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# Citizen Centric Assessment of E-Governance Service Delivery through E-Mitra Centres of Ajmer and Jaipur

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*Abstract:* Citizen participation in the governance processes is integral to the successful running of any governance and the very purpose of good governance. E-Mitra is an ambitious E-governance initiative of Government of Rajasthan (GoR). This research effort is conducted to assess the quality of service being provided at the E Mitra center. This exploratory research study user expectations from E-Government services and the issues and barriers which the users encounter when using these services. The research uses a structured interview questionnaire to discover the technical and operational aspects of E Mitra Services. The findings suggest acceptable level of user satisfaction and hints at several methods for service improvement.

*Keywords:* Citizen Centric E Governance, E Mitra, CSC, Consumer Service Centre, E Mitra model, Quality of service at E Mitra, Citizen participation

# I. INTRODUCTION

Citizen is the central factor in democratic governance. Citizen participation in the governance processes is integral to the successful running of any governance and the very purpose of good governance. E governance is defined as "the use of information and communication technologies in government to provide public services." [21] E-government services goes along with a change towards a more customer friendly culture. While e-government is technology neutral, the Internet is fast becoming an important tool for sustained availability of E Governance services. E-Government is often associated with government web portals because most governments, national or local, have created web sites and umbrella portals, operating as gateways and guidance to information and services. [15]

Government of Rajasthan in its continuous attempt to ensure that government, private and social sector services are made available to all its citizens near their residences, has established Numerous E Mitra centers all across the state. E-Mitra is an ambitious E-governance initiative of Government of Rajasthan (GoR) which is being implemented in all 33 Districts of the state using Public-Private Partnership (PPP) model for convenience and transparency to citizens in availing various services of the Government and Private Sectors under a single roof at their door steps using an e- platform. The services are delivered via counters known as E Mitra / CSC (Common Service Center) kiosks in Rural Areas and e-Mitra kiosks in urban areas.[30] This research effort is conducted to assess the quality of service being provided at the E Mitra centers.

An Android app was developed to conduct the survey that enabled the researcher to gather data and upload the details directly to the server. The purpose of developing this app was to utilize technology in the assessment of technology dependent e governance arena. This also provided real insights for technology usage at ground level. The objective of the study was to check the quality of services being offered to the citizens by the E Mitra Centers and analyze the impact on the citizens using the services. The findings and recommendations of the study may be extrapolated and implemented for the entire state and arrive at suggestion for better service delivery.

Common Services Centers Scheme is part of the National e-Governance Plan. The E Mitra / CSC is a strategic cornerstone of the National e-Governance Plan (NeGP), approved by the Government in May 2006, as part of its commitment in the National Common Minimum Programme to introduce e-governance on a massive scale.

The E Mitra / CSCs is designed to provide high quality and cost-effective video, voice and data content and services, in the areas of e-governance, education, health, telemedicine, entertainment as well as other private services. A highlight of the E Mitra / CSCs is that it offers web-enabled e-governance services in rural areas, including application forms, certificates, and utility payments such as electricity, telephone and water bills.

The Scheme creates a conducive environment for the private sector and NGOs to play an active role in implementation of the E Mitra / CSC Scheme, thereby becoming a partner of the government in the development of rural India. The PPP model of the E Mitra / CSC scheme envisages a 3-tier structure consisting of the E Mitra / CSC operator (called Village Level Entrepreneur or VLE); the Service Centre Agency (SCA), that will be responsible for a division of 500-1000 E Mitra / CSCs; and a State Designated

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Agency (SDA) identified by the State Government responsible for managing the implementation over the entire State.

# Vision & Mission of E Mitra / CSC

E Mitra / CSCs are envisioned as the front-end delivery points for Government, private and social sector services to rural citizens of India. The objective is to develop a platform that can enable Government, private and social sector organizations to align their social and commercial goals for the benefit of the rural population in the remotest corners of the country through a combination of IT-based as well as non-ITbased services. e-Mitra is an integrated project to facilitate the urban and the rural masses with maximum possible services related to different state government departments through Lokmitra-Janmitra Centers/Kiosks. The e-Mitra Project integrates LokMitra (an urban centric e-government project) and JanMitra (a rural centric e-enabled service delivery system) so as to bring together all the departments under one roof in an efficient, transparent, convenient and friendly manner using IT in all or any aspects of citizen service to maximize speed, accountability, objectivity, affordability and accessibility from the perspective of the citizens.

Various Citizen-centric services of Government departments are being made available in integrated form through 'e-Mitra' centers / kiosks also known as service & information delivery points.

This project has been implemented across 33 districts under Public-Private Partnership (PPP) model. [30] The key objectives of the project are as mentioned below:-

• Provide for hassle free one-stop solution to the citizen.

