

E-Governance: A Road Map Towards Good Governance

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Abstract: *E-governance may be defined as application of information technology to transform the efficiency, effectiveness, transparency and accountability of informational and transactional exchanges within the various levels of the government, and to empower citizens through access and use of information, in digital form. E-governance is crucial for public transparency, accountability, efficiency, and maintaining streamlined processes.*

In order to transform the entire eco-system of public services through the use of information technology, the Government of India has unveiled an ambitious digital India program with the vision to transform India into a digitally empowered society and knowledge economy. E-governance pulls together many schemes like Aadhaar Enabled Biometric Attendance System (BAS), jeevan pramaan, National Digital Literacy Mission (NDLM), e-book platform, e-bhasha, digital locker and many more upcoming services. Main challenge in front of government body is transforming these schemes and implementing them in a synchronized manner. The present study has made an attempt to discuss some of the services provided under e-governance project by Government of India making it an exploratory study. Further, survey has been conducted to check the awareness about e-governance among citizen of country. Various respondents from different background were invited to take part in the survey. Analysis of data has been presented in the forms of charts as well. Results of the study revealed that majority of respondents are not aware about e-governance. There is a need to develop strong infrastructure for ICT (Information and Communication Technology) to promote e-governance in country.

Keywords: *E-governance, Digital India,*

I. INTRODUCTION

India is a country of nearly 127 crore people. India has potential of transforming into developed economy in no time, but it will be possible only if 127 crore people will step together. It is possible when every citizen of country gets sky of opportunities to show the flight. In order to ensure participation of each individual in country's growth, government of India has come forward with a concept named 'E-governance'. According to Prime Minister of India, Mr. Narendra Modi, "E-Governance may be defined as easy, effective and economic governance". Good governance is participatory in nature, consensus oriented, accountable, transparent, responsive, effective, efficient, equitable, and inclusive.

Good governance can be ensured by e-governance. There is a need of meaningful interaction among policy makers, industry leaders and academicians to deliberate, interact and recommend an actionable strategy for good governance and to improve the standard of services rendered to the common man. Mahatma Gandhi once said, "Do the policies help the poorest and weakest man? If yes, that is good governance". Framing and implementation policies of welfare is not only the prime duty of government but it is also right of every citizen of country.

It is a great challenge in front of government to provide timely, effectively and transparent service to every individual of the country. Now this challenge is being converted into opportunity with the help of vision of Digital India. The two main pillars for fulfilling dream of digital India are transparency and accountability. Indian government has taken several initiatives towards e-governance, a few of which are as follow:

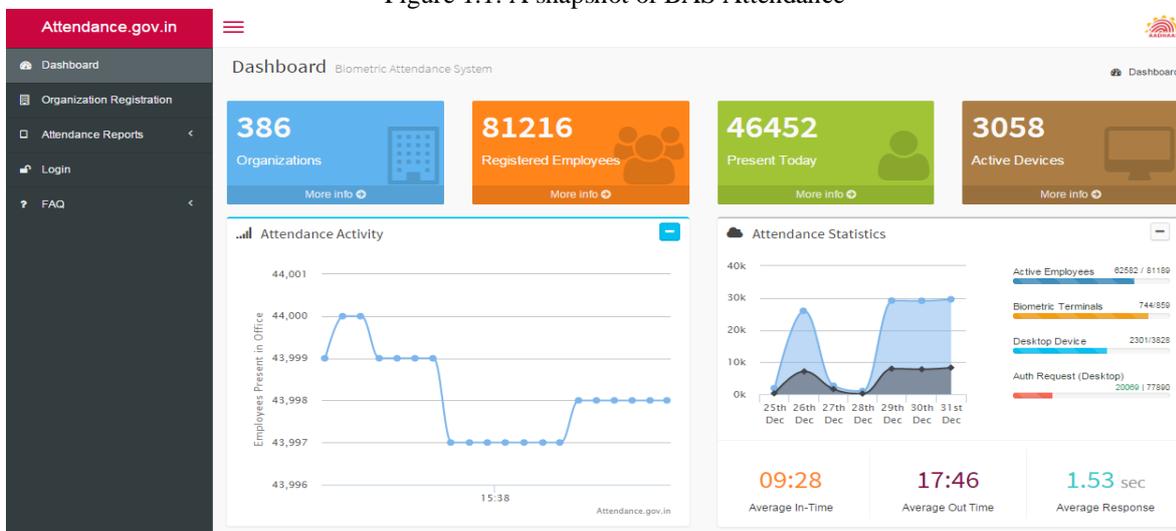
- Aadhaar enabled Biometric Attendance System (BAS)
- Digital Locker
- E-book
- E-basta
- E-bhasha
- E-post
- E-sampark
- Jeevan Pramaan

