



The Mediating Roles of Perceived Ease of Use, Perceived Usefulness, Satisfaction and Trust on Relationship between E-Governance Service Quality and Behavioural Intention: A Study among Beneficiaries of Common Service Centre's in India

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Abstract

Common Service Centres are institutions that provide different G₂C services, G₂B services to the rural population of India. In Kerala, Akshaya e-kendras act as the one-stop delivery point of e-governance services to the common citizen. A close relationship between service quality, satisfaction, customer loyalty, and behavioural intention is already evident from literature. This study is intended to examine the relationship between e-governance -service quality from Akshaya e-kendras and outcome attributes like perceived ease of use, perceived usefulness, satisfaction, and trust. It further analyses the mediating effect of these variables on behavioural intentions of beneficiaries.

Keywords: Behavioral intention, Common service Centres, E-governance services, Service quality

1. Introduction

Common service centres are established for making citizen-centric government services more transparent, accessible and reliable for the common man. The role of the common service centres in Kerala is played by Akshaya e-kendras. About 95% of the G₂C services related to the citizen are availed from Akshaya e-kendras. Even though most of the e-government services provided by Akshaya e-kendras are from open portals, which can be accessed by the citizen by themselves, there are some barriers for the common citizen to use these open portals such as e-illiteracy, inadequate infrastructures like the Internet connections, shortage of electricity, less knowledge about online portals etc. The Akshaya e-kendras act as a bridge to extinct the existing digital divide in the State. There are about 2666+ Akshaya e-kendras all over Kerala, which is more concentrating on providing G₂C services to the most underprivileged citizen so that they can lead a dignified life in society. It also forms a digital hub for all day to day digital solution to the common citizen. Hence, it is desirable to determine the relationship between service quality and major outcome attributes like perceived ease of use, perceived usefulness, satisfaction trust and behavioural intention of beneficiaries at these common service centres in Kerala because of its reach and purpose of the establishment.

The importance of overall service quality on the behavioural intention of customers is already established in many studies (Zeithaml et al., 1996; Cronin et al., 2000). A positive behavioural intention results in profitability and goodwill of the firm whereas a negative behavioural intention of customers may significantly affect the future existence of the firm. By understanding the major outcome attributes of overall service quality at Akshaya e-kendras and its effect on the behavioural intention of beneficiaries, the acceptability of Akshaya e-kendras among the beneficiaries can be assessed. Further, the implementations of these factors, the Akshaya e-kendras can effectively be built their competency over other competitors and improve their services towards the citizen.

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This paper assesses the relationship between the quality of services of Akshaya e-kendras in Kerala towards outcome psychological attributes like perceived ease of use, perceived usefulness, satisfaction, trust and behavioural intentions of beneficiaries. Since the mediating effect of satisfaction on service quality to behavioural intention is studied very much, little importance is given to the mediating effect of perceived ease of use, perceived usefulness, and trust on behavioural intention. Though the effect of perceived usefulness and perceived ease of use are the major constructs determining the acceptance of technology (TAM) (Davis et al., 1989) and trust and also eminent factors for adoption and reuse of the e-governance initiatives on behavioural intention; these areas have not been studied in its entirety. Hence, here we analyse the mediating effect of the outcome attributes viz. perceived ease of use, perceived usefulness, satisfaction and trust in the behavioural intention of beneficiaries at Akshaya e-kendras.

