An Analysis of Less Involvement of Rural Residents in E-Governance

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Abstract **-**Today is the era of e-communication. All over the world governments are using e communication that is e-governance which is used to govern the public and private activities in which Punjab is one of them. This is the fastest and easiest way of communicating information. E-Government means different things for different people. Before ICT, the interaction between a citizen or a business and a government agency took place in a government office. But now with the usage of ICT it is possible to access service centers close to the clients or people. In this paper we want to explore the usefulness of e governance for the government businesses and citizen of Punjab. It aims also to review current progress and planned future activities for Punjab's e-government.

Keywords **-** *Growth of ICT, e-Governance, Rural Punjab, ICT.*

I. INTRODUCTION

e-Governance is the realization of good governance through the effective use of Information and Communication Technologies (ICT). The World Bank also defines e-Governance as the "use of information and communication technologies by government agencies to transform the relation between citizen, business and other arms of the government. It involves information technology enabled initiatives that are used for improving (i) The interaction between government and citizens or government and business i.e. E-Services (ii) The internal governmental operations i.e. E-Administration (iii) External interactions, i.e. E-Society." Most often the two terms e-Government and e-Governance are taken synonymous, but there is a subtle difference between the two. e-Government is the structural aspect of government operations, whereas e-Governance is the outcomes of the government operations as experienced by those who are governed. The internet has ushered enormous possibilities that have had a fundamental impact on human society. The advent of internet technology has made it possible for the government to become e-enabled and transform itself into a government online. It offers an outstanding opportunity to react to the demands of the citizens and business by offering new methods of service delivery to meet their expectations.

II. LITERATURE REVIEW

Singh and Sharma (2003), explain that the intention of the Lokmitra project is noble. It is meant to provide citizen centric services and information at kiosks and redress citizen's complaints through a single window interface. In this way the harassment of the people can be put to an end, administration will become responsive and accountable and benefits of the ICT will reach the general public. Initially the project functioned satisfactorily because there was a strong leader in the District Centre who took keen interest in monitoring the project by 'thumb rule' in the absence of a proper strategy. Since the project was a pilot project there was a need to define the metrics for measuring the performance against the objective and timelines so that it could be replicated in other districts of the state. This could happen only when the project stabilized.

Bhatnagar (2004), provides key insights and practical guidelines on: ways to successfully implement e-government projects; selecting application areas, project designs, strategies and their implementation; benefits and impact of e-government on public sector reform, poverty reduction and empowerment methodology for evaluating e-government projects; and overall strategy formulation.

Bhattacharya et. al (2008), studied about the effectiveness of the Indian governmental online portal of different states. They have Thorley analyzed the web portal from the primary window to end guideline for accessing information which is required. They have found that they are a requirement of proper utilization of technological development around the world. Also find that there is a lack of appropriate portals and scarcity appropriate uses of the same.

Malhotra and Singh (2007) in their paper stated that since last ten years the government has spent a large amount of money to increase the use of ICT in govt offices. ICT is widely used in public and private sectors such as in education and other centres. On the other hand, the active participation of rural communuites in this field is very nominal. So a lot of work is required to be done to improve it. The goverment makes a lot of effort to provide the ICT services. But the people are facing lot of problems in its use. Beacuse of some hurdles such as lack of local laguage and need based services, the information becomes useless for the rural population

Singla and Aggarwal (2012) proposed a new framework of Suwidha Centres network which would help to increase responsiveness and effectiveness at Suwidha centre across state and would also help to reduce obstacles faced by the citizens of state. With the proposed new framework, researchers also like to recommend few changes at human behavior level and infrastructure level at Suwidha centre.

Kaur and Rathore (2012) reported that e-Governance (digital government or online government) refers to government's use of information technology to exchange information and services with citizens, businesses and other arms of government. E-Governance is a process of reforms in the way Governments works, share information, engage citizens and deliver services to external and internal clients for the benefit of both government and the clients that they serve. This paper studies the current status of e-governance and future of e-governance in Punjab.

