i.e. Information and Communication Technology (ICT) based applications are promising to enhance the service delivery system and enlarged participation, and made the democracy more inclusive. By using ICT's government can deliver a package with efficiency, time bounding, cost-effective way to their citizens. To achieve this objective, the Government of India has initiated various electronic-governance projects at different levels of governance. E-district project is one of the important projects announced under the National e-Governance Plan, 2006 with the purpose of delivering some basic services to the citizens at their doorstep electronically. The main purpose of the present study is to assess the effectiveness of e-governance services delivering through the e-district project from the citizens' perspective. The study also tries to identify the key challenges of these projects and also to suggest avenues for better performance.

#### **Keywords:**

Governance; Information and Communication Technology; E-District; Efficiency.

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#### I. Introduction

The delivery of various public services is the primary responsibility of the state and it is one of the most important and critical aspects of good governance because it touches the lives of millions of people. It also affects the entire lifecycle of a citizen's right from birth till death. Public services are essential services provided by a government to its citizens, either directly or by financing private provision of such services. It requires smooth interaction between the service providers and the service receivers so that the service provider can respond to the need of the people. Hence, the government must ensure the uninterrupted public services delivery system to meet the needs of the common citizen. People want transparent and accountable administration to take care of their needs effectively. They want immediate disposal of their grievances. But the developing countries like India with traditional pattern and process of administration could not meet the needs of the common citizens. The excessive dependence on bureaucracy, hierarchy, rules regulations and made

administration ineffective in delivering proper services to the citizens. For many decades, public services have unfortunately been provided with the main focus on the convenience of service providers rather than service receivers. Various factors like complex regulations, lack of proper information, complicated forms, corruption, lack of accountability and responsiveness have left ordinary citizens almost out of the public service delivery system. Hence, there is a great deal of public dissatisfaction with the existing service delivery system at all levels of government (Basu, 2015). In response to this crisis, the Government of India has introduced several administrative reforms; e-Governance is one of them. The main objective of e-governance project is to provide efficient and enhanced service delivery to the citizens at their doorstep. E-governance simply means the use of information and communication technology in delivering government services. Although the term e-governance has gained significant attention in recent years, there is no standard definition of this term. Different state government and organisations define this term

according to their aims and objectives. World Bank defines e-government as the use by government agencies of information technologies (such as Wide Area Networks, the Internet, and mobile computing) that can transform relations with citizens, businesses, and other arms of government. Dr. APJ Abdul Kalam, former President of India, has visualized e-Governance in the Indian context to mean 'a transparent smart egovernance with seamless access, secure and authentic flow of information crossing the interdepartmental barrier and providing a fair and unbiased service to the citizen'. So, e-governance is a process of reform in the way governments work, share information, engage citizens and deliver services to external and internal clients for the benefit of both the government and the clients that they have.

The central and state government in India have invested more in e-governance to make their functioning effective, accountable and transparent. Information and Communication Technology (ICT) also helps in reinventing government by increased transparency through the dissemination information, promoting more participation, innovation, the introduction of new ideas, lower costs, improved efficiency and quality and effective linkage between the government and the citizens (Nag, 2020). E-Governance is a paradigm shift over traditional administration, which means the rendering of government services and information to the public using electronic means. This paradigm shift also brought about a revolution in the quality of service delivered to the citizens.

There are several stakeholders in e-governance namely government, citizens, employees, business, government officers, various agencies etc. E-governance involves four types of interactions: (a) Government to Government (G2G): it includes the relationship between central and state governments and also the relationship between two or more government departments. (b) Government to Citizens (G2C): G2C refers to the relationship between the governments and their

citizens. This interface is created to provide satisfactory service to citizens to improve the government-citizen relationship. (c) Government to Business (G2B): in this area of interaction egovernance tools are used to aid the business community- providers of goods and services- to seamlessly interact with the government. (d) Government to Employee (G2E): G2E denotes the relationship between the government and its employees only.

