



THE IMPACT OF E-GOVERNANCE IN PUBLIC UTILITY SERVICE SECTOR IN KERALA

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Abstract

Very important element in the entire process of Governance is the performance of employees, which leads to achievement of goals. Nowadays lot of changes are taking place around the world due to ICT enabled governance. As these changes are occurring very rapidly, organisations tend to adopt ICT at the same pace and speed to remain in the competitive market. Many studies and research has undertaken to evaluate the impact assessment in relation to cost, quality, revenue generation, and perceived value delivered to the customers, but very little research has undertaken to assess the impact in relation to the employees, who are the first caretakers in the whole process, hence it is felt that there is need for development of a Frame work for assessing impact of E-Governance on Employees. After extensive research survey, authors have concluded that creativity, Personal efficacy and Effectiveness lead to efficient delivery of services by the employees in E-Governance scenario.

Key words- Employees, E-Governance, Frame Work, Creativity, Personal Efficacy, Effectiveness.

Introduction

The 21st century is the world of Information Technology. It brings the revolution changes in the working of whole world. The latest impact of technology has been observed on government sectors where government offices and services are governed through information technology. The adoption of new technology in government sectors merges new phenomenon called e-governance. The e-governance is referred to services provided by government to the citizens, business and local government through information technology. The rise and popularity of e-governance has proved it. E-Governance makes working of government more efficient, responsive and transparent. Many developed countries like UK, USA, and Brazil etc. have adopted the e-governance and India is one of them. E-Governance is a web-based service for local, state and national governments. Government uses these web-based services by internet to serve their citizens online. Government give many online services like payment of bills, taxes etc. and citizens use the services according to their need, comfort and time.

Indian government also recognized the importance of technology and established the Department of Electronics in 1970. India took [1] first step towards the e-governance with the establishment of the National Informatics center (NIC) in 1977. India launched NICNET (National Satellite – Based Computer Network) in 1987 with the aim of computerize all the district offices of the country. E-Governance provides many services to the citizens and government also. The following are the factors [2,3] which influence the acceptance of e-governance:

Quality Services And Information For Citizens: E-Governance provides reliable and useful information in time. In the earlier stage, information was available in the aspects of forms, rules, procedures etc. but in e-governance, information is available on internet which saves time, effort and money.

Accountability of The Government: Accountability of government increases with the popularity of e-governance. Citizens are more aware about their rights, facilities and expenditures of government on schemes. Government becomes answerable to the citizens for their performances and future plans which increases productivity and efficiency of working of government.

Expanded Approach And Reach of Governance: E-Governance makes strong bonding and connection between government and citizens. It minimises the gap, increases interaction and trustability among citizens and government. With the advancement of telephonenet work and expansion of internet facilitates the delivery of large number of services to the citizens.

E-Governance: The governance is a framework which is developed with combination of man and machine. The implementation of any e-governance services require advance technology infrastructure like for web-based application require dedicated server and user-friendly web interface. The following are generalized pillars considered for any e-governance application.

| I | II | III | IV |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Connectivity | Knowledge | Data Content | Expenses |
| Connectivity is very important and mandatory for the success of e-governance. It establishes a connection between people and government services. There should be strong connectivity between citizens and government service systems to ensure effective access and delivery. | Government should appoint engineers and technical personnel with sufficient IT knowledge. In case of faults or technical issues in e-governance systems, skilled professionals should be capable of resolving them efficiently to ensure smooth functioning. | Government should maintain a proper and updated database for e-governance services. The data content should be adequate, relevant, and aligned with the services provided. Information should be securely shared over the internet for the success of e-governance. | Expenses refer to the financial resources utilized by the government to provide services and benefits to the public. Funding may come from both public and private partnerships. For effective e-governance, expenditure should be minimized while maximizing benefits to citizens. |

Definitions

e-Government

e-Government is a way to use the e-commerce mechanism (online services). More and more countries felt the importance of introducing and govern the whole manual system to electronic system, it is a transformation of old traditional method of book-keeping system to computerized.

