

Demographic Factors as Determinants of User Satisfaction on e-Governance: A Field Study in Kerala

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ABSTRACT

The development of Information and Communication Technologies (ICTs) has led to a new form of interaction between government and citizens. It is believed that this type of interaction not only leads to more efficient, transparent and less costly administration but also brings out changes in the fundamental relationship between government and citizens and businesses. e-Governance is about a process of reform in the way of government functioning so that giving citizens the choice of when and where they can access government information and services. This study aims at finding users' satisfaction towards two chosen dimensions of e-Governance, namely: transparency and participation. The study tries to examine whether the demographic variables such as age, gender, education and occupation affect users' satisfaction towards the chosen dimensions of e-Governance in Kerala. The result shows that the educational level of the respondents significantly influences their level of satisfaction towards e-Governance.

1. Introduction

e-Governance is the latest trend in governance process all over the world. India is not an exception to it. In India e-Governance is gaining wide currency with the formal acceptance of National e-Governance Plan (NeGP) through its policy documents in May 2006. e-Governance in India has been steadily evolved from computerization of government departments to the initiatives that aim at the core objectives of governance such as transparency, citizen centricity, cost effectiveness etc. e-Governance not only entails mere computerization of government departments rather it focuses on change in the mentality of bureaucrats to treat citizens as valued customers of government and important participants of government decision making. e-Governance can be defined as the use of Information and Communication Technologies (ICTs) to provide government services and information in more transparent, effective and convenient manner. The state of Kerala is promoting e-Governance in a big way. Kerala sustains as an aspiring leader in the development of newer initiatives and through its policy reforms; IT policy has been adopted to utilize the potential of ICTs to getting transformed to a knowledge based society. High rate of literacy, internet penetration, mobile internet usage and presence of Common Service Centres (CSCs) like AkshayaCentres act as e-facilitators and made e-Governance implementation easier in Kerala. Recently Kerala has been declared as the first digital state in India. Kerala State Information Technology Mission (KSITM) is the nodal agency under government of Kerala to strengthen e-Governance in Kerala.

2. Literature Review

The term e-Governance can be defined in many ways. According to the World Bank (www.worldbank.org) "e-Government refers to the use by government agencies of information technologies that have the ability to transform relations with citizens, businesses and other arms of

government. The 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 growth relations". e-Governance is a paradigm shift over the traditional method of public administration means providing government services through electronic means by ensuring transparency, quality of service, simplification of procedures, provision of services through single window, reduction in corruption and change in the attitude and behavior of service providers.

According to the UNESCO (www.unesco.org) "governance refers to the exercise of political, economic and administrative authority in the management of a country's affairs including citizen's articulation of their interest and exercise of their legal rights and obligations. e-Governance may be understood as the performance of their governance in 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".

Al Athmay, A. (2013) examined how demographic variables such as age, gender, education, employment and nationality affect citizens' satisfaction on three dimensions of e-Governance; namely openness, collaborative governance and participation in United Arab Emirates (UAE). The findings show that these demographic factors considerably affect citizens' perception on e-Governance. Sheibani et al., (2011) assessed citizen satisfaction of Electronic Value Added Tax (EVAT) in Iran. They found that citizens' perception towards efficiency, reliability, accessibility, completeness; customization and usability have influence on their overall satisfaction towards e-Governance.

Warle et al., (2015) analyzed the satisfaction of citizens towards the e-Governance initiative "SETU" in Maharashtra. They examined whether the SETU initiative has accomplished its basic objectives set by the Government of Maharashtra such as service quality, citizen satisfaction, easiness in accessibility of services, timeliness, transparency and integrated service delivery. They found that the citizens are marginally satisfied with the service quality and the government has to reengineer processes and adopt new technologies for the fulfillment of other objectives.

3. Objective of the study

The purpose of this study is to find out how the demographic factors such as age, gender, education and occupation influence users' satisfaction towards the chosen dimensions of e-Governance; namely transparency and participation.

