



GOVERNANCE WITH INFORMATION AND COMMUNICATION TECHNOLOGY: A TOOL OF SERVICE DELIVERY

Anmol Sheoran¹ and Paras Kanojia²

¹Research Scholar , Department of Commerce , Kurukshetra University, Kurukshetra.

²Research Scholar , Department of Commerce , Kurukshetra University, Kurukshetra.

ABSTRACT :

Information and communication technology is an important part of governance in today's era. ICT is helping the governments in smooth, efficient and effective functioning of various services and also increasing the productivity of governance-related activity. E-governance performs the function in order to simplify, more accountable, responsive, transparent, governance system. It is a new path between citizens and the government. It comprises the decisional process and also helps to do activity in the faith of public affairs. The main purpose of focusing governance is to improve the administrative process. Government aim is the welfare of people with good governance practice. Social empowerment also emphasis for connecting or develop the society with redistribution resource. For the redistribution of resources, Government needs a proper connectivity. With the help of ICT, the government can ensure the best e-Governance practice. The purpose of this paper is to review the role of ICT in governance and E-Governance services in Haryana.



Government aim is the welfare of people with good governance practice. Social empowerment also emphasis for connecting or develop the society with redistribution resource. For the redistribution of resources, Government needs a proper connectivity. With the help of ICT, the government can ensure the best e-Governance practice. The purpose of this paper is to review the role of ICT in governance and E-Governance services in Haryana.

KEYWORDS : Governance, Service delivery, ICT, e-transactions, e-governance model, social empowerment.

INTRODUCTION

Every government has a core objective of the welfare of the society. The Government can perform various functions like safeguarding the legal right of citizen, equality process of public services and economic growth. With the help of e-governance, the government can perform these activities easily. It is imperative to the creation of general awareness toward e-governance among the citizen. In the initial stage of launching ICT in the government sector, it was used at small scale because it was predicted that the computerization of governance create a problem and will not be suitable for these activities. Another fact is that the government employee had reluctant toward using computer and ICT. After some time, it was observed that the new technology is very user-friendly and it creates opportunities of employment and improves the process of governance. Then, ICT in governance emerges as a symbol of faster and better communication, efficient storage processing of data and exchange and utilization of information by the citizen, government and other stakeholders. Using of ICT in governance, the governance process is going to re-engineering. It creates very healthy results in governance practice, qualitative better decision, accountability and better utilization of resources.

According to the World Bank, "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. These

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 cost reductions."

UNESCO defines e-Governance as "Governance refers to the exercise of political, economic and administrative articulation of their interests and exercise of their legal rights and obligations. E-Governance may be understood as the performance of this governance via the 7 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."