- Mobile Seva
- My Gov
- National Digital Literacy Mission (NDLM)
- National Optical Fiber Network (NOFN)

Indian government has decided to implement common **Biometric Attendance System (BAS)** in the central government offices. The program is initially launched for offices located in Delhi. The proposed system would enable an employee to register attendance by presenting his/her biometric (finger print/iris) which will be authenticated online by doing one to one match with the bio-metric stored in the UIDAI data base against the employee's Aadhaar number. In the first phase of implementation, approximately 150 central government organizations have on boarded about 50,000 employees on common attendance portal (attendance.gov.in). 1000 wall mounted bio-metric attendance terminals, 5000 finger print scanning devices and 200 IRIS devices have been procured. These client terminals have been installed in about 100 government buildings. Government organizations that could not get registered in phase-I will be registered on attendance.gov.in portal in phase-II for the implementation of biometric attendance system.

Current status of BAS (Biometric Attendance System) of any government employee can also be checked. A common biometric attendance portal viz. attendance.gov.in has been developed. The attendance portal is hosted in NIC data center. As can be seen from Figure 1.1, currently 386 organizations have registered more than 80000 thousands employee on attendance portal.

Figure 1.1: A snapshot of BAS Attendance

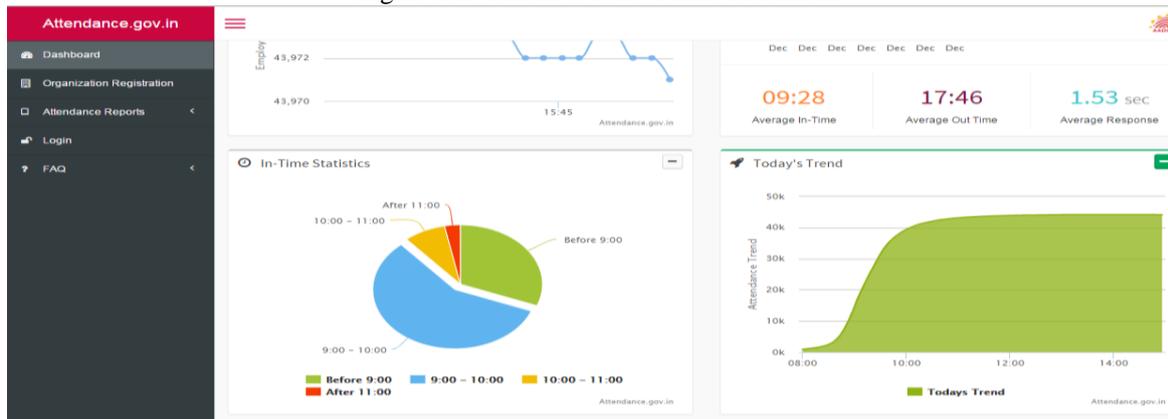


Source: <http://www.attendance.gov.in/>

BAS (Biometric Attendance System): A step toward e-governance: Aadhaar Enabled Biometric Attendance System is first big step towards e-governance. Now any citizen of country can visit attendance.gov.in to check attendance of government employees at any time in a day as shown in Figure 1.2.

By visiting portal (www.attendance.gov.in) anyone can know in and out time of government employee in the offices. Different charts and graphs are available to get real time information. Biometric attendance system service will lead India towards better future by ensuring full transparency and increased work efficiency of the government employees.