This research paper is a part of the study and only the relationship of some factors of rural population with impact of ICT is analysed, because the participation of rural population is not getting momentum**.**

III. OBJECTIVES OF RESEARCH

- Find out the relationship of Age with Entertainment tools, Internet availability, Internet Use, Trust Online, Impact of ICT
- Find out the relationship of Gender with Entertainment tools, Internet availability, Internet Use, Trust Online, Impact of ICT
- Find out the relationship of Residence with Entertainment tools, Internet availability, Internet Use, Trust Online, Impact of ICT

IV. RESEARCH METHODOLOGY

The research is part of an exploratory case study with the aim of producing an e-government adoption framework. The study aims to describe the current and future plans and achievements in the e-government project in Punjab and analyse the participation of rural population in ICT. In Simple English a questionnaire will be developed with the research questions. Different segments of the Punjab's society will be chosen to provide a fair representation of people with good income and good education.

A. Details of the Questionnaire

The review of selected literature provided an initial development of a draft. The final questionnaire consisted of a total of 35 common questions that included close-ended, multiple and Likert scale type questions. Random stratified sampling technique has been used for collecting the data. Information has been collected from the citizens, government and academia, businessmen and professionals. The purpose of each question is elaborated here; first 12 questions (question 1 to 12) to collect the full profile of the respondent while the other questions were for studying a variety of responses of the peoples. The questionnaire is based on a five - point Likert scale for most of the responses. The next 23 common questions (question 13 to 35) seek responses of the persons on various aspects like the level of computerized government services, desired timings and language factors for providing a good quality administration and governance. Some factors that may be causing pain, harassment and difficulties to the citizens in getting the services are also enlisted here. The respondent is willing to pay through preferred mode of payment, barriers/ challenges / risks/ hindrances for effective computerized citizen services, factors in contributing to the success or effectiveness of improved services, creating awareness and training of citizens while implementing good governance.

V. DATA ANALYSIS

The present study takes the participative stakeholder analysis to get the views and perceptions of citizens and proposes a strategic policy framework and interventions required on the basis of the gap identified above. Sampling statistics viz.Chi-square analysis, ANOVA, factor analysis, etc. were used to analyze the data. For data collection, major cities were taken from Punjab. The findings of data collected through questionnaires are described in following sections presents the strategic framework for good governance.

5.1 Participative Stakeholder Analysis

5.1.1 Demographic Profile

Table 1: Demographic Profile of 486 respondents

Group	Number	Percentage
Age		
18-30	308	63.37
31-45	114	23.45
46-60	49	10.08
61-75	13	2.67
>75	2	0.43
Gender		
Male	347	71.39
Female	139	28.61
Residence		
Urban	82	16.87
Semi-urban	45	9.26
Rural	359	73.87

The demographic profile of the respondents given in Table 1 depicts that one third of the respondents are females, 73 percent belong to rural areas and 45 percent are married. Among the younger respondents, the majority of the female students is unmarried. Females, those participated in the

survey, are generally more educated than their counterparts. Mean age of the respondents of different categories was estimated to be 30 years for Citizens.