Types of interactions in e-governance:-

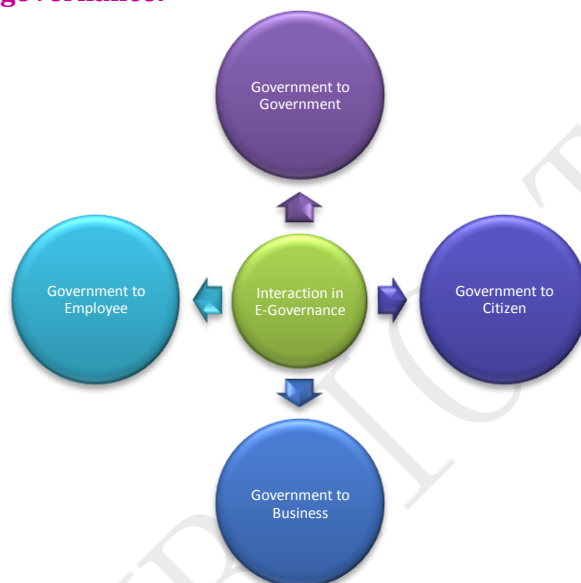


Figure 1: Types of Interaction in e-Governance

- **Government to Government:** It includes interaction of different government organizations at different level. The interaction with government on horizontal desk i.e. different government agencies and also function with vertical like national, international agencies as well as between different levels with an organization. It helps to achieve efficiency, productivity in the performance of work of government.
- **Government to Citizen:** G2C interaction specifically for delivering public services with efficiency and effectiveness. Now, the availability and accessibility of government public services are confirmed with e-governance. It give opportunities to the citizen to interact with the government without any hassle. There are various electronic mediums available to the citizen to connect with government. All medium are citizen friendly.
- **Government to Business:** The government also interacts with the business houses through electronic channels. Various legal practices are followed by the government in electronic mode. It helps to save time, cut red tape, increase operation efficiency, improving ease of doing business .all the activities like licensing permit procurement are now in electronic mode. It creates a healthy business environment.
- **Government to Employees:** The government is the biggest employer like other organizations. Employees now interact with the government with the help of different electronic mediums. Use of ICT tool helps to interact with the government quickly and efficiently and increases their level of satisfaction.

E-GOVERNANCE MODEL

Prof. Dr. Ark Halachmi in his paper, namely "E-Government Theory and Practice: The Evidence from Tennessee (USA)" has given the perspective to understand the working structure of government on connectivity with the various shareholder. Further, these model helps to guide the circumstance in with fundamental transformation in communication with the help of information and communication technology.

TYPES OF E-GOVERNANCE MODELS

- **Broadcasting Model:** The model describes the use of information and communication technology for reaching a wider public domain for the purpose of advertising the various government schemes due to they become more empowered to exercise their rights and responsibilities. It is useful for in displaying in governmental law and regulation and making available information to the public regarding government decision.
- **The Critical flow Model:** In this model, the emphasis is on critical value information. The role of this model is to channelize the information to a targeted audience with the help of information and technology. It is helpful in focusing on information content and user-oriented application. This model is detriment for common people by doing research deliberately. The critical information will help various stakeholders to communicate the critical information to the beneficiary media, common people, judiciary and special investigation branch. It is emphasized on the intended user in term of informational content. It is significant in the decision making process for delivering better e-governance practice and also it gives the boost to concerned parties.
- **Comparative Analysis Model:** Comparative Analysis Model makes sure the best practices in e-governance media. The main purpose of this model is to set a benchmark of government activities and help for evaluating the other government activities. In this model, effect of services and issues of services can be measured. With the help of this model, inefficiency in services can be reduce and new feature can be introduced.
- **E-Advocacy Model:** It depends on setting up an arranged, guided stream of data to manufacture solid virtual partners to supplement activity in the genuine circumstance. It constructs the force of certifiable procedures by including the conclusions and concerns communicated by virtual networks. Virtual people group meet up in light of the fact that they share comparable perspectives or thought or concerns or issues and these networks, thusly, consolidate to help genuine gathering exercises for purposeful activity.
- **The Interactive Service Model:** This model emphasize on social empowerment. It gives importance to direct participation of government and various stakeholders without any barrier. Thus, with the help of information and technology tools, it create new opportunities in e-governance practices. Social empowerment is the basic essence of e-governance. This model elaborate that how to introduce the essential services to general public and create awareness and helpful ineffectiveness as well as efficiency in services.

GOOD GOVERNANCE PRACTICES

The UN e-government development survey is the only global initiative to measure and track the e-governance practices in the country. UN report shows how e-governance can be implemented in a country with the condition of sustainable development. In this survey, India got 0.5669 scores in EGDI score. But this is just above the whole world EGDI score.

By comparing with other nations in Asia, India has no such e-government practice, which are followed. South Korea scored 0.9150 and India is got lower score than Sri Lanka and Iran. In the sub-index, India achieve high rank. Also with e-participation index, India got 12th place. In the e-participation index, there is three components- decision making-information, and e-consultation.