Figure 1.2: Current Status of BAS Attendance



Source: <http://www.attendance.gov.in/>

The government is working on the concept of a **digital locker**, an online repository for all certificates and documents issued to the citizens of the country. On applying for a service, the agency concerned will verify these documents, stored on a government cloud, and the task will be completed, without the trouble of record-keeping or getting photo copies, attestations and affidavits. Under the digital India program, the national digital locker is being launched to minimize usage of physical documents and encourage documents to be uploaded in electronic formats making them easy to share and access across multiple agencies. It will also help in identification of fake documents, certificates, degrees, etc. This platform enables citizens who are availing services to securely share their documents with the service providers who can also directly access public documents from the issuing authority through an authenticated route. The Digital Locker Technical Specifications (DLTS) have been developed to ensure smooth functioning of the process flow and to develop architecture for the system.

Education is everyone right. All school books will be made available in electronic form. **E-book** may be defined as publication of document in digital form, comprising of text, graphics, audio, and video. The e-book content may be seen on several electronic devices like mobile, tablets, PCs, laptop with appropriate software and web browser. The content in e-book can include a variety of applications such as newspaper, magazine, and course book. E-book will remove darkness of illiteracy and will help in making India an educated economy.

Government has provided us with **e-basta** as well. In line with the government's Digital India initiative, this project has created a framework to make school books accessible in digital form as e-books to be read and used on tablets and laptops. The main idea is to bring various publishers (free as well as commercial) and schools together on one platform. In addition to the portal, a backend framework to facilitate the organization and easy management of such resources has also been made, along with a web based application that can be installed on tablets for navigating the framework. The framework, implemented as a portal, brings together three categories of stakeholders: the publisher, the school and the student. Publishers can display their resources on the portal, for use by schools. Schools can browse, select and compile their choice of resources from this pool, as e-basta for different classes. Students can download such e-bastas from the portal, or the school may distribute them through media like SD cards.

As a gesture to bring together the large non-English speaking population residing in the villages of our country, a new measure was recently flagged off. The new service that will provide the digital user interface in all regional languages is a new add-on service for the much praised Digital India campaign. This will not only make it easy for the rural population to interact and use the digital interface but also will eradicate any feelings of being "used as a vote bank" during elections. Nick named "**e-bhasha**" platform, will spread digital content in many local languages. E-bhasha platform will make e-governance of pensions, banking, judiciary etc. easy to comprehend. Sure multilingual development is no easy feat but is certainly a very. It will further enhance the internet population and decrease the price range due to the voluminous internet subscriber base. It is ironic that less than 20 percent of Indians can read or write English language, and today more than 90 percent of the government content is in English language. Now our government is ready to provide citizen of country more

than one language platform, the access to digital content must not suffer break downs. It will definitely ensure enhanced participation of common people of country in fulfilling dream of Digital India.

In the recent past, internet and e-mail have revolutionized the world of communications. At the same time, accessibility to email is a major problem for many people, especially in the rural areas. In its endeavor to make the benefits of e-mail available to everyone and to bridge the digital divide, department of posts has introduced **e-post** service. Through **e-post**, customers can send their messages to any address in India with a combination of electronic transmission and physical delivery through a network of more than 1,55,000 post offices. **E-post** sends messages as a soft copy through internet and at the destination it will be delivered to the addressee in the form of hard copy. E-post costs just Rs.10/- per page of A4 size. E-post can also be availed by the corporate customers, by having a business agreement with India Post. Corporate customers will get special e-post rates and other value additions. Corporate customers can book the e-post messages from their premises. Hand written, multilingual and picture message can also be sent through e-post. Customer can even give the e-post message in pen drive/CD incorporating the address and e-mail IDs of the recipients for sending. E-post messages will be transmitted on the same day to the e-post center, nearest to the destination. E-post center will get it printed and e-post message will be delivered by the postman at the destination in the form of hard copy. Indian post is playing major role in journey of digital India. It is unique in world that all 1.55 lakhs post office are connected through IT making daily work and services easy, trustable and efficient. E-post has balanced gap between urban and rural India.