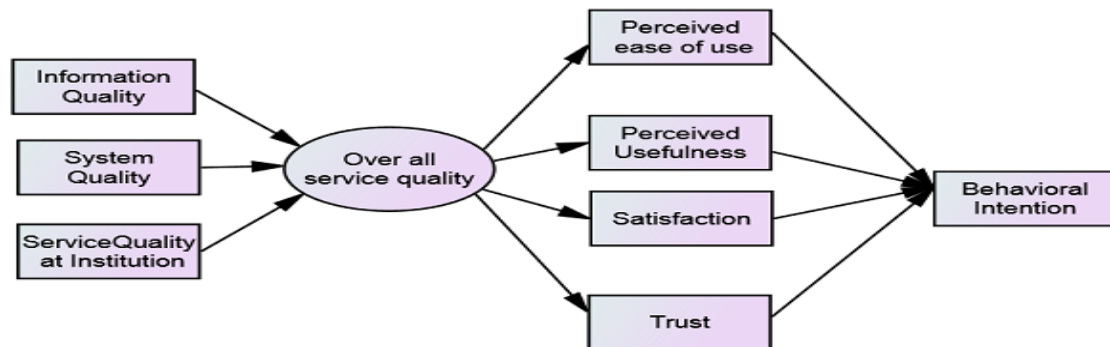
2. Literature Review

The massive penetration and application of ICT in the public sector have expected to improve the transparency, accountability, efficiency, and productivity in public sector services in providing services to all level of stakeholders including citizen, business and government it. Wang, Y.S et al. (2008) focused on measuring the success of G₂C e-government systems from the citizens' perspective. This study provides the first empirical test of an adaptation of De Lone and McLean's IS success model (DeLeon et al., 2003) in the context of G₂C e-government services. It identified about six dimensions viz. information quality, system quality, service quality, usage, user satisfaction, and perceived the net benefit. According to the model, the perceived net benefit has been considered as a closer measure of e-government systems success which on the other hand depends on appropriate management of perceived quality, system use, and user satisfaction. The e-government online service quality model (EGOSQ) (Agrawal, 2009) intended to explore the service quality attributes from user's perception and linkage of these factors with citizen satisfaction and behaviour intention in an Indian context. The pool of EGSOQ consists of seven dimensions with 48 attributes which were further refined to identify twenty-six items spread across seven dimensions like reliability, resourcefulness, utility, assurance, accountability, convenience, appealing website. The e-government website service quality studied with SERVQUAL construct like tangibles, reliability, responsiveness, empathy, and TAM constructs like assurance perceived usefulness of the website, perceived ease of use of the website and Trust (Tan, C.W et al., 2008) revealed that the sociological concept of trust plays a complementary role in predicting citizens' continual usage of e-government websites transactions. To induce trust among citizens towards e-government services, the website must exhibit characteristics of reliability, responsiveness, assurance, and empathy in its delivery of public e-service offerings. E-GSQA was developed to assess e-governance quality and citizen's trust (Syed Faizan et al., 2012). It developed e-GSQA by modifying various dimensions of existing service quality frameworks of E-S-Qual, (Parasuraman et al., 2005) and E-GovQual (Papadomichelaki et. al., 2009) and ISO/IEC 9126 standard by ISO in the year 1991. The framework includes various dimensions like website quality, design, reliability, responsiveness, security, privacy, effectiveness, ease of use and citizen's trust. By adopting e-GSQA, the researchers will have a better understanding of the quality criteria. The proposed framework was validated by implementing it in e-tax services in India. The study showed that the quality of e-government services influences citizen trust and satisfaction with e-government interactions. A user-centric service quality model guided by TAM & D&M IS Success Model was developed for the Indian government portal (Debjani Bhattacharya et.al. 2012). The seven dimensions of the Model include citizen centricity, usability determined by perceived ease of use (PEOU) and perceived usefulness (PU), technical adequacy, privacy and security, the usefulness of information, transaction transparency, and interaction. An extension of DeLone and Mc lean Model was developed to study the citizen-centric success model of e-governance (Jafari, S.M et al., 2011). Some additional factors other than the factors identified in Mclean and Delone IS success model were also introduced in the model. It suggested that for an e-government system, e-interaction, policy environment and regulation, access to information and public trust plays an important role.

3. Theoretical Model and Hypotheses

The foregoing review gave a brief account of various e-governance service quality models and frameworks developed to analyze e-service quality and benefit incurred by adopting e-governance across the world. Further, the review reveals that most of the studies are concentrated on areas viz. benefits and satisfaction of e-governance websites, e-governance quality, e-governance service quality scale for government websites, quality in public sectors and service quality. No comprehensive study has been carried out to understand the service quality of common services centres, its effect on the outcome attributes like

perceived usefulness, perceived ease of use, satisfaction and trust and also the mediating effect of these attributes on the behavioural intention of beneficiaries. Based on the above literature review, a comprehensive theoretical model was developed and the following hypotheses were generated for the study.



H₁. The e-governance service quality of G₂C services through Akshaya e-Kendras and the outcome attribute like perceived ease of use, perceived usefulness, satisfaction, and trust are independent.

H₂. Outcome variables viz. perceived ease of use, perceived usefulness, satisfaction and trust has no mediating effect on service quality of G₂C services to behavioural intention.

3. Research Methodology

This study is descriptive and the samples were collected from the beneficiaries of Akshaya e-Kendras. For this purpose, Kerala was divided into three zones viz., North, Central, and South. 90 Akshaya e-kendras were selected (30x3) using convenient sampling. For selecting the sample beneficiaries, five beneficiaries from each Akshaya e-Kendra were selected using a convenient sampling method. Thus a total of 450 beneficiaries (90x5) constitute the respondents for the study (150 from each region). A five-point Likert scale was used to measure all the dimensions. Further, confirmation and validity of the scale were performed by conducting exploratory factor analysis (EFA), confirmative factor analysis (CFA), and structural equation modelling (SEM), and for assessing mediating role the bootstrap method was performed.

4. Conclusion

This study has been undertaken to analyse the relationship of e-governance service quality to behavioural intentions among beneficiaries at Akshaya e-kendras. Akshaya e-kendras makes sure that the most underprivileged citizen is also provided with e-governance services in the most effective, efficient and satisfying way. The study found that the service quality of common service centres significantly affects the ease of use, usefulness, satisfaction, and trust among beneficiaries. The mediating effect of these outcomes attributes towards the behavioural intention of beneficiaries reveals that behaviour intention of beneficiaries can be enhanced by making them satisfied with the service provided. Even though the ease of use and usefulness is important, Akshaya e-kendras must look forward to satisfying beneficiaries. But, the trust didn't show any mediating effect between service quality and behavioural intention of beneficiaries. This can be because all Akshaya e-kendras are not performing the e-services in proper benchmark ways. It is advisable for Akshaya e-kendras to adopt quality standardization for making beneficiaries satisfied by its services i.e. adopt quality certification like ISO 9000, ISO /IEC 9126 for software quality, maintaining citizen charters or following IS15700-2005, the service quality management system or SEVOTTAM model.

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