• Unified e-services platform minimize multiple interaction points for the citizen and hence reducing the wastage of valuable time.

• Combines best features of LokMitra & JanMitra models.

• Enhanced services basket more departments including private sector services.

• Uniform information interchanges architecture.

Public-Private Partnership model for Front Offices.

• Back Office to be owned by Government but operated by Technology Partner.

• Will provide employment opportunity all over the state.

Uses real time, Internet & batch processing modes.

# II. RESEARCH QUESTIONS / FRAMEWORK FOR ASSESSMENT STUDY

This research, through the survey initiatives, sought to identify the issues associated with providing citizen-centered E Governance from both user perspective and agency perspective. The research efforts were exploratory and limited to be scaled up for a comprehensive study by future research.

The exploratory research questions of the study included the following:

• What are user expectations from E-Government services and resources?

• What are the issues and barriers users encounter when using E-Government services and resources? [18]

• What factors facilitate and enhance users experiences with E-Government services and resources?

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• What are the primary drivers of the development and implementation of E-Government services and resources?

• To what extent are citizen needs and expectations included in the design and implementation of E Government services and resources? [20]

• How are citizen identified expectations and desires in E Government services and resources incorporated into the overall design and continual enhancement of E-Government services and resources?

• What needs do users have in attempting to engage in E Government service and resource use?

• Are there design issues that facilitate and/or act as barriers to successful citizen E-Government interaction? [8]

# III. RESEARCH METHODOLOGY

The research methodology employed for the study is a blend of quantitative and qualitative methods. Based on the objective of the study and limitations in terms of time and other resources it was proposed to conduct the study for the e Mitra centers of Ajmer and Jaipur. 40+ centers were selected for the survey (20+ from Ajmer and 20+ from Jaipur district) based on a random number generator sampling from the E Mitra universe sample list . A total of 200 citizen responses were collected and analyzed (100citizen responses from Ajmer and 100 from Jaipur). Special care was also taken to include non-users of e-Mitra in the sample for which researcher also visited departmental counters, shops, offices and residences of various consumers for collecting the responses. [16]

The survey instrument was also administered at the

e-Mitra centres where consumers were availing various services. The data was collected through a structured questionnaire. Three months data was taken as a representative data for survey and analysis, and the respondents were advised to base their responses on one quarter representative data.

60 questions were framed for the structured questionnaire and then the survey questionnaire was divided into 2 sections:

• Questionnaire for E Mitra Entrepreneur, and E Mitra Infrastructure

• Questionnaire for Citizen Services covering Profile, Awareness Level, Services provided, Service Quality and the Feedback mechanism.

The performance assessment objective of the project was to check the performance of the E mitra centre across the technical and operational areas. The Technical exploration included:

• Connectivity: Whether adequate connectivity is available at E mitra centers and how has last mile connectivity been achieved? [3]

• IT Architecture: Is IT architecture blueprint followed by E mitra node?

The Operational process study included:

• Services: What has been the contribution of the E Mitra node in G2C and B2C transactions?

• How the compliance to branding/ logo/ colour scheme ensured at the centers? [24]

• Operations Management: Are performance evaluation of E mitra node being tracked?

• Is a wallet recharge mechanism being used by the E Mitra Entrepreneurs to recharge wallets?

• Submission of Financial Statements: Certified financial statement submitted by the E Mitra centre

• Are complaints of citizens being tracked properly?

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2

"Internet Technology and Cyber Crime" On 11 January 2015 Organized byPraful Narooka and Sponsored by Agarwal College, Merta City (Nagpur) • Have all statutory clearances been obtained for providing services (G2C, B2C, B2B) at the E Mitra node?

• Traning: Has adequate training been provided E Mitra Entrepreneurs before they start operating the E Mitra centers?

• What is the schedule of refresher courses to be provided to the E Mitra Entrepreneurs?

• Reconciliation and Control: Whether account reconciliation is being performed?

For the purpose of discovering the same a research questionnaire was developed and digitized in the form of an app. On the landing screen of the app the options available to a user were as follows:

- □ Add Survey
- □ Edit Survey
- □ Delete Survey
- □ Server Sync
- □ Settings
- □ Logs & Instructions



The representative informational inputs as touched upon by the questionnaire to test out the quality of service being provided to the citizens by the E Mitra / CSCs are:

Awareness about E-Mitra

• Mode of publicity through which citizens know about the services

- Usage of E-Mitra services
- Number of walk-ins per day

• Distance the citizens have to travel to reach E Mitra / CSC

• Approximate cost of one visit or the commuting money they have to spend to reach the E Mitra / CSCs

• Approximate time cost for one visit at E Mitra / CSC

• Number of trips that have to be made to a center to avail a service

- Convenience of working hours
- Citizens Services offered by E Mitra / CSC

• Whether service list is prominently displayed at the centers

• E Mitra / CSC Infrastructure Ambience and Overall size

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Whether working hours are adequate and convenient

Payment receipts is generally correct

• Number of process inputs required to process a G2C case

• Key service equations of E Mitra / CSC Entrepreneur.