It is an initiative of the government of India to modernize the Indian economy and empower the Indian society. It is a good tool to promote good governance. It is the use of digital technology for quality of governance. This programme empowers all citizens by enabling the universal access to good and services.

Digital India is also made for bridging the gap of the digital divide and financial inclusion and also helps in improving the quality of the city of life. The use of digital India in various sectors like infrastructure, identity, inclusion, job, industry, make in India, policy, startup, health, agriculture, literacy, education, skilling, services, payment, security, open data, and democracy.

SOCIAL EMPOWERMENT AND GOVERNANCE

Empowerment as a concept, has found a major genesis in development discourse particularly an issue of people participation in development activity and thus in decade 1990-80, it emerges as a slogan meant to bring such conducive socio-cultural-political-economic and ideology condition so people could develop themselves. It is a process of transition from powerless to power by increasing the decision making capability of the individual in the sense of concentration enabling the people to do what they decide to do rather what the told to do. Thus, empowerment is a process by which change related to the distribution of power in interpersonal relation and institutional relation will be imparted through our social system.

In the broader perspective, empowerment is a process of acquiring, providing, and bolstering. The resources also enables the people to control the resource for which we need to bring people at the center since they are the basic engine. It would make people independent and the purpose is to make change people catalyst of change no merely being the dependent beneficiary. It is also the process of empowerment. All the level of societies either it is micro, small or medium, only the degree of autonomy and self-determination could increase both individual and community must develop on the own line rather than the line of imposed reliance.

Empowerment as concept found genesis in community psychology associated with work of social scientist Julian Rappaport connoting deficit orientation to strengthen orientation where the individual and community get mastery over there life sociological term empowerment address group of people that socio discriminate process made them excluded from the decision making process example discrimination on basis of birth, sex, gender, religious, race, ethnicity. Government aim is to welfare people with good governance practice. Social empowerment emphasis to connect or develop the society with redistribution resource. To redistribution, resource government needs a proper connectivity. With the help of ICT, the government can deliver best e-Governance practice.

DIGITAL INDIA

It is an initiative of the government of India to modernize the Indian economy and empower the Indian society. It is a good tool in the adoption of good governance. It consists the use of digital technology for quality of governance. This programme empowers all citizens by enabling the universal access to services. Digital India is also made for bridging the gap of the digital divide and financial inclusion and also helps in improving the quality of the city of life. The use of digital India in various sector like infrastructure, identity, inclusion, job, industry, make in India, policy, startup, health, agriculture, literacy, education, skilling, services, payment, security, open data, and democracy. Digital India initiative taken by the government of India for forwarding minimum government and maximum governance. The fundamental feature of any good governance is to deliver maximum services with efficiency and effectiveness. The main purpose of the platform is to maximize the transparency and accountability and creates a good government to citizen interaction environment.

The objectives of digital India is:

- To modernize the Indian economy
- To improve Indian society

- To re-engineering the quality of governance through information and communication technology

The functions of digital India is:

- Design a bridge to reducing the digital divide
- Create digital inclusion

Different application under Digital India is as follows:

AADHAAR: Aadhaar identity scheme is an important initiative for digital India. A unique identification number is provided to all citizens of India under it. This is based on a biometric identification system. Today, in many government services like social welfare schemes, financial inclusion schemes, banks services, income tax services etc., aadhaar is now compulsory. The total number of identities under aadhaar is 1.21 billion. It is also important to eliminate fake or duplicacy of identities. It is used as the primary identifier to provide several government welfare schemes. Good governance is also promoted by aadhaar because it ensures effective and efficient service delivery. Aadhaar is also promoted by parliamentary law.

Bharat Interface for Money (BHIM): Bharat Interface for Money is recently launched the mobile application which is useful in making fast payment transaction with ease by using Unified Payments Interface (UPI). It is the initiative of NPCI (National Payment Corporation of India). This app is available in 13 languages and more than 9 Million. According to the data, monthly BHIM-UPI transaction cross the high level of 190 Million transactions with a worth of \$3.92Billion in April 2018. Bank to bank transfer or collecting money by using mobile numbers etc. are some function of it. Bharat Interface for Money app can be easily operated on Android with the internet connection and google play store can be used to install it on android.