# I(A). E-District Project in West Bengal – at a glance

The Government of India has acknowledged the importance the e-governances and initiated many programmes. Though the concept of e-governance has its origin in India during the nineteen seventies, the major step has been taken in May 2006 with the approval of the National e-Governance Plan (NeGP) consisting of 27 Mission Mode Projects (MMPs) under different categories. This plan laid the foundation and provides the impetus for the long-term growth of e-governance in India. E-District is one of the 27 MMPs under NeGP implemented by Department of Information Technology (DIT), Government of India. It's a state mission mode project with the objective of making the government's services available to the common citizen through a computerised system. Like other states in India, the Government of West Bengal has implemented the e-District project in all the districts of the state. The architecture of the e-District portal in West Bengal has been built with three main pillars - State Wide Area Network (SWAN), State Data Center (SDC) and Common Service Center (CSC). The Webel Technology Limited (WTL) under the administrative control of the Department of Information Technology and Electronics, the Government of West Bengal is involved in the successful implementation of the West Bengal e-District project as a Nodal Agency and is authorised as State Implementing Agency (SIA) for Government of West Bengal. At present, different category of G2C services like Income Certificate. Local Residence (Domicile)

Certificate, Delayed Birth Registration Certificate, Delayed Death Registration Certificate, Distance Certificate for Students, Registration of Firms, Societies and Non-trading Corporations, Building and other construction workers beneficiary registration, Transport workers beneficiary registration, etc are available through e-District Portal.

#### II. Literature Review

The public service delivery mechanism in developing countries like India used to cost too much, deliver too little, and had not been sufficiently responsive or accountable (Malik et al.,2014). E-governance reforms aim to revamp the delivery system. It involves the use of ICTs to transact the business of the government (Heeks, 2001). Researches on e-governance initiatives have highlighted the importance of such initiatives in the domain of public service delivery. Richard Heeks (2001) studied the effect of information and communication technology (ICT) and how it can make a positive impact on citizens about government service. This line of thought was further expounded by other studies (Sangita & Dash, 2008, Kumara, 2010, Mehta, 2014). It acknowledges that e-governance initiatives have a direct impact on citizens, in which the citizens derive benefit through direct transactions with governmental services. Kaushal (2016) studied the plausibility of ICT in public service delivery mechanisms in India. The positive outcomes have been observed where e-governance projects have been conceived, designed and implemented with due regard to the needs of the people.

The e-District project is one of the core elements of NeGP, whose main aim is to 'making all public services accessible to the common man in his locality, through common service delivery outlets and ensure efficiency, transparency, and reliability of such services at an affordable cost to realize the basic needs of the common man'(NeGP, 2006). Das (2020) studied ICT-enabled public service delivery system from good governance perspective. This empirical study shows that ICT has positive impact on public service delivery

system and by using it government can delivery any service with efficiency, time-bounding, costeffective, and more transparent way to its citizens. Sanyal et al. (2014) provides a primary picture of the e-district project implemented in the state of West Bengal, the nature and quality of its services, citizen's satisfaction, etc. The study has also explored different critical factors involved with the citizen's satisfaction and contributing to citizen's behavioural change towards acceptance of the ICT based public service delivery system. Sarmah (2015) in his study affirms that the edistricts project in the state of Assam has played a very effective role in delivering public services to its citizens and the efficiency of this portal is very high.

Several studies have been done on the role of ICT and its impact on the public service delivery system in India, but work on a particular egovernance project from service receivers or citizens' perspective has been ignored. The present study tries to fill up this gap by assessing the effectiveness of e-governance services in delivering public services to the citizens.

#### III. Research Objective

On the background as depicted, the present study intends:

- To examine the level of awareness about e-governance services.
- To assess the effectiveness of egovernance in delivering public services to the citizens.
- To identify key challenges of this project.

#### IV. Methodology

This is an empirical study and observations as well as survey method have been used to meet the objectives of the study. The primary data have been collected from the field survey by using direct interview method through schedules, which consisted of both open and closed ended questions. Secondary data have been gathered through content analysis from books, research articles, various government reports, and WebPages.

The study has taken the Cooch Behar district of West Bengal as a research area. A field survey has been conducted in the Cooch Behar district to get first hand information. A total of 300 samples have been taken for this study. The researcher has taken an equal number of respondents from every sub-division of the district and personally visited the field and interviewed the people. For the respondent's selection, the snowball sampling method has been followed.