• Number of days taken to issue a G2C certificate

• Officials are customer friendly and pay personal attention to the customers

- General level of satisfaction with the E Mitra / CSC model  $% \mathcal{C}(\mathcal{C})$ 

• Satisfied with the overall quality of service

• Average income of citizens availing services from E Mitra / CSCs

• Frequency of visit (average in a year) for sum total of services availed from the E Mitra / CSCs

The questionnaire for the survey was designed to be browse through multiple pages and responses were entered in the app.

#### IV. FINDINGS AND DISCUSSION

#### **Awareness /Intention**

There was a high level of awareness about E-Mitra concept. Of the 200 respondents, only 10 (5%) of the respondents consumers have not heard of e-Mitra. Large numbers of consumers (80%) were continuously receiving services from e-Mitra.

# Mode of publicity

Mode of publicity through which citizens know about the services were multiple but the most frequently quoted one was the word of mouth appreciation through peers. Word of mouth information through "Neighbours/Relatives" the main source of awareness about CSC services; promotion through Newspapers / Television was reported as lowby more then 50% respondents.

# Usage patterns

Usage of E-Mitra services was continuous for a large percentage of sampled population (76%). This high ratio of users continuously availing services at e-Mitra indicates its popularity. This also ensures continuity of the model in future times

#### Citizen Walk in

There are on an average 72 walk-ins per day in a E Mitra /CSC. A good number of walk-ins per day is useful both for the entrepreneur and the citizens. A few centers reported a high day of 200 transactions in a day. This indicates sustainability and effective usage of the E governance initiative. The walk-ins in a center are dependent on multiple factors like distance of center from citizens' home, presence of other CSCs in vicinity, quality of service provided to citizens etc.

# Citizen cost of service

The Average distance which the citizens have to travel to reach E Mitra / CSC was approximately 3 Km. The variation in rural setups was greater but in all the respondents agreed that the distance to reach up to the E mitra service was not a problem. Approximate cost of one visit or the commuting

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money they have to spend to reach the E Mitra / CSCs was approximately Rs 20. Approximate time cost for one visit at E Mitra / CSC was averaged at around 30 minutes. Number of trips that have to be made to a center to avail a service was averaging at 2 visits. On the whole the respondents agreed that the mean cost made for each trip have been reduced with respect of earlier setup.

# Satisfaction Level

68% user expressed their satisfaction on the convenience of working hours factor. 20% were indifferent while a few reported inconvenience.

Time and Efforts in availing services was lower to traditional model. (satisfied 68%)

The location of the center and the working hours were more convenient. (satisfied 82%)

Single window for multiple services was a welcome feature (satisfied 92%)

Courtesy & Knowledge of staff was rated as good and the staff was more friendly then arrogant. (satisfied 72%)

# Visible display of service menu

Only 40% of the E Mitra centers visited had prominently displayed service list with fees which brings in transparency to the service equation. Display of service charge list is an essential component of service delivery and promotes transparency. For centers where service charges are not prominently displayed, there is a possibility of different rates being charged by the CSCs to citizens (for same set of services). [27]

Citizens Services offered by E Mitra / CSC and their proper display and pricing needs immediate attention and action.E Mitra / CSC. Proper control mechanism should be put in place to ensure visible publication of service menu and pricing.

# Infrastructure and Ambience

Infrastructure Ambience and Overall size was reported as adequate. The ambiance was rated as professional. Seating & Cleanliness at the counter was rated as Highly satisfying by 62%.

Weighting time in the queue was rated as low by 45% and average by another 30 %

Service efficiency level was rated as good by 71%

#### Service Quality and Accuracy

The accuracy level and payment receipts is generally correct as reported by 72% respondents. This installs new faith in the PPP model of E governance implementation. Connectivity is a major challenge faced by the E mitra counters.

# Process Inputs and duration for G2C Certificates

Number of process inputs required to process a G2C case was an approximate of 3 document processes. Requirement of documents like affidavit to be attached for processing of a G2C certificate leads to addition of multiple pages in a case. Number of days taken to issue a G2C certificate was variable and sometimes as high as 15 days and 4 follow up visits. This was primarily a case when the document required formal signatures by government officials. G2C certificates require signature from district officials, which is a contributing factor in the delay of issuance

#### **Professional Conduct of E Mitra officials**

It was agreed that as a general case the officials are customer friendly and pay personal attention to the customers. The e-Mitra has improved the quality of governance in terms of friendly behaviour of officials and personal attention being paid to clear doubts. The spirit of entrepreneurship to successfully run a business is shown by the E Mitra entrepreneurs through good customer service.