According to the World Bank (2004) , e-Government "refers to the use by government agencies of information technologies (such as Wide Area Networks, the Internet, and mobile computing) that have the ability to transform relations with citizens, businesses, and other arms of government.". This process of information exchange among citizens and government applied only at public service departments in municipal administration settings. By introducing information technologies, it is possible to display all the required information for the citizens on the e-Government portals.

Christopher Baum defines e-Government as the "transformation of public sector's internal and external relationship through net-enabled operations, information technology and communications to optimize

government service delivery, constituency participation and governance” (cited in Kumar 2004) West (2004) defines e-Government/e-Governance as a simple and useful model for forwarding publicly relevant information and data using the internet. In his article, West stresses that as an asset to the public, because that would make information, accessible even after the business hours or holidays of government offices.

e-Governance

e-Governance is an expanded form of e-Government aided by ICT, emphasizes the need of a finely analyzed order to implement it with its uncompromising designs and policies for a successful system. We cannot put all the concept and meaning of e-Governance in a simple one definition. It principally focuses on responsibilities of a politically elected government to meaningfully interact with citizens to attain the goal of socio-economic policies.

E-Governance has turned the whole attention towards it in governing process all over the world. It is not to post all necessary information on the government website, but it is a process of reformed governance. e-Governance denotes the application of IT (Information Technology) to the process of government functioning in order to bring about better governance, which has been an innovative term as SMART (Simple, Moral, Accountable, Responsive and Transparent) (Budhiraja,2003). All the developed nations of the world such as U.S.A, U.K, Canada, Australia and Singapore have adopted IT in a big way for e-Governance. Developing nations like India, China, Sri Lanka, Philippines, and Brazil, are also progressing well in e-governance implementation.

E-Governance Initiatives In India

The UNES of 2012 and 2014 focused special attention to recognize those countries with a population of over 100 million. The survey also found a remarkable fact that the countries over 100 million population have a tremendous progress and also registered their efforts to provide e-Government services to their people in spite of various challenges faced by them. Looking at the latest development in the e-Government services which is depicted in TABLE 1.2. India has recorded a drop of 7 points from the year (125th rank) 2012 to (118th rank) 2014. The retrogression fall of 7 points must be shared by both government and citizens“. Though we have highly disciplined wizards in ICT fields the desired policies, aim and objectives to provide simple, efficient, accurate e-Government services to public are held back, due to non-building of infrastructure, lack of literacy, poverty, political instability and high level of corruption etc.

India with great population emerged to show its ability. Being strong and serious in its aim the government has taken positive steps to provide valuable and factual information through ICT. India’s greatest strength is information Technology (IT). Though we have highly disciplined wizards in ICT fields the desired policies, aim and objectives to provide simple, efficient, accurate services to public are held back due to non-building of adequate infrastructure, lack of literacy, poverty, political instability and high level of corruption etc. Having all the said setbacks, India has registered an unspeakably a commendable progress in the socio-economic scenario and this will encourage India to go further to make all the so-called impossible things possible through ICT.

Literature Review

According to Robert E. Davis “Developing and implementing IT governance design effectiveness and efficiency can be a multidirectional, interactive, iterative, and adaptive process”.

ICT has opened up new avenues and opportunities for growth and development around the world, ICT have a valuable prospective to help meet good governance goals in world. It spread information to the user for widen their choices for Economic and social privileges. The E-Governance is the application of Information and Communication Technology (ICT).

The word “govern” derives from the latin word “gubernare” which means "to direct, rule, guide," originally "to steer" (<http://dictionary.com>).“Fundamental aspects of governance”are:graft,rule of law,and government effectiveness.Other dimensions are: voice and accountability, political instability and violence, and regulatory burden (Kaufmann, Kraay and Zoido-Lobaton 1999).

