Analysis the impact of E-governance Services in Rural Areas of Mansa District-Punjab

Resham Dhillon[1], Dr Vijay Laxmi[2]

[1]*Research Scholar, Dept. of Computer Applications, Guru Kashi University,*
Talwandi Sabo, Punjab, India

[2]*Associate Professor, Dept. of Computer Science and Engineering*
Guru Kashi University Talwandi Sabo, Punjab, India

Abstract- This research survey analysis the impact of ICT/e-governance services in the Mansa district, Punjab for rural population. There are around 165 respondents were selected from Mansa district in Punjab. The analysis were done based on impact of various factors(performance expectancy, effort expectancy, social influence, facilitating conditional and behaviors intention adoption) for low participation of rural population in e-governance services. Hence the finding suggested that there should be improvement in transparency and efficiency in the field of e - governance in Mansa district of Punjab.

Keywords: E-governance, Performance expectancy, ICT, Barriers

1. INTRODUCTION

E-governance/Information and Communication Technologies (ICT) has helped a lot to the common people and government. Due to presence of these technologies (e-governance/computerizations services) in present generation people are getting services of various department facilities from the single-window centers efficiently. Therefore, throughout the country with the introduction of e-governance the efficiency and effectiveness of government services are improved in huge scale.

2. LITERATURE REVIEW

Impact of E-governance to control the corruption based on analysis of various projects implemented in India especially in the State of Punjab (Singla and Aggarwal, 2011). India is faced with a large number of challenges that is typical for developing countries (Madan, 2004). There is vital need to recognize the role of local knowledge in sustainable development (Garai and Shadrach, 2006). The challenges arise from change in government policy with change in government, lack of sufficient skilled well-trained human resource, supply of sufficient fund for implementing such capital intensive project (Hassan, 2013). Governments and public sector organizations around the world are facing to reform their public administration organizations and deliver more efficient and cost effective services, as well as better information and knowledge to their stakeholders. (Dwivedi and Bharti, 2010). There is another problem that is of language. As the information is not supplied in the local language, so the people do not feel comfortable (Monga, 2008).

3. OBJECTIVES OF THIS STUDY

1. To find out the factors responsible for low participation of rural people in Mansa district (Punjab) in e-governance projects.
2. To find out local development priorities and perspectives, strategies for integration of e-governance services with public administration systems at Mansa district level

4. RESEARCH FRAMEWORK

We observe various factors responsible for low participation of rural people in e-governance projects in Mansa district. Questionnaires are the main tools for primary data collection. Additionally, this questionnaire was translated into Punjabi language since most people in Masnsa district more comfortable in Punjabi rather than the English language. A semi-structured questionnaire was used to collect data from 165 respondents using quota-sampling techniques (Kothari, 2006), with following details.

Table-1: Mansa Demographic Profile

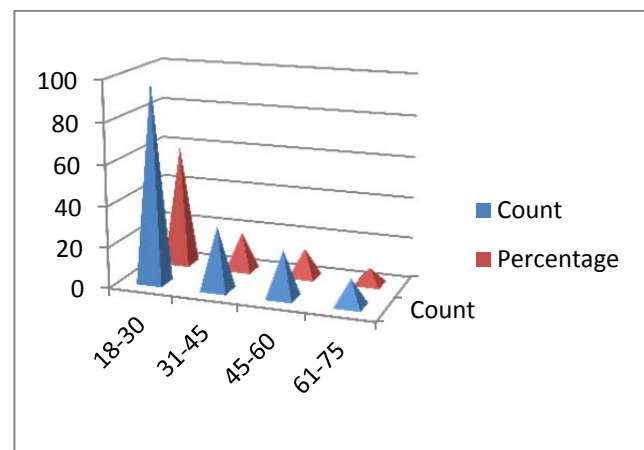| Age Group	Number	Percentage
18-30	109	72.18
31-45	33	21.85
46-50	9	15
Gender type	Number	Percentage
Male	115	76.15
Female	36	23.84

Figure -1: Age group in district Mansa

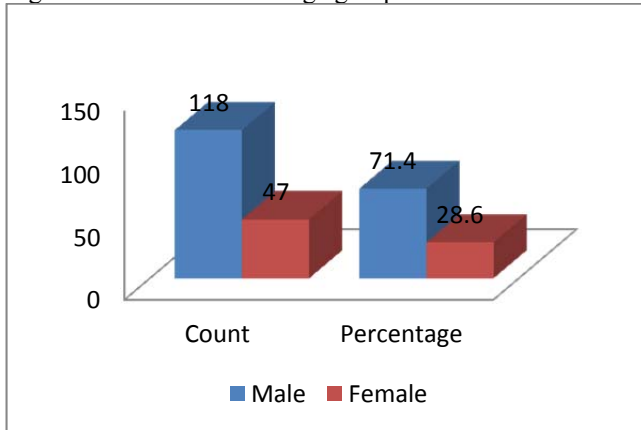Figure 2 shows maximum age group under 18-30