Transparency indicates the ease with which citizens can find, digest and use government information. Access to government information helps in empowering people and giving them power to hold government institutions accountable for service delivery.

Participation reflects utilization of internet technologies to increase citizen's involvement in government decision making. It also includes the extent to which citizen feel active participants in democracy whether their opinions matter in formulation of rules and policies.

4. Hypotheses of the study

1. There is no significant difference in the level of users' satisfaction towards the chosen dimensions of e-Governance with respect to their age.
2. There is no significant difference in the level of users' satisfaction towards the chosen dimensions of e-Governance with respect to their gender.
3. There is no significant difference in the level of users' satisfaction towards the chosen dimensions of e-Governance with respect to their education.
4. There is no significant difference in the level of users' satisfaction towards the chosen dimensions of e-Governance with respect to their occupation.

5. Methodology

This study is based on both primary and secondary data. Primary data is collected from 60 respondents from Thiruvananthapuram district. The study focuses on citizens those who have availed any of the e-Governance services. A structured questionnaire was used to collect data about users'

satisfaction towards e-Governance. The secondary data is collected from various magazines, journals, books, newspapers, websites etc.

6. Tools for analysis

For analyzing data, ANOVA and independent sample t-test were applied using Statistical Package for Social Science (SPSS).

7. Analysis and Discussion

Table 1 explains the demographic profile of respondents. Out of the total respondents, 33.3 percent belong to age group of 25-35, 55 percent are males, 25 percent are graduates and 35 percent are self-employed.

Table 1: Demographic profile of the sample

Demographic Factors	Categories	Number of Respondents = 60	Percentage
Age	Below 25	12	20
	25-35	20	33.3
	35-50	19	31.7
	Above 50	9	15
Gender	Male	33	55
	Female	27	45
Education	Below SSLC	9	15
	SSLC	13	21.7
	Plus two	11	18.3
	Graduate	15	25
	PG & Above	12	20
Occupation	Government employee	12	20
	Private employee	14	23.3
	Self employed	21	35
	Others	13	21.7
Total		60	100

Source: primary data

➤ **Level of user satisfaction based on age.**

H0: There is no significant difference in users' satisfaction towards the chosen dimensions of e-Governance with respect to their age.

With regard to age, the respondents were classified into four categories; below 25 years; 25 – 35 years; 35 – 50 years; and above 50 years. One-way Analysis of Variance was carried out to find out the influence of age to the level of user satisfaction towards the chosen dimensions of e-Governance.

Table 2: One way analysis of the mean differences in user satisfaction by age

Dimensions		Sum of Squares	df	Mean Square	F	Sig.
Transparency	Between Groups	0.061	3	0.02	0.06	0.981
	Within Groups	18.875	56	0.337		
	Total	18.936	59			
Participation	Between Groups	0.076	3	0.025	0.074	0.974

	Within Groups	19.202	56	0.343		
	Total	19.277	59			

Source: primary data

Interpretation

Since the P values are greater than 0.05 in both cases, H0 is accepted at 5% significance level. Thus it is interpreted that there is no significant difference in the level of users' satisfaction based on the ages of the respondents on the two dimensions of e-Governance. As far as transparency is concerned, mean square value is 0.020 for between groups and 0.337 for within groups. In case of participation, mean square value is 0.25 for between groups and 0.343 for within groups. Hence it is understood that the level of users'

satisfaction on these two dimensions of e-Governance doesn't differ with respect to their age.

➤ **Level of user satisfaction based on gender.**

H0: There is no significant difference in users' satisfaction towards the chosen dimensions of e-Governance with respect to their gender.

T-test is used to find out the influence of gender of the respondents with their level of satisfaction towards the two dimensions of e-Governance.

