

Impact of Information Communication Technology for Development and Digital Era: A Literature Review

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Abstract - Since early 90s Information and Communication Technologies (ICTs) are playing a focal role in the development process of any country. In today's life Technology became a part of life and livelihood. In this digital era, India is using ICTs to promote their development programs as well as reaches to the poor to strengthen their lively hood. Here the use of ICT in eradication of poverty as well as the e-governance performance has been discussed. The current ICT initiatives tend to focus on infrastructure development and the extension of information and communication services from centre to the periphery. This paper mainly focused on how the ICT intervention in rural development, HDI, Total Factor Productivity, Customer problems in Retail Outlets, Employment, Education in Rural Schools, Project based Elementary Education, Women Empowerment, Rural India and in developing a Knowledge Society. The initiatives are capable for development of Digital India. The cases presented illustrate both the opportunities and challenges in the diffusion of ICT within India and for other developing countries. ICT applications can be classified as those that provided decision support to public administrators for improving planning and monitoring of developmental programs, those that improved services to citizens and brought in transparency, and those that empowered citizens through access to information and knowledge.

This paper is providing the analytical information about ICT for Knowledge Society, Social Area and will provide impact analysis of ICT on Digital Era.

Keywords - ICT, Trained Teachers; Total Factor Productivity; Knowledge Society; HDI; e-learning.

I. INTRODUCTION

Now a day's life is fabricated by emergent growth and progression of the Technologies. There is a great dependency on the knowledge and competence of individuals due to use of Information and Communication Technologies and this dependency is growing day by day. Some problems that are affecting society are emerging gaps and distancing people from the main goals Motivation for advancement-opportunity in people is beneficial to the country. A person who is unable to participate in modern society, a person without opportunity, despite the acknowledged necessity and benefits of inclusive computer is known as a computer illiterate person. There are still groups of people having difficulties accessing basic

computer education like persons with disabilities, persons with learning difficulties, migrant workers, unemployed persons, persons that live in remote (rural) areas where IT education is not accessible.

IT (Information Technology) encompasses all of the technology that we use to collect, process, protect and store information. It refers to software, hardware, and networking of computers.

ICT (Information and Communication Technology) concept includes transfer and use of information. ICT is the basic of economy and a driving force of social changes in the 21st century. Distance is no longer an issue when it comes to accessing information; for example, working-from-home, distance learning, e-banking, and e-government are now possible from any place with an Internet connection and a computing device.

II. LITERATURE REVIEW

The ICT and Development should be directly proportional in present Era if we want growth? During the literature survey findings were crazy. The society may inhibit or enable individuals from taking full advantage of ICT resources for their lives with some implications for policy makers advancing an agenda on ICT for Development (ICT4D) (Salihu Ibrahim Dasuki and Pamela Abbott, 2015) [1]. In case of multimedia, data analysis is necessary for enhancing the quality of research in the ICT for Development (IC4D) domain (Rajesh Chandwani and Rahul De, 2015) [2]. In E-Learning the Successful implementation of e-learning relies on the presence and blending of the three preconditions (technological, organizational and pedagogical) components (John K. Tarus and David Gichoya, 2015) [3].

Populations with higher level of HDI (education, health and living standards) are better able to use ICT for productive purposes contributing to national income (Bilal MEHMOOD and Parvez AZIM, 2014) [4]. During the study of level of ICT awareness on the trained teachers (male and female) and between rural and urban trained teachers. The conclusion was that the trained teachers had very poor, poor, average, good and very good level of ICT awareness (Nabin Thakur, 2014) [5]. Regarding Knowledge Society, the most important vital assets and resources are People and ICT for successfully development of Knowledge Society (KS) (Researcher Samia Al Hadi and Sulaiman Al Rawahi, 2014) [6].

In use of recent technologies such as, Scanners, Barcode Readers, Cash Register, Debit/ Credit Card Reader, Electronic Article Surveillance, Video Surveillance will facilitate in increasing customers and providing them ease and support to shop happily (Ms. Garima Srivastav, 2013) [7].