E-sampark has been introduced long ago. The vision for this project is to create a knowledge-based society through extensive use of IT as a medium for effective interaction between the administration and the public so that exchange of information and access to government departments is speedy and easy, leading to a better quality of life. Main objectives of e-sampark are to provide hassle free one-stop solution to the citizen, bring transparency in delivery of services and to provide better turnaround time in receipt, processing and issue of services. Project e-sampark is initiated to bring together the services of all the departments under one single umbrella and give citizens of country a “multi-service” - “single-window” experience apart from eradicating the undue harassment met by the citizens due to lack of transparency. E-sampark provided the services like procedures and forms for all departments, which are frequently used by a common man e.g., How to apply for a birth/death certificate including procedure for late entry, how to lodge a FIR, various forms and procedures concerning public offices such as RLA, Estate Office, DC Office, Municipal Corporation, Engineering Wing etc; Education and Health related information services e.g., daily updated information regarding availability of blood in blood bank of government medical hospital, exam results, information about availability of educational and health related facilities in each sector; Transport and Tourism related inquiries e.g., bus routes, information relating to tourism activities etc.; Inquiries relating to Passport status; Railway booking status, Train timings etc.; Providing access to all Government websites. These services are provided free of cost except when the citizen needs any print out, the same is available at a nominal cost per page of print out.

Digital life certificate for pensioners' scheme of the government of India is known as **Jeevan Pramaan** certificate. Jeevan Pramaan certificate is produced for individual pensioner using his biometric credentials. More than one crore families in India can be classified as pensioner families, where the pension disbursed by the various government bodies forms the basis for their income and sustainability. One of the major requisite for the pensioners post their retirement from the service, is to provide life certificates to the authorized pension disbursing agencies like the bank, following which their pension is credited to their account. In order to get this life certificates the individual drawing the pension is required to either personally present himself/ herself before the pension disbursing agency or to have the life certificate issued by authority where they have served earlier and have it delivered to the disbursing agency. This requirement of personally being present in front of disbursing agency or getting a life certificate often becomes a major hurdle in the process of seamless transfer of pension amount to the pensioner. It causes a lot of hardship and unnecessary inconvenience particularly for the aged and infirm pensioners who cannot always be in a position to present them in front of the particular authority to secure their life certificate. In addition to this, a lot of government employees post their retirement choose to move to different location either to be with their family or other reasons, hence causing a huge logistical issue when it comes to accessing their rightful pension amount.

Mobile is in the reach of maximum citizen of country, so government of India has decided to reach to common man with the help of **Mobile Seva**. Mobile will be used to deliver information regarding various government policies. DOT (Department of Telecom) plans to take mobile network by December 2016 to nearly 10 per cent of Indian villages that are still unconnected, to make the government's ambitious Digital

India program more effective. Of the 6,00,000 villages in the country, about 55,000 are still awaiting mobile connectivity. Under the project of Rs.1.13 lakh crore mega Digital India initiative, the government aims to connect every nook and corner of the country with broadband internet, and deliver services electronically through mobile phones.

MyGov welcomes government institutions to collaborate with citizens through this platform. MyGov is primarily created for the government departments and institutions to pursue their citizen engagement initiatives. Institutions can form or create interest groups based on various causes and initiatives taken in each sector the government. Within each group, discussions on relevant and significant topics can be initiated. The discussions can help government institutions understand viewpoints of citizens and gather feedback on policy issues. Citizens can be involved in online and on ground tasks through the platform such as writing research documents, concept notes, field reports, taking photographs/videos, compiling policy measures etc. MyGov will empower citizens to work hand in hand with the government. Anyone can register on mygov.nic.in to participate in various activities. In order to access web portal personal details such as name, email id etc. will be asked. There is also provision to indicate the kind of skills someone has and the issues on which one may like to provide inputs. On successful registration an email will be sent to email id provided with a link to activate registration. After activation log in and start participating in the various groups and discussions. Moreover, MyGov platform gives an opportunity to every citizen of country to help in nation building.