The re-organisation of processes (system), people and technology under e-governance projects needs to be directed and aligned with the administrative system and the larger society receiving its services.(SNSangita,2005).

Wade (2002), for example, argues that in taking for granted that ‘bridging the digital divide’ is the central issue of development, literature from the World Bank and other international agencies has neglected details of cost, risks and benefit ratios in human development terms.

Castells (1998) puts forward a troubled vision of the information society in which ‘old binaries are reworked’ around the ICT revolution such that the poor majority of the developing world becomes irrelevant to the new society.

Need For The Study

e-Government systems were introduced by the public sector in developed and developing countries to improve efficiency, effectiveness, and transparency (World Bank 2007a). There were lots of studies conducted in the e-Governance domain. (Carter and Belanger ,2005; Warkentin, et.al.,2002; Foteinou,2011; AlAwadhi and Morris,2008; Rana et al,2011). The existing literature review showed that there is a very little study has been undertaken in the area of “the impact of e-Governance in India” (Barua, 2012; Bhatnagar, S. C,et al,2010; Dwivedi& Bharti, 2010). The success of any implementation depends on how far its awareness, accessibility and the amount of usage done by the citizens through e-Governance system. The aim of this research is to propose a holistic theoretical framework for both citizens as well as government employees, which identifies the citizens’ adoption factors as well as government employees’ in implementing e-Governance in public utility service sector in India.

Statement of Problem

The aim of this research is to propose holistic theoretical frameworks, which identify the citizens’ and government employees’ perspective in implementing e-Governance in the public utility service sector in India. There exist a lot of studies in the field of e-Government adoption in developed countries, but very few studies are available in Indian context. Every study has been used various factors in the different public utility service sector. There is no common reason available to judge for determining which factors contribute to the adoption of e-Government, which leads to a gap in the literature review. Based on the gap the study tries to identify the most suitable factors for measuring the intention to use the e-Government system in India.

Objectives of The Study

1. To understand and explore the factors influencing e-Governance services in public utility service sector in India from the citizens’ perspective.

2. To propose a theoretical framework for citizens' intention to use e-Government system in India.
3. To understand and explore the impact of e-Governance services in public utility service sector in India from the demographic profile of citizens' perspective.
4. To understand and explore the factors influencing e-Governance services in public utility service sector in India from the employees' perspective.
5. To propose a theoretical framework for employees' intention to use e-Government system in India.

Research Methodology

In this study all the three types of research designs are used in different stages forming the preparation of the research problem, objectives of the study and by hypotheses of the study. In this study the exploratory research helps to familiarize with the research problem or concept to be studied. Descriptive research helps to identify the characteristics of the population as well as it helps to specify clearly target population taken for this research. Casual research tries to identify the relationship between the independent and dependent variables going to be tested in this study.

Data Collection

This approach is used to bring the inner feeling and experiences of a person about the world in which they live. The method used to collect data in qualitative approach is by means of informal, in-depth semi-structured interviews from the participants.

The research instrument used in the present study is questionnaire method. To test the theoretical model for this study, a survey was conducted.

Sampling Method

The target population for this study is government employees who are working in the public utility services in Kerala is considered. For this study the researcher has used convenience sampling for collecting the responses for the study. Convenience sampling is referred to as sample selected based on the convenience of the researcher. The convenience sampling is used in this study because the researcher has not having the population list to be studied.

Sampling Size: The sample size is 498

Data Collection: The present study employed quantitative techniques by using of survey questionnaire method for data collection.