# V. Findings and Discussion

The major findings of the study are as follows:

#### V(A). Level of Awareness

It was observed that 62 percent of respondents are aware of e-governance initiatives whereas 38 percent are unaware of e-governance initiatives in the district. The ratio between awareness and unawareness is 62:38. Apart from this statistical dimension, it has been noticed that respondents are not only unaware about this portal, but they are more or less unaware about today's digital world. Very poor knowledge has been observed about information and communication technology and how it works. They called this portal based service delivery mechanism simply as 'internet service' or 'internet certificate'. Many of them are not interested about the project or portal, how it works, they just looked only for the fulfilment of their personal requirements.

A comparative analysis has been carried out between the e-governance system and manual system of public service delivery to meet the objective of the study which is to assess the effectiveness of the e-District project in public service delivery system. Effectiveness of e-governance services has been made on the following parameters – the distance of CSC/Kiosk and Government office from citizens' residence, mode of travels, number of trips, the average cost of service, the average time required for each trip, clarity of procedures, speedy and timely delivery of service, convenience working hours, courteous and friendliness of officers and volume of paperwork.

# V(B). Distance of CSC/Kiosks and Government Office

The distance of the Common Service Center or Government office is one of the key indicators to determine the effectiveness of the public service delivery system. To determine the effectiveness of e-governance services providing through the e-District project, data has been collected from respondents about the distance of CSC or government office from citizens' residences. After calculating all responses, it has been observed that CSC/Kiosks are nearer than a government office. The survey data indicates that the citizens need to travel an average of 2.5 kilometres to reach CSC/Kiosks whereas citizens need to travel an average of 10.5 kilometres to reach government office. Hence, common people preferred egovernance service than manual service.

### **V(C).** Mode of travels

To evaluate the effectiveness of e-governance services researcher has studied the mode of travel used by respondents to reach CSC/Kiosks as well as a government office to avail public services. Because the mode of travel is very useful to determine travel expenses which are directly related to the average cost required in availing service. In the present survey, it is found that citizens approach CSC/Kiosks by walk (18.59%), by cycle (32.98%), by two-wheelers (21.47%), by Toto-rickshaw (17.01%) and by bus/auto (9.95%). On the other hand, it is found that 45.29 percent of respondents used bus and 24.34 percent of two-wheelers respondents used to reach government office.

# V(D). Number of trips required to avail the service

To evaluate the effectiveness of e-governance services the researcher has studied the number of trips required to avail services. Because the mode of travel is useful to decide travel expenses and average required time of service delivery. It is acknowledged that with the increase in trips average cost and time will increase. The survey data shows that to avail e-governance services at CSC/Kiosks 9.42 percent of citizens require one

trip, 61.52 percent require two trips, 23.30 percent require 3 trips and only 5.76 percent require four trips. On the other side present study reveals that 67.54 percent of citizens require three and more than three trips to avail of the service at the government office.

# V(E). Average cost of service

The cost of service is another key determinant of the effectiveness of e-governance services. To measure the average cost to avail service we have made a comparative study between manual system and e-governance services delivering through CSC/Kiosks. The average cost includes travel cost, service charges, bribes if pay, and other charges. The survey data reveals that the average cost of e-governance services is less than manual services. The average cost is Rs. 82 for availing service at CSC/Kiosks whereas average cost is Rs. 148 for availing service at the Government office which is almost double of CSC/Kiosks cost.

### V(F). Average time required for each trip

The survey data represents a clear picture of the average time required for each trip. It includes travel time and waiting times. The survey shows that 72 minutes required per trip for availing service at CSC/Kiosks whereas 128 minutes required per trip for availing service at the government office. It has acknowledged that with the increase of time the average cost also increased. If anyone spent his/her full day in availing service means wage loss of a day. Hence, reducing time span e-District portal not only saves time but also saving the wages of the citizens.

### V(G). Clear business process

Clear rules and working procedures are some of the key indicators to determine the effectiveness of e-governance service delivered through the e-District project. For this, we have made a comparative study between the e-governance system and the manual system. The survey data shows that 73.56 percent of respondents are agreed and strongly agree with the view that e-governance has made rules and regulations more clear and business process simplified. Only 14.92 percent of respondents expressed their satisfaction

with the working procedure of the manual system of service delivery.