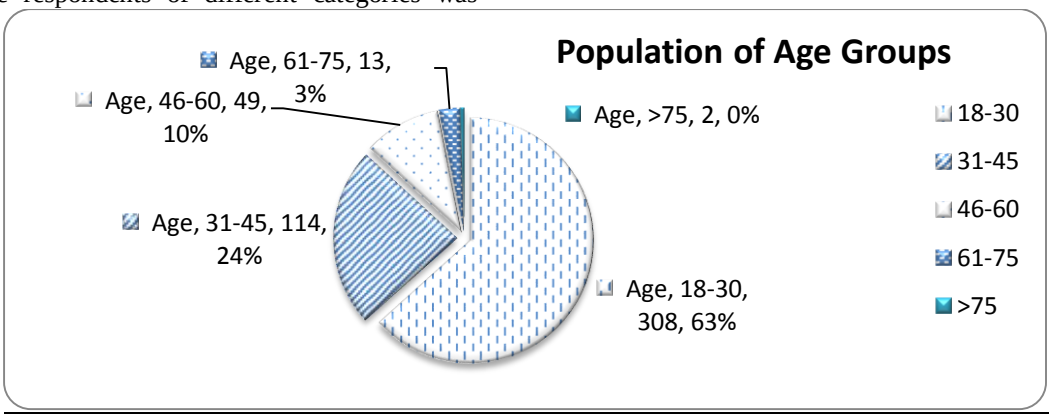

Figure 1: Population of Age Groups

As seen from Figure 1 the largest Age segment, i.e., 63 percent of respondents are less than 30 years and if age till 45 is considered, this segment comprises of 80 per cent of the respondents. The respondents of age 46 to 60 years are just 10 percent. The senior citizens' in the sample were very less.

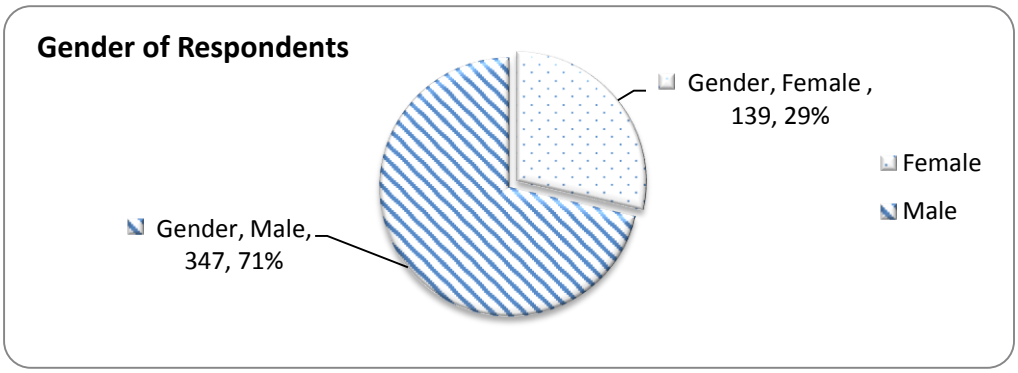

Figure 2: Gender of Respondents

The Figure 2 sample is dominated by males, which consisted of 71 percent of respondents. The remaining were female respondents.

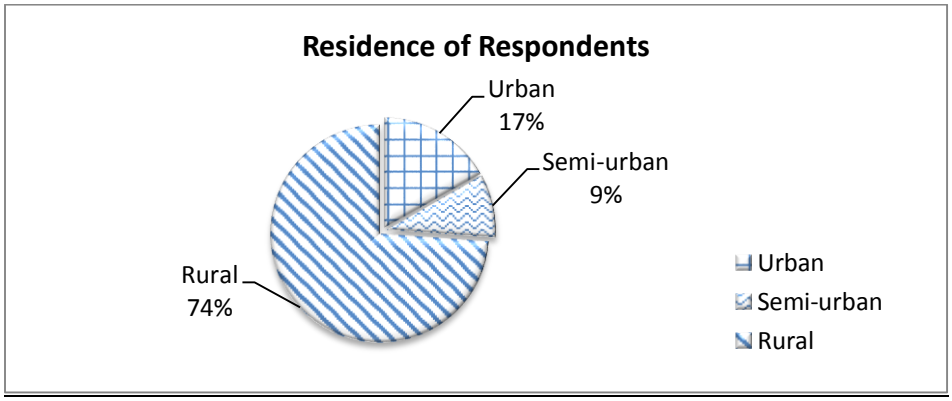

Figure 3: Residence of Respondents

The Figure 3 sample is dominated by rural populace which consisted of 74 percent of respondents. 9 percent respondents were from semi- urban areas. The urban segment constituted 17 percent.