The National Digital Literacy Mission (NDLM) envisaged initially for providing Information Communication and Technology (ICT) training to ten lakh persons, one in every eligible household in selected blocks in each state/UT of the country. Out of ten lakh, nine will be trained through government machinery and the remaining one lakh through industry, NGOs and others. The objective is to impart basic ICT skills relevant to the need of the trainees, which would enable the citizens to use IT and related applications and participate actively in the democratic process. It will further enhance opportunities for their livelihood. The persons shall be able to access information, knowledge and skill through the use of digital devices. The scheme is to be implemented in each state/UT across the country. The eligible households can nominate one person from their family. The selected person to get himself enrolled under this program in a nearest training centre/common service center. Independent external evaluation will be conducted by a National level certifying agency like NIELIT, NIOS, IGNOU, etc.

Broadband or high speed internet is backbone for providing any e-service throughout the country. High speed connectivity can be assured by using optical fibre cable as media. At present OFC (Optical Fibre Cable) connectivity is available in all state capitals, districts, headquarters and upto the block level. There is a plan to connect all the 2,50,000 Gram panchayats in the country. This will be done by utilizing existing fibres of PSUs (BSNL, Railtel and Power Grid) and laying incremental fibre to connect to gram panchayats wherever necessary. Dark fibre network thus created will be lit by appropriate technology thus creating sufficient bandwidth at the gram panchayats. This will be called the National Optical Fibre Network (NOFN). Thus connectivity gap between gram panchayats and blocks will be filled. Non-discriminatory access to the NOFN will be provided to all the service providers. These service providers like telecom service providers (TSPs), ISPs, cable TV operators and content providers can launch various services in rural areas. Various categories of applications like e-health, e-education and e-governance etc. can be provided by these operators. NOFN is a tool for improving the lives of people by providing affordable and equitable access to high speed internet connectivity. It has direct impact on their day to day life style. It can contribute towards increased trade and employment avenues.

II. OBJECTIVES OF THE STUDY

The core objective of the present study is to check awareness of e-governance among citizens of India. The study aims to fulfill some additional objectives as well which are as follows:

- To find out relationship between education qualification and use of service though e-governance
- To find out image of e-governance among citizen of India
- To find problem faced while using services through e-governance

III. RESEARCH METHODOLOGY

Following methodology has been used to fulfill the objectives of the present study:

3.1 Scope of the Study

The scope of the study is limited to 170 respondent of the country. In this study, an attempt has been made to study the awareness and usage of e-governance among citizens of India.

3.2 Sample Selection

Random sampling method was used for the present study. A total of 250 questionnaires were distributed among the students, teaching and non teaching staff, laborer and people visiting Bank of India. Out of 250, only 170 questionnaires were filled completely. Size of the sample is now 170 which constitute sample of all population of Central University of Rajasthan and nearby area.

3.3 Tools for analysis

Due to nominal nature of data from questionnaire, data has been presented in the forms of charts. Frequency, cross tabs and percentage methods were used during analysis. SPSS 16.0 is used to analyze and interpret the collected data.

IV. FINDINGS OF THE STUDY

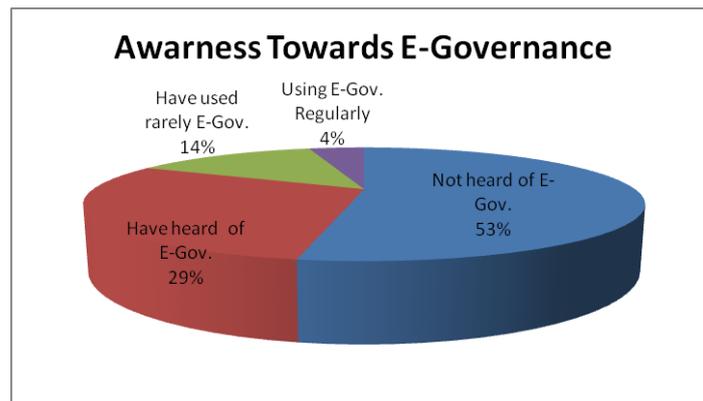
Findings of the present study have been divided into the following sections:

- Awareness towards E-Governance among citizen of India
- Relationship between education qualification and use of service through E-Governance
- Image of E-Governance among citizen of India
- Problem faced while using services through E-Governance