CROP INSURANCE MOBILE APP: Crop insurance mobile app is another digital initiative for farmers. This application provides facilities for farmers to calculate insurance premium with the help of the coverage amount of crop etc. and loan amount. Many information such as details of the amount insured, extended sum insured, premium details and subsidy information of notified crop etc. can also gather without any middlemen.

DIGILOCKER: Digilocker is an Indian government initiative to transform India into a digitally empowered society and knowledge economy. It was launched on 1 July, 2015. Digilocker provides a shareable private space on the public cloud in which public can upload their document and certificates in digital form and can access these documents through an app at any time. It is a Digital India Vision which also promotes paperless governance. Any citizen can access this facility through a mobile app. It is a platform which issues and verifies documents and certificates in a digital way and eliminates physical documents.

eNam: The government of India launches the national soil health card scheme in February 2015. In this initiative, all the information regarding soil health now delivered through the digital medium. In this regarding a mobile-based application launched name with soil health card. The Electronic National Agriculture Market (eNAM) is a mobile-based application. This application help the farmer to find the better marketplace to sell their commodities. In this regards, a unified national market is created through the electronic network. It provides a single window service for all agriculture related information and services. The app has lots of features like prices or availability of commodity, buying and selling trade offers etc.

ePathshala: This is a mobile app and website developed by NCERT to provide a platform for the students to access e-resources including textbooks, video, audio, periodicals and other printed and non-printed material through a mobile app. It eliminates many problems like non-coverage of wide geographical areas and digital barriers. All the study material can access through mobile phones (Android, iOS and Windows platforms), laptop and desktop by the various stakeholders such as students, teachers, educators, and parents etc.

UMANG: Unified Mobile Application for New-Age Governance (UMANG) is one of the common, online unified platform and mobile app which provide access to many government services. It is like a consumer service center which provides approximately 1200 services of center & state government and of local bodies by integrating 200 applications. It also provides some other utility services of private sectors. Its main objective is to eliminate barriers faced by users while managing multiple mobile apps and to provide the one-stop solution.

DIRECT BENEFIT TRANSFER (DBT): The primary function of DBT is to deliver direct social assistance to the original beneficiary. The main aim of the DBT is to deliver welfare and social schemes to citizens at faster and effective way. In this scheme, benefits such as scholarships etc. are transferred directly to the beneficiary account. It also helps in detecting fraud and duplicate transaction. The other aim of this scheme is to provide effective, transparent and efficient service to the citizen with accountability. It helps in bringing confidence among citizens.

MEGHRAJ: This initiative is launched to accelerate delivery of e-services in the country by using available spending of ICT of the government. It will be helpful in the utilization of the infrastructure and speed up the development of government mobile application. The main aim of the app is utilizing the benefit of cloud computing. The name of this initiative is "GI Cloud".