Table 1: Demographic Profile of the Respondents – Citizens' Perspective of e-Government System (N = 498)

| Variable | Category | Frequency | Percentage (%) |
|---------------|--------------|------------|----------------|
| Gender | Male | 273 | 54.8 |
| | Female | 225 | 45.2 |
| | Total | 498 | 100.0 |
| Age | Below 20 | 12 | 2.4 |
| | 20–29 | 272 | 54.7 |
| | 30–39 | 118 | 23.7 |

| Variable | Category | Frequency | Percentage (%) |
|----------------------------------|---------------------------------|------------|----------------|
| | 40–49 | 54 | 10.8 |
| | 50–59 | 20 | 4.0 |
| | 60 and above | 22 | 4.4 |
| | Total | 498 | 100.0 |
| Educational Qualification | 10th | 39 | 7.8 |
| | 12th | 23 | 4.6 |
| | Graduate | 246 | 49.6 |
| | Postgraduate | 158 | 31.9 |
| | Professional | 29 | 5.8 |
| | PhD | 1 | 0.2 |
| | Missing | 2 | 0.4 |
| | Total | 498 | 100.0 |
| Income | Up to ₹1 Lakh | 66 | 13.3 |
| | Above ₹1 Lakh – Up to ₹4 Lakh | 171 | 34.3 |
| | Above ₹4 Lakh – Up to ₹8 Lakh | 143 | 28.7 |
| | Above ₹8 Lakh – Up to ₹15 Lakh | 71 | 14.3 |
| | Above ₹15 Lakh – Up to ₹50 Lakh | 10 | 2.0 |
| | Above ₹50 Lakh | 4 | 0.8 |
| | Missing | 33 | 6.6 |
| | Total | 498 | 100.0 |

Findings and Suggestions

This study also recognizes the contribution made by the demographic variables like age, gender, income and education which are influencing towards intention to use e-Government system. This finding suggests that gender has no significant in predicting intention to use e-Government system, in the sense both male and female are more interested to use new system for performing their task. The findings suggest that age has no significant influence on intention to eGovernment system. This means that people in all age groups are interested to use new system and feel more comfortable to use online system. The findings also suggest that there is a significant difference in income categories of citizens'' overall predicting the intention to use e-Government system. The higher income group people have the capacity to own a computer and internet facilities to use online system at their door step, whereas the low income group shows very marginal intention to use e-Government system due to non-availability of resources.

The findings also suggest that there is a considerable difference in education categories of citizens overall predicting the intention to use the e-Government system. In fact, educated people by virtue of their knowledge know how to use on-line system and they can easily adapt to the new system compared those who have no experience in using the on-line system. Demographic variables like income and education are the more contributing towards intention to use the eGovernment system, whereas age and gender have no difference in intention to use the eGovernment system.

Limitations of The Study

As with any research that deals with new technology, this research has also encountered with some limitations. The study does not include many of the public utility service sectors due to the unavailability of the e-Government system. The sampling method used in the study is convenience sampling. Given that a convenience sampling method is not considered as an effective method of representation of the population, the results may be interpreted cautiously, especially when generalized with the concept. The perception of intention to use e-Government system may vary from different dimensions because the number of respondents though drawn is varied in terms of age, income level, gender, education, etc. The method used for data collection was survey method using questionnaire. Researchers have limitations with this type of data collection, due to low response rate, complex and confusing questions and surveys that might be too long (Cooper and Schindler, 2003). Hence it is hard to decide whether the theoretical model proposed is applicable in other public utility service sectors

Conclusion

In today's digital world governments around the world has to incorporate information and communication technologies tools into their day to day activities. Various thoughts of authors have one common goal that is to use the fullest capacity of ICT in public sector. India understood the potentiality of e-Governance on a perfect broad base covering all the aspects to give a satisfactory response with its simplicity in operations will definitely encourage and influence the Indian mass. For successful implementation and survival of e-Government system it should have better adoptability, security, interactivity, capability, flexibility, simplicity, utility and feasibility and also with a well-organized infrastructure to influence the people to come forward more and more to involve themselves in the use of e-Government services. In the absence of any one of the elements said above the implementation of eGovernment will not attain its goal. Despite dismissing all the barriers such language barrier, infrastructure, corruption, illiteracy, poverty, political instability etc, the Indian mind set prepared to accept and invite all the challenges and convert them in a successful way and show their courage to make all the impossible things possible.

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