# Satisfaction level from E Mitra Model

There was a high level of general satisfaction with the E Mitra / CSC model both in the entrepreneur and the citizens. The respondents in tune of around 68% reported 'satisfied' with the overall quality of service. The business entrepreneurs of E mitra largely reported the intention to continue with the business model. The users have been highly satisfied with the overall quality of services being rendered through E-Mitra.

# **Income and Education Level of Users**

Average income of citizens availing services from E Mitra / CSCs was reported in lower to middle income group. The governance initiative seems more instrumental and useful for the middle income group of the society. A large section of society (42%) availing services of CSCs, do not possess any formal education degrees.

# Citizen Involvement in Service Design and Feedback mechanism

Government agencies do not engage citizens in the development of their E-Government services. The Citizen centric approach of window for customization was grossly missing. There was even low or no opportunity for registering suggestions for improvement. The research also revealed that the vast. [11]

majority of sites had little to no feedback from users. Government agencies do not systematically engage

users in feedback on designed E-Government services. Government agencies do not systematically solicit service quality, outcome, or other evaluation data. Essentially, once a service is up and running, improvements come largely in the form of system updates and as responses to programmatic changes which force a change in an application. Language barriers were also identified as a major barrier that served to make some content inaccessible. Even the official Hindi was not easy to grasp.

Given that the research efforts were exploratory, one cannot fully generalize to all E-Government services and resources. However, the findings do indicate a general lack of citizen inclusion in the development, design, and implementation of E-Government services and resources.[18] Moreover, the findings indicate that this lack of inclusion of citizens in an ongoing and regular basis can lead to a range of barriers on account of absence of feedback mechanism.

# V. DISCUSSION AND SUGGESTIONS FOR IMPROVEMENT

# **Engaging Citizenry in E-Government**

The Government of Rajasthan needs to engage users successfully in E-Governance implementation. This requires a

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4

range of iterative and integrated planning steps and design processes such as:

- conducting an information and service needs assessment,
- technology needs assessment,
- determining the availability of appropriate content and services to meet user needs, [9]
- the ability of citizens to engage in E-Government services due to information and technology literacy,
- which agency or level of government provides the needed service or resource,
- usability and functionality testing,
- accessibility testing etc

These considerations are essential to the development, implementation, and continual improvement of user-centered E-Government services. These are important for the growth and sustenance of E Governance efforts. The central pivot of the system 'the citizen' should not be ignored at any step of the implementation process.[2]

# **Conduct Citizen Centered Needs Assessments**

Developing a Web-based E-Government service that requires a broadband connection, high-end computer, and advanced technology competencies can immediately exclude a segment, or multiple segments, of the intended service population. The tension between system developers and designers and user ability to use high-end computing and telecommunications is critical to resolve.[5] The rural Rajasthan still lacks the core competence for successful E Mitra implementation. Training calendars should be communicated online and the training need assessment should be conducted regularly to bridge this gap. This will help in understanding the types of training and support that the users may need for successful engagement of E-Governance Services.

# **Engage E Mitra Entrepreneurs and Users**

Many types of problems can be identified and corrected by engaging users in the actual design of the service. There are a range of tools and techniques in which governments can engage E Mitra Entrepreneurs and Users to develop successful E-Government services such as:

- focus groups and interviews (with experts and users);
- usability, functionality, and accessibility testing throughout the design and development process;[26]
- encouraging real-time comments and suggestions about the services being used;
- log file and transaction log analysis;
- providing interactive help screens
- online interactive assistance;

The key is to include user feedback during the E governance service development and design phases as well as while the service is in operation.

# **Location Decision for E Mitra Counters**:

Government should open e-Mitra centres so that there is at least one E Mitra within range of 3 Km radius in the urban area. In the rural areas instead of deciding on location of e-Mitra (CSC), within a specified distance, it could be based on the number of villages and the population that could be covered by a specified CSC. [7]

### Awareness and publicity drive

Awareness among people should be created through newspapers, TV advertisement, hoardings to supplement mouth publicity. Public should also be educated and motivated to use online services through the Internet by offering incentives. [6]The awareness campaign should be such that it creates an intention to use the service and the increasing desire to engage in action for all services made available through E mitra.

# Active Publication of Standard Service Rates

The government should publish the prescribed rates for various services and it should be made compulsory for the e-Mitra centres to display official charges for providing various services.

#### **Streamline Processes to Reduce Service Time**

Time required to process transactions at e-Mitra centre can be further reduced by introducing QR code and printing it on the bill so that time taken for manual entry and errors is eliminated. The unique transaction details should also be automated to permit reconciliation based on unique customer ID. [14]

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