E-GOVERNANCE IN HARYANA

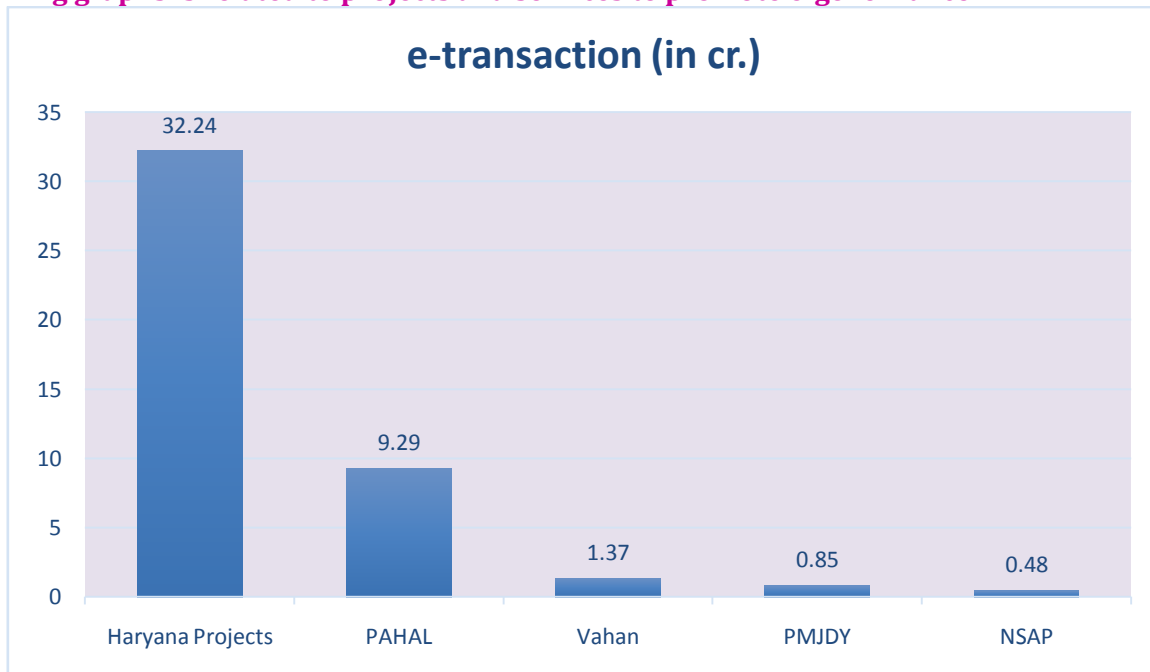
Haryana is one of the developed states of India with the per capita income of the population matching some of the developed countries of the world. Haryana has a 1.37% geographical area in India and 2% of the total population. It is located near Delhi, the capital on India. Various government projects are implemented by the central as well as the state government to put good governance practices. Some of the projects implemented by the government are the following:

| Sr. No | Pillar of scheme | Instrument |
|--------|--|--|
| 1 | Broadband Highways | SWAN,NOFN,NKN, Rural/Urban Wi-Fi, Cloud Computing, NII(National Information Infra) |
| 2 | Universal Access to Mobile Connectivity | NOFN, CCIP Policy |
| 3 | Public Internet Access Programme | CSC, Post Office, Mass IT Literacy NOFN |
| 4 | Governance - Reforming Government through Technology | eOffice, ERP, HRMS, IVRS, Aadhaar based eKYC Services, IT Cadre |
| 5 | eKranti - Electronic delivery of services | 250+ eServices (G2C, B2C,B2B, G2B etc), Poerals, Apps (Portals,Mobile), ISMO |
| 6 | Information for All | MyGov Haryana, eServices, State Portals, Websites, Cyber Security Policy, etc |
| 7 | Electronics Manufacturing | Incubation Centres, IoT, STPI, IIIT, ITIR, etc |