### V(H). Speedy and timely delivery of Service

Besides e-governance, several other efforts have been made for improving the public service delivery mechanism. The citizen charter is one of To measure the improvement administration in the timely and speedy delivery public service before and after the implementation of e-governance, the researcher has included the citizen charter in this study. The West Bengal government has enacted 'the West Bengal Right to Public Services Act, 2013' to address the growing demand of citizens for improved and transparent delivery of public service. This act has introduced a citizen charter which ensured a time frame delivery of public service. Apart from the low-level awareness of citizen charter and timeliness of service delivery among respondents, it has been observed that a maximum of respondents expressed that through the e-governance system administration has delivering speedier and time-bounding service than a manual system. The survey data shows that 76.18 percent of respondents expressed their positive response about speedy and timely delivery of service through the e-governance system. On the side, only 21.73 percent of respondents thought that speedy and timely delivery is possible in a manual system of service delivery.

# V(I). Convenience working hours

The normal working hours of government offices are from 10-30 a.m. to 4-30 p.m. with an interval of 30 minutes from 2 p.m. to 2-30 p.m. for Tiffin (except Saturday and Sunday). On the other hand, the working hours of maximum CSC/Kiosks are from 10 a.m. to 7 p.m. (except Sunday). Moreover, it has been observed that the maximum government office starting their working after 11 a.m. and after that, they start dealings with citizen services and after 3.30 p.m. they stopped taking any further applications from citizens. Citizens were directed to come the next working day for their required service. But, in today's world,

everyone is very busy with their profession and other related activities. Hence, it is not possible for everyone to go to the government office in a pre-fixed time to avail of any service. To overcome this problem, e-governance more specifically the e-District portal can be used as an effective tool. Through this portal, citizens can access government service from anywhere anytime and the working hours of CSC/Kiosks are more suitable to the common citizen. To assess the effectiveness of working hours we have collected responses from respondents. It is seen that 87.17 percent of respondents express their satisfaction with the working hours CSC/Kiosks where 64.97 percent of respondents express their dissatisfaction with the working hours of the government office.

# V(J). CSC/Kiosks and government officers' behaviours

Government office staff and operators in CSC/Kiosks, how they behave with the citizens is the major factor to assess the effectiveness of the service delivery system. In the present study, we have done a comparative study on behaviours of government office and CSC/Kiosks operators. It is seen that 53.93 percent of respondents express their happiness about CSC/Kiosks operator behaviours whereas only 15.71 percent of respondents expressed their satisfaction with government officers' behaviours.

# V(K). Volume of paperwork

The introduction of ICT in the governance process has reduced the volume of paper works. Now citizens do need to submit any paper for their required service to a government office. Through this portal, citizens can apply for their required service by filling up an online form and uploading necessary testimonials. The present study report also shows that e-governance has reduced the volume of paper works significantly. The survey data depicts that 78.01 percent of respondents expressed that paperwork in the e-governance process is low and very low; whereas 81.67 percent of respondents opined that paperwork in the manual system is high and very high.

# VI. Conclusion and Suggestions

From the study, it is evidence that e-governance has a significant role in delivering public services to the common citizens in a time-bounding, transparent, accountable, cost-effective, and more efficient way. Before the e-district project was launched in West Bengal, citizens had to travel to the block or sub-divisional offices to avail of ordinary services like certificates for income, domicile, etc, where they had to pay bribes, wait indefinite time for the service. That system was costly as well as time and energy-consuming. Now, citizens do not need to visit any government office to avail of any service and to wait indefinite time. Through this portal, citizens can avail themselves of specified public services from anywhere and anytime. Hence, the e-district project can be looked at as an efficient tool to deliver quick services to citizens. Government departments also increase their efficiency by providing seamless services to people easily through the electronic medium.

However, the e-District projects sometimes fumble to achieve their goals due to lack of awareness among citizens, poor internet connectivity and infrastructure in rural areas, and sometimes due to apathy of the officials to function professionally. Besides, the dearth of power supply, resistance to change, and shortage of ICT trained manpower, and poor data securities are some other persisting problems.

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