ICT investment has a positive and significant effect on both oil-based and non-oil-based countries employing rate. While the intensity of effectiveness is lower in the case of non-oil-based economies. For selected OIC member countries, one percent increase in ICT expenditures and GDP of the country leads to employing rate increase as high as 0.045 and 0.2% respectively (Hamid Sepehrdoust and Hossein Khodae, 2013) [8]. Information Communication Technology (ICT) plays a significant role in developing human capital through bringing a revolutionary change in education system specially focusing on the development of rural schools by the use of ICT in imparting education to the students of primary and secondary levels. ICT is implemented co-ordinately and encouraged fashion than the vision successful (Arifur Rahman Khan, Reza Shahbaz Hadi, Dr. Md. Mahfuz Ashraf, 2013) [9].

Information and Communication Technologies (ICT) have opened vistas of opportunities as regards increasing the outreach of education, a vital component of which is the use of satellite based communication in teaching-learning transactions describing pillars of learning: learning to know, learning to be, learning to do and learning to live together (Sampat Ray Agrawal, Manoj Roy V., Dr Ajay Kumar Gupta and Dr Chinmoy Kumar Ghosh) [10]. The role ICT in Woman Empowerment like Personal, Educational, Economic, Social, Psychological, Technological and Political is positive (Ms. Beena and Dr. Madhu Mathur) [11].

The governments adopting Information and Communication Technologies (ICT) initiatives in rural areas are capable of enabling the governance to achieve rural development and their integration with the grassroots is critical for sustainability. An integrated framework for ICT interventions in rural areas is required that could amicably blend community needs, knowledge and inputs along with inputs of other stakeholders. In the process of development the Governments concentrating on the eradication of poverty, in this connection they are completely concentrated in rural areas. With the impact of the Information Technology, the whole world became global village. It is very clear that ICT can contribute to poverty reduction, if it is tailored to the needs of the poor and if it is used in the right way for right purposes and complemented with required reforms (Arathi Chitla, 2012) [12].

Students have a positive attitude towards the use of ICT to support studies and facilitate learning. As such, they use computers and the internet on daily basis to communicate through e-mail and chat, and also for research/studying. ICT is considered to exploit the flexibility of training. The rhythm of study, the allocation of time and the availability of teachers can allow better articulation between private life

and professional life as well as a better allocation of time between the various uses (Tah Babila Mbah, 2010) [13].

III. CONCLUSION

In these reviews of the literatures has helped me to discover research area for the research in Computer Science and ICT field. In these literature reviews I have studied various research papers from year 2010 to 2015 in search for a specific area in Computer Science and ICT in which I want to carry on my research work. I have gain a lot of knowledge from these literature reviews. These all the reviews give me the deep knowledge about the Research Methodology that was used by the Researchers in their Research Papers. All the reviews studied are of good quality, encouraging and especially better to understand that steps to decide the topic in the research area that I need. I have found some useful topics during this literature study such as on Impact of ICT, Through this literature review I have able to conclude with the research area for my research work in Impact of ICT and also found that all topics would certainly help me in this direction as everything in the impact of ICT. ICT is a wide topic. ICT4D is again a new topic in area of ICT. This literature review would help as a guide to take initial step in my research work but there is a need for more literature review in my specific field of research work.

IV. FUTURE SCOPE

To improve the HDI (Human Development Index) of a country we have to build a Knowledge Society (KS). KS is a structured organization based on developed knowledge and represents new emerging life support system. KS depends on information society. If the Information society is powered by latest technologies then it will be helpful to create a latest knowledge Society will be beneficial to develop a smart country. Social, cultural, economic, political and environmental are the major components of human activities which depend upon developing and sharing knowledge and information. If we have to build a Digital India we have to concentrate on the obstacles which are the barriers in implementing of new technologies in ICT.

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