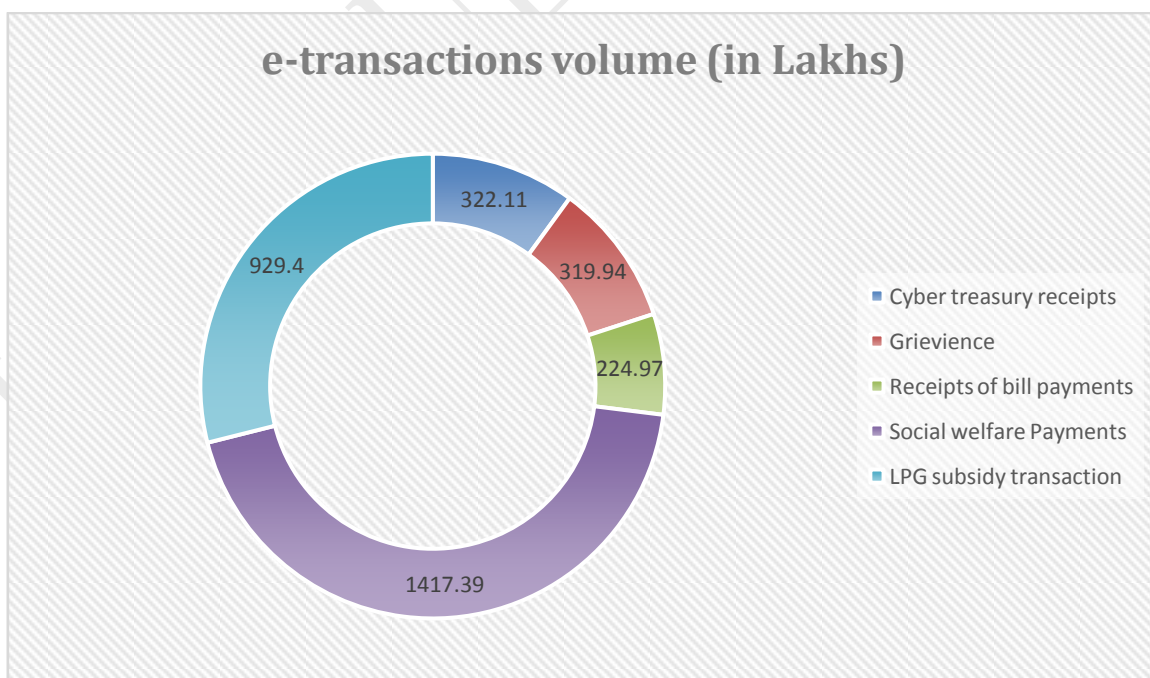
(source: <http://haryanait.gov.in>)

eTaal : "Electronic Transaction Aggregation & Analysis Layer (eTaal) is a public service system developed by India's National Informatics Centre to measure the impact of various e-governance initiatives at national and state levels." In the context of Haryana, various sectors are under the e-governance project. The following diagram describes the volume of e-transactions occurring under e-governance projects. This helps us to understand the pattern of the e-governance practices. In that particular sector is most dominant in the diagram. This describes that in social and welfare sector are now easy with e-governance.

Following graphs is related to projects and services to promote e-governance:



The above graph shows the top five projects in term of e-transaction in different services. Haryana projects has the highest amount of e-transactions while National Social Assistance Programme (NSAP) has the lowest e-transaction amount in top five services.



The above chart shows the highest no. of e-transaction in top five services. Highest no of e-transaction is done in Social welfare payments while lowest no. of e-transactions is recorded in receipts of bill payments.

CONCLUSION

The study emphasized on conceptual view regarding ICT in e-governance services in Haryana. From the supply aspect of e-governance, government plays a significant role. Also the fundamental value of our constitution is democratic. In that perspective, social empowerment is vital component for all welfare schemes. Still our country is not absolute in literacy aspect so government makes some bold movement in that respect. Information and communication is a very appropriate tool for working of government system. Also, the geographical strata has some time hindrance in good governance. With the help of ICT, government can change the relationship with citizen in good governance perspective. Thus, empowerment is fundamental right. It gives a process of entrance to mainstream. Further, empowerment is a process by which change related to the distribution of power in interpersonal relation and institutional relation will be imparted through our social system. In the broader perspective, empowerment is a process of acquiring, providing, and bolstering. It would make people independent and the purpose is to make people catalyst of change no merely being the dependent beneficiary. So at last, Information and communication technology is tool of empowerment with best services delivery.