The population in age group of 18-30 years uses entertainment tools more than population of other age groups. The value of Chi-square is 0.240 (see Table 2) it shows that there is no association between age group and entertainment tools and that hypothesis H_o1 is accepted. Thus, various age groups are influenced by entertainment tools.

Table 2: Relation between the Age and Entertainment Tools		
Age Group	**Count (%)**	
18-30	322 (66.35)	Chi-square 0.240
31-45	114 (23.56)	df 24
45-60	9 (10.09)	

The Chi-square value 0.356 (see Table 3) shows that there is no relation between age groups and internet availability. The value is more than 0.05, means the acceptance of the null hypothesis. Thus the age of respondents has no association with internet availability. Hence the hypothesis H_o2 is accepted.There is no correlation between age and internet availability. The various age groups are influenced by internet availability differently.

Table 3: Relation between the Age and Internet availability	
Age Group	Chi-Square 0.356 df 0.8
18-30	
31-45	
45-60	

The Chi–square value 0.218 (see Table 4) is more than 0.05 that means the acceptance of the null hypothesis. It shows that there is no relationship between age group and internet use. Thus hypothesis H_o3 is accepted. There is no correlation between age and internet usage. Various age group people are influenced by internet differently.

Table 4: Relation between the Age and Internet Use	
Age Group	Chi –Square 0.218 df 12
18-30	
31-45	
45-60	

The Chi-square value is 0.011 (refer Table 5) for the association between age group and trust in online services. The youth age group from 18-30 years has a higher percentage of the population having trust in online services amongst others. The value of chi-square is less than 0.05 that means rejection of the null hypothesis. This proves that the age of respondents has an association with trust in online services. Thus hypothesis H_o4 is rejected. Hence there is a strong correlation between age and trust in online services. Various age group people are influenced by trust online differently.

Table 5: Relation between the Age and Trust Online	
Age Group	Chi –Square 0.011 df 4
18-30	
31-45	
45-60	

The Chi–square value shows that there is no relationship between age group and impact of ICT. The value of the Pearson chi square is 0.658 (see Table 6) being more than 0.05 that means the acceptance of the null hypothesis and hence H_o5 is accepted. There is no correlation between age and impact of ICT. Various ages are influenced by impact of ICT differently.

Table 6: Relation between the Age and Impact of ICT	
Age Group	Chi –Square 0.658 df 12
18-30	
31-45	
45-60	

The association between marital status and other factors is examined. The Chi–square value 0.014 (refer Table 7) is less than 0.05 that means the rejection of the null hypothesis H_o6. Thus it proves that the gender of the respondent has an association with entertainment tools. There is a strong correlation between gender and entertainment tools. Various genders are influenced by entertainment tools differently.

Table 7: Relation between the Gender and Entertainment Tools		
Gender	**Count (%)**	
Male	347(71.40)	Chi –Square 0.014 df 6
Female	139(28.60)	

The Chi–square value (refer Table 8) shows the association between gender and internet availability. The null hypothesis H_o7 is rejected. There is a strong correlation between gender and internet use. Various gender group people are influenced

Table 8: Relation between the Gender and Internet availability	
Gender	Chi –Square 0.000 df 2
Male	
Female	

by internet availability differently.

The Chi–square value shows a strong relationship (see Table 9) between gender and internet use. The value of the Pearson chi square is 0.000 that is less than 0.05 that means the rejection of null hypothesis H_o8. Thus, there is a strong correlation between gender and internet use. Various gender group people are influenced by internet usage differently.

Table 9: Relation between the Gender and Internet Use	
Gender	Chi Square 0.000 df 3
Male	
Female	

The Chi–square does not depict any association between gender and trust in online services. The value of the Pearson chi - square is 0.228 (see Table 10) that is more than 0.05 that means the acceptance of the null hypothesis H_o9. There is no correlation between gender and trust in online services.