Figure -2: Gender in district Mansa

Figure 2 shows maximum male comparison than female

5. DATA ANALYSIS AND FINDINGS

Quantitative data are analyzed statistically using SPSS (Gaur et. al. 2004), software package to summarize the relations among the variables assessed by this study. The general purpose of this analysis is to uncover meaningful relations among the measured variables and to represent important aspects of the phenomenon under consideration. Cronbach's coefficient alpha value was assessed to observe the internal research consistency of measuring (Hinton, et al. 2004; Srraub, et al. 2004).
The four points of reliability are recommended excellent (0.90 and above), high (0.70 - 0.90), high moderate (0.50 – 0.70), and low (0.50 and below).The reliability values detailed in study should be equal to or above (0.70) for an affirmative study. The reliability for each construct is demonstrated in Table 2. High Cronbach's value for all constructs involves that they are internally consistent and measure the same content of the construct.

Table 2: Reliability of Measurements Evaluate

Constructs	Sample size	Cronbach's Alpha (α)	Type
Performance expectancy	151	0.798	High Reliability
Effort Expectancy	151	0.828	Excellent Reliability
Social influence	151	0.736	High Reliability
Facilitating Conditions	151	0.736	High Reliability
Behavioral intention to Use	151	0.704	High Reliability

The above mentioned table 2 illustrates Cronbach's coefficient alpha values that are estimated to test the internal consistency of the measure. Cronbach's results varied between (0.704) for the Behavioral Intention to adopt e-government and (0.828) for the Effort Expectancy constructs. Social Influence reveals a reliability of (0.712) and Facilitating Conditions possessed a reliability of

(0.736). The remaining construct, namely Performance Expectancy had a Cronbach's score of (0.798). The findings prove that all the alpha values indicates the study's instrument is reliable and the higher the Cronbach's (α) value of construct, the higher the reliability is of measuring the same construct (Dwivedi,et al. 2006). Following are the main finding of our study detail.

5.1 Performance Expectancy
These are important to measure the degree to which individuals believe that using a system will help them to improve their job performance. There are various parameters to measure the performance expectancy for the good quality administration and governance and these were included after pretesting of the questionnaire. The 61.72 percent of the respondents favor corruption free services. The population expects (57 percent) people centric services in a responsive manner and 55 percent favor maintaining rules of law and applying the same rules to all, no VIP culture and freebie schemes. People expect good governance in responsive manner. The 51 percent of respondents emphasize on improvement in services like access to land records, registration and transfer of property, copies of other records, property tax and revenue related cases etc through computerized ICT/use of e-governance.

5.2 Effort Expectancy
The degree of ease related with the use of the system; effort expectancy is made up of; perceived ease of use, complexity and actual ease of use. The 72.42 percent of citizens have trust in online services. The result shows that the trust worthy e-governance services are the most important factor for citizens; which is followed by timely service delivery, transparency and 24x7 availability of e-governance services. There is mixed response from the respondents favoring services like downloading application forms and submitting application forms online and make fee payment through credit card/debit card. A very few respondents (those who are illiterate and aged) are in favor of manual systems. The maximum number of respondents and service providing staff is in favor necessary computer education (for free or at a nominal fee) for creating awareness of using computerized government services/e-governance services in the effective manner.

5.3 Social Influence
Social influence is the degree to which people react against the influence of the system be it positive or negative. The maximum number of respondents get irritation from unreasonable delay, multiple visits even for small services as well as non responsiveness of government staff to the needs of urgency of citizens and lack of information/guidance for the correct procedures, form, rules etc are the most common reasons or difficulties that are being faced while getting the citizen services from various government departments. The results also prove the fact that respondents agree that the system need overhauling as the problems are not identified and defined correctly in department(s) or service(s). There is need to upgrade the technology with time and apply strict rules to keep privacy of citizen information/transactions.