The responses received from respondent are illustrated in the form of figures as discussed below:

4.1 Awareness towards E-Governance among citizen of India

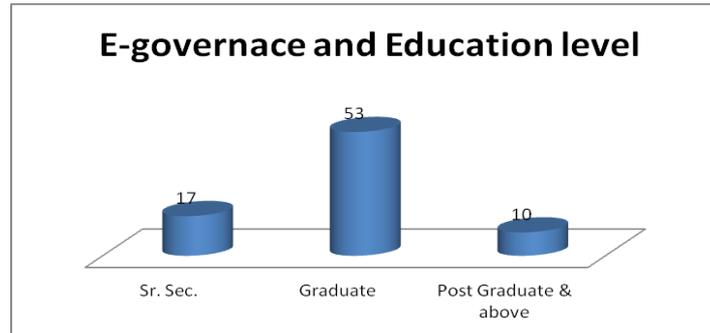
Awareness of citizen of country towards E-Governance can be seen in Figure 4.1. It is very clear from the figure below that more than 50 % of the citizens have not even heard about e-governance. 23 out of 170 respondents have used service of e-governance at least once in life. Only 4 % respondents use service of e-governance on regular basis. It is clear that level of awareness towards e-governance is very less and steps need to be taken for improving the same. Respondent who have not heard about e-governance have been excluded further analysis.



Source: Researcher's Compilation
Figure- 4.1

4.2 Relationship between education qualification and use of service through E-Governance

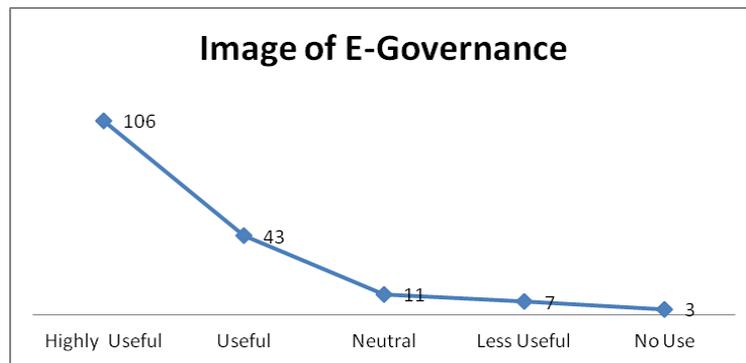
All 80 respondents out of 170 who are aware about e-governance are literate. Figure 4.2 shows that 53 respondent who are aware about e-governance are graduate. It is clear from study that there is positive correlation between education qualification and awareness about e-governance.



Source: Researcher's Compilation
 Figure- 4.2

4.3 Image of E-Governance among citizen of India

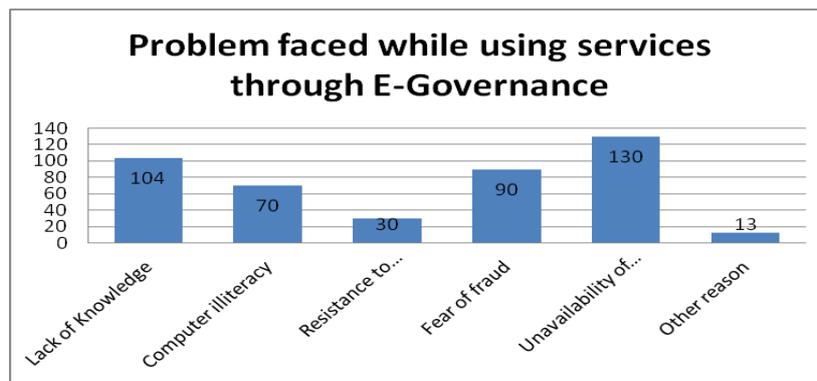
After discussing basic about e-governance it is found that maximum of respondent found services through e-governance useful. It can be clearly seen from the Figure 4.3 that 106 out of 170 respondents found e-governance highly useful. Only 10 respondents found e-governance of less use or of no use.