Table 10: Relation between the Gender and Trust Online	
Gender	Chi –Square 0.228 df 1
Male	
Female	

The Chi–square value shows association between gender and impact of ICT. The value of the Pearson chi - square is 0.046 that is less than 0.05 (refer Table 11) that means the rejection of null hypothesis H_o10. There is a strong correlation between gender and impact of ICT.

Table 11: Relation between the Gender and Impact of ICT	
Gender	Chi –Square.046 df 3
Male	
Female	

The value of the Pearson chi - square is 0.000 is less than 0.05 (see Table 12) that means the rejection of the null hypothesis. This shows that the residence of respondents has an association with entertainment tools and hence the hypothesis is H_o11 is rejected. There is a strong correlation between residence and entertainment tools.

Table 12: Relation between the Residence and Entertainment tools		
Residence	**Count (%)**	Chi–Square 0.000 df 12
Rural	359(73.96)	
Urban	82(16.69)	
Semi-Urban	45(9.35)	

The value of Chi-square highlights relationship between residence and internet availability. The value of the Pearson chi - square is 0.001 that is less than 0.05 (refer Table 13) that means the rejection of the null hypothesis H_o12 is rejected. There is a strong correlation between the place of residence and internet.

Table 13: Relation between the Residence and Internet availability	
Residence	Chi–Square 0.001 df 4
Rural	
Urban	
Semi-Urban	

The result of Chi-square does not show any relationship between the residence and internet use. The value of the Pearson chi - square is 0.050 (see Table 14) that is equal to 0.05 that means the acceptance of null hypothesis H_o13 is accepted. Thus the residence of respondents has no association with internet usage.

Table 14: Relation between the Residence and Internet use	
Residence	Chi –Square 0.050 df 6
Rural	
Urban	
Semi-Urban	

The Chi-square value shows a relation between residence and trust in online services. The value of the Pearson chi square is 0.000 (see Table 15) that is less than 0.05 that means they reject of null hypothesis H_o14 is rejected. Thus the residence of the respondent has an association with trust in online services.

Table 15: Relation between the Residence and Trust Online	
Residence	Chi –Square 0.000 df 2
Rural	
Urban	
Semi-Urban	

The Chi-square value shows a strong relationship between the residence and impact of ICT. The value of the Pearson chi - square is 0.000 (see Table 16) that is less than 0.05 that means the rejection of null hypothesis H_o15 is rejected. Thus the residence of the respondent has association with impact of ICT. Various residence group people are influenced by impact of ICT differently.

Table 16: Relation between the Residence and Impact of ICT	
Residence	Chi –Square 0.000 df 6
Rural	
Urban	
Semi-Urban	

VI. CONCLUSION

The result shows that 72.42 % of citizens are having trust on online services. It also shows that the trust worthy e-governance services is the most important factor for citizens; which is followed by timely service delivery, transparency and 24*7 availability of e-governance services.

The result depicts that approximately 50% of citizens favor services like downloading application forms and submitting application forms online and make free payment through credit card/debit card. Only 10.69% of citizens supporting present method and say that there is no need of any computerized government services. Maximum citizens supporting the use of Punjabi language and multilingual for computerized government services/ ICT led e-governance services respectively.

The maximum (55.96%) people favor free computer education in primary level for creating awareness of using computerized government services/ e-governance services in the effective manner. Around 45% of citizen supporting the opinion of having Computer education at the high school level and college level for a nominal fee. The result depicts maximum citizens are in favor of basic computer literacy should be provided to the existing government staff and made compulsory for all future promotion in government staff.

The Majority of the population in Punjab is living in rural areas; they are economically poor, socially background and illiterate. Even this section of the public that is educated, lacks minimum basic knowledge of computer and internet operating skills. The state government should focus to implement projects which are simple, economical and more citizens centric for successful e-governance projects.

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