5.4 Facilitating Conditions

The degree to which an individual believes that an organization and technical infrastructure exist to support the system is facilitating conditions. These are involved of three roots: perceived behavioral control, facilitating conditions and compatibility. The maximum population is in favor of getting computerized citizens services in District office for nominal fee. The same number of respondents is in favor of online payment/online bank transfers through internet or by cash at the service counter. The respondents are comfortable if the services are improved within a period of one year for implementing efforts for effective e-governance services.

5.5 Behavioral Intention to Use

The behavioral intention of the public towards e-government services has parameters like how much percent of the respondents support the governmental efforts and due to this how much empowered the citizen becomes with the ease of information availability. The respondents are in favor of these efforts and agree that this would bring in the radical change in the way government functions and would bring in real benefits to the citizens.

6. BARRIERS FOR LOW PARTICIPATION IN ADOPTION OF E-GOVERNANCE SERVICES

1 Infrastructure

The success of ICT and e-governance projects lies in the availability of infrastructure by the government for public accessibility. The cost of computing tools and fees for internet access are still high for the most rural population. So, they cannot access these services. In addition to this there is digital divide between the information haves and information have-nots.

2. Poverty

Any individual living below poverty line does not afford a computer to harness the benefits of e-government and other online services. They are economically poor, socially background and illiterate. Even the segment of public that is educated, lack of basic knowledge of computer and internet operating skills. Sometimes there is lack of awareness among the people is an important factor.

3. Lack of Funding

Funding is the major barrier in implementing ICT and e-governance projects. The projects that are the part of the e-governance sustainable need huge investment. The state of Punjab is going through financial crisis since last ten years. This has been a major factor for low participation of people in e-governance.

4. Literacy Rate

Majority of the people in Punjab are not literate and thus they do not have proper knowledge about the usage of ICT tools. So, low level of ICT literacy is a major hurdle for e-government adoption and acceptance the people. The e-government applications are written or published online in English language only and are not user-friendly. This is also one of the major reasons for the negligible acceptance and adoption of e-government projects.

5. Local Language Problem

The most important factor for the population is of language and there is dominance of English language on the internet. It is reported that most of the population in Punjab speak Punjabi language.

7. CONCLUSION

The present study highlights   to find out the some factors that are needed to be designing for implementation of e-governance in Mansa district. So that there is increased in adoption of e-governance services among rural population in district. Governments should focus on improving services of e-governance based on citizen centric factors (infrastructure, poverty, lack of funding, literacy rate and local language problem) for sustainable development. They should be aware of what are the major expectations of the citizens (corruption free services, trustworthily services freebies or nominal fee).

REFERENCES

[1] K.Singla and H.Aggarwal, "Combating corruption through E-governance in Public Service Delivery system" Volume 2, No. 7, July 2011 Journal of Global Research in Computer Science.

[2] S. Madon, "Evaluating the development Impact of E-governance Initiatives: An Exploratory Framework" EJISDC (2004) 20, 5, 1-13.

[3] A. Garai, and B. Shadrach, "Processes and Appropriation of ICT in Human Development in Rural India: Bridging the Research and Practice Gaps", In Taking ICT To Every Village, by Atanu Garai and B.Shadrach, 1-35. New Delhi: One world South Asia, 2006 (accessed in February,2006. from http://www.drous./org/grous/oneworldsA/docs/TICITEIV_pdf.pdf).

[4] Md. Ramzan Hassan, "E-Governance and E-Government in Bangladesh: Performance, Challenges Remedies" Asian Journal of Applied Science and Engineering, Volume 2, No 2 (2013) pp. 111.

[5] S.K. Dwivedi and A.K. Bharti, "E-governance in India – problems and Acceptability. Journal of Theoretical and Applied Information Technology © 2005 - 2010 JATIT & LLS. All rights reserved

[6] Monga, A."E-government in India: Opportunities and challenges, JOAAG, Vol. 3. No. 2.

[7] CR. Kothari, "Research Methodolgy Method and Technique",2nd ed (2004). New Age New Delhi: International Publishers.

[8] Y. Dwivedi, A. Papazaferiropoulou and H. Gharavi, "Socio-Economic Determinants of Adoption of the government Gateway Initiative in the UK", Electronic Government, (3:4), 2006, pp.404-419.

[9] *A. Gaur and S. Gaur,* "Statistical Methods for Practice and Research: A Guide to Data Analysis", 2006. Using *SPSS*.

[10] P.R. Hinton, C. Brownlow, I. MucMurvay and B.Cozens, "Explained ,East Sussex England: Routledge Inc" , 2004.

[11] D.W. Straub, M.C. Boudreau, D. Gefen, "Validation Guidelines for IS Positivist Research, CAIS (forth coming) 2004.