Table 3: t- test for user satisfaction towards e-Governance by gender

Dimensions	Gender	N	Mean	S D	t	sig.
Transparency	Male	33	3.787	0.608	0.118	0.906
	Female	27	3.770	0.522		
Participation	Male	33	3.769	0.598	-0.351	0.724
	Female	27	3.822	0.547		

Source: primary data

Interpretation

Since the P values are greater than 0.05 in both cases, H0 is accepted at 5% significance level. Thus it is interpreted that there is no significant difference in the level of users' satisfaction based on the gender of the respondents on the two dimensions of e-Governance. The mean values for male and female on two dimensions are almost same. Hence it can be inferred that there is no significant difference in the level of users' satisfaction with respect to gender of the respondents.

➤ **Level of user satisfaction based on education.**

H0: There is no significant difference in users' satisfaction towards the chosen dimensions of e-Governance with respect to their education.

In order to find out the influence of educational qualification of respondents with their level of satisfaction towards the two dimensions of e-Governance, One Way Analysis of Variance (ANOVA) is applied.

Table 4: One way analysis of the mean differences in user satisfaction by education

Dimensions		Sum of Squares	df	Mean Square	F	Sig.
Transparency	Between Groups	8.193	4	2.048	10.486	0
	Within Groups	10.743	55	0.195		
	Total	18.936	59			
Participation	Between Groups	7.287	4	1.822	8.356	0
	Within Groups	11.991	55	0.218		
	Total	19.277	59			

Source: primary data

Interpretation

Since the P values are less than 0.05 in both cases, H0 is rejected at 5% significance level. Thus it is interpreted that there is significant difference in the level of users' satisfaction based on the education of the respondents on the two dimensions of e-Governance. As far as transparency is concerned, mean square value is 2.048 for between groups and 0.195 for within groups. In case of participation, mean square value is 1.822 for between groups and 0.218 for within

groups. Hence it is understood that users' satisfaction differs with level of education of respondents.

➤ **Level of user satisfaction based on occupation.**

H0: There is no significant difference in users' satisfaction towards the chosen dimensions of e-Governance with respect to their occupation.

One Way Analysis of Variance (ANOVA) is used to find out the influence of occupation of respondents with their level of satisfaction towards the two dimensions of e-Governance.

Table 5: One way analysis of the mean differences in user satisfaction by occupation

Dimensions		Sum of Squares	df	Mean Square	F	Sig.
Transparency	Between Groups	1.384	3	0.461	1.472	0.232
	Within Groups	17.552	56	0.313		
	Total	18.936	59			
Participation	Between Groups	1.923	3	0.641	2.068	0.115
	Within Groups	17.354	56	0.31		
	Total	19.277	59			

Source: primary data

Interpretation

Since the P values are greater than 0.05 in both cases, H₀ is accepted at 5% significance level. Thus it is interpreted that there is no significant differences in the level of users' satisfaction based on the occupation of the respondents on the two dimensions of e-Governance. As far as transparency is concerned, mean square value is 0.461 for between groups and 0.13 for within groups. In case of participation, mean square value is 0.641 for between groups and 0.31 for within groups. It is understood that there is not much difference in users' satisfaction with respect to occupation.

8. Findings

The major findings of the study are;

- From ANOVA, it is found that there is no difference in the level of users' satisfaction on transparency and participation with respect to their age.
- It clear from independent sample t-test that gender of the respondents doesn't significantly affect their level of satisfaction towards transparency and participation.

- It is clear from ANOVA that educational qualification of the respondents significantly affects their level of satisfaction towards transparency and participation.
- From ANOVA, it is also found that occupation of the respondents doesn't significantly affect their level of satisfaction towards transparency and participation.

9. Conclusion

The objective of this study is to find out the influence of four independent demographic variables such as age, gender, education and occupation towards two dimensions of e-Governance namely; transparency and participation. It can be concluded that the level of education significantly affect users' satisfaction towards these two dimensions. Other demographic variables such as age, gender and occupation do not significantly affect users' satisfaction towards the two dimensions of e-Governance.

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