Source: Researcher's Compilation
 Figure- 4.3

4.4 Problem faced while using services through E-Governance

According to Figure 4.4, unavailability of resources has topped the list as 130 (76.47%) respondent found lack of resources available as hurdle to use services of e-governance followed by lack of knowledge, stated by 104 (61.18%) respondents. Fear of fraud in service through e-governance is also faced by 90 respondents (52.94%). Further, computer illiteracy has also been found one of the major reasons by 41.18% respondents.



Source: Researcher's Compilation
 Figure 4.4

V. CONCLUSION

The following conclusions can be drawn from the research findings:

- Majority of respondents are not aware about services provided by government through e-governance.
- Education background of respondent is positively correlated with knowledge and usage of service through e-governance.
- Once made aware, people want to utilize more service through e-governance.
- Unavailability of resources and lack of knowledge are main hurdles in using services of e-governance.
- There is a need of mass awareness program about e-governance in the country to utilize the services properly. So, government should expand ICT (Information and Communication Technology) program in the country.

VI. LIMITATIONS AND DIRECTIONS FOR FUTURE RESEARCH

Despite its valuable findings and implications, this study contains some limitations as discussed below:

- Due to time constraints, the research could not be made extensively. The study is limited to the respondents of Central University of Rajasthan. Study could have been expanded to include respondents from different areas of country. Therefore, researchers should be cautious while generalizing the findings of study.
- In depth interview process may have provided a broader measure about respondents. Such a method is not used in study because it was difficult to approach in depth interview process due to time constraint and varying background of respondents.

Future studies can be conducted taking larger sample size. Also, a study can be conducted by involving more variables and different background of respondents for cross-cultural and cross-marketplace comparison.

REFERENCES

- [1] Dawes, S. S. (2008). The Evolution and Continuing Challenges of E-Governance, *Public Administration Review*, S86-S102.
- [2] Haque, M. S. (2002). E-governance in India: its impacts on relations among citizens, politicians and public servants, *International Review of Administrative Sciences*, 68(2), 231-250.
- [3] Navarra, D. D. & Cornford, T. (2009). Globalization, networks, and governance: Researching global ICT program, *Government Information Quarterly* 26, 35-41.
- [4] Potnis, D. D. (2010). Measuring e-Governance as an innovation in the public sector, *Government Information Quarterly* 27, 41-48.
- [5] Sharifi, M. & Manian, A. (2010). The study of the success indicators for pre-implementation activities of Iran's E-Government development projects, *Government Information Quarterly* 27, 63-69.
- [6] Singh, A. K. & Sahu, R. (2008). Integrating Internet, telephones, and call centers for delivering better quality e-governance to all citizens, *Government Information Quarterly* 25, 477-490.
- [7] Tsai, N., Choi, B., & Perry, M. (2009). Improving the process of E-Government initiative: An in-depth case study of web-based GIS implementation, *Government Information Quarterly* 26, 368-376.
- [8] Yildiz, M. (2007). E-government research: Reviewing the literature, limitations, and ways forward, *Government Information Quarterly*, 24, 646-665.
- [9] Zhao, J. J. & Zhao, S. Y. (2010). Opportunities and threats: A security assessment of state e-government websites, *Government Information Quarterly* 27, 49-56.
- [10] <http://attendance.gov.in/>
- [11] <http://indiapost.nic.in/>
- [12] <https://jeevanpramaan.gov.in/>
- [13] <http://www.bbnl.nic.in/content/page/national-optical-fibre-networknofn.php>
- [14] <http://mygov.in/>
- [15] <http://economictimes.indiatimes.com/industry/telecom/digital-india-initiative-government-to-connect-55000-villages-with-phones-by-december-2016/articleshow/45644723.cms?inttarget=no>
- [16] http://www.business-standard.com/article/economy-policy/govt-mulls-digital-locker-to-store-citizens-info-on-cloud-114091100008_1.html
- [17] <http://trak.in/tags/business/2014/10/28/e-bhasha-platform-localize-digital-content/>
- [18] http://articles.economictimes.indiatimes.com/2014-12-26/news/57420309_1_telecom-secretary-rakesh-garg-telecom-network-telecom-towers