REFERENCES

- Mohd Heikal Husin, Niloufar Loghmani, SitSalbiah Zainal Abidin.(2017) "Increasing e-government adoption in Malaysia: MyEG case study", *Journal of Systems and Information*
- Al-Hujran, O., Al-Dalalmeh, M., & Aloudat, A. (2011). The role of national culture on citizen adoption of eGovernment services: An empirical study. *Electronic Journal of E-government*, 9(2), 93-106.
- Al Hujran, O., Aloudat, A., & Altarawneh, I. (2013). Factors influencing citizen adoption of e-government in developing countries: The case of Jordan. *International Journal of Technology and Human Interaction (IJTHI)*, 9(2), 1-19.
- Warkentin, M., Gefen, D., Pavlou, P. A., & Rose, G. M. (2002). Encouraging citizen adoption of e-government by building trust. *Electronic markets*, 12(3), 157-162.
- Liljander, V., Gillberg, F., Gummerus, J., & Van Riel, A. (2006). Technology readiness and the evaluation and adoption of self-service technologies. *Journal of Retailing and Consumer Services*, 13(3), 177-191.
- Alzahrani, L., Al-Karaghoul, W., & Weerakkody, V. (2017). Analysing the critical factors influencing trust in e-government adoption from citizens' perspective: A systematic review and a conceptual framework. *International business review*, 26(1), 164-175.
- Khanh, N. T. V. (2014). The critical factors affecting E-Government adoption: A Conceptual Framework in Vietnam. *arXiv preprint arXiv:1401.4876*.
- Suki, N. M., & Ramayah, T. (2010). User acceptance of the e-government services in Malaysia: structural equation modelling approach. *Interdisciplinary Journal of Information, Knowledge and Management*, 5, 395-414.
- Chang, A. M., & Kannan, P. K. (2006, January). Employee technology readiness and adoption of wireless technology and services. In *System Sciences, 2006. HICSS'06 Proceedings of the 39th Annual Hawaii International Conference on* (Vol. 2, pp. 42c-42c). IEEE.
- Venkatesh, V., Sykes, T. A., & Venkatraman, S. (2014). Understanding e- Government portal use in rural India: role of demographic and personality characteristics. *Information Systems Journal*, 24(3), 249-269.

- Lai, M. L. (2008). Technology readiness, internet self-efficacy and computing experience of professional accounting students. *Campus-Wide Information Systems*, 25(1), 18-29.
- Lin, J. S. C., & Hsieh, P. L. (2012). Refinement of the technology readiness index scale: a replication and cross-validation in the self-service technology context. *Journal of Service Management*, 23(1), 34-53.
- Andaleeb, A. A., Idrus, R. M., Ismail, I., & Mokaram, A. K. (2010). Technology Readiness Index (TRI) among USM distance education students according to age. *Digital camera*, 27(60.0), 60-0.
- Molla, A., Cooper, V., Corbitt, B., Deng, H., Peszynski, K., Pittayachawan, S., & Teoh, S. Y. (2008). E-readiness to G-readiness: Developing a green information technology readiness framework. *ACIS 2008 Proceedings*, 35.
- Tsikriktsis, N. (2004). A technology readiness-based taxonomy of customers: A replication and extension. *Journal of Service Research*, 7(1), 42-52.
- Godoe, P., & Johansen, T. (2012). Understanding adoption of new technologies: Technology readiness and technology acceptance as an integrated concept. *Journal of European psychology students*, 3(1).
- Taylor, S. A., Celuch, K., & Goodwin, S. (2002). Technology readiness in the e-insurance industry: an exploratory investigation and development of an agent technology e-consumption model. *Journal of Insurance Issues*, 142-165.

WEBSITES

<http://meity.gov.in/divisions/national-e-governance-plan>
<http://www.digitalindia.gov.in/di-initiatives>
https://darp.gov.in/sites/default/files/promoting_egov11.pdf
<https://uidai.gov.in/beta/>
<http://www.npci.org.in>
<http://umang.gov.in>
<http://epathshala.nic.in/>
<https://cloud.gov.in/index.php>
<https://dbtbharat.gov.in/>
<https://etaal.gov.in/>