

A Review Report on Application and Development of Information and Communication Technologies

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Abstract

This article provides an introduction and a short review report on application and development of information and communication technologies. The author highlights key issues of ICTs in a development context in respect of teacher education with a new perspective. In this article it is try to enhance knowledge about the basic of history, devices and development of ICT and about the applications of ICT collectively by taking from different sources of the internet. It is suggested that if we open more e-Choupal Internet kiosk in rural areas that take away more economic growth, e-Choupal will help for more development of agriculture and villagers. On the other hand the more development of ICT is effecting on some bird like sparrow. We should think about the negative effect of the development of ICT.

I. Introduction

Information communication, whether it is between human or other living things, they have own communication languages to communicate to each other and the way of communication become technology which is used from a long time in any form. We are living in the environment of ICT. We are using ICT. Using or more application of ICT is taken the form of more development. In the report in 2002 of the international telecommunications union (ITU) shows the worldwide market of ICT was almost \$ 2.1 trillion in which telecom services 39%, software and services 31%, and hardware 30%; this is the nearly 6.6% of the gross world product. Today ICT became the basic need of the life. Connectivity, whether the Internet or mobile phones is increasingly bringing market information, financial services, health services to remote areas, and is helping to change people's life in unrepeatable ways. New information and communications technologies (ICT), in particular high-speed internet, are changing the way companies do business, transforming public service delivery and democratizing innovation. With 10 percent increase in high speed Internet connections, economic growth increases by 1.3 percent. The research (report of world bank) covering 20,000 firms from 26 sectors in 56 developing countries, shows that businesses that use ICT (phone, PC and email) more intensively are more productive, grow faster, invest more, and are more profitable. Technological progress is a considerable driving force behind economic growth, citizen engagement and job creation. More than 75 percent of people around the world now have access to a cell phone, with the number of global mobile-cellular subscriptions quickly approaching 7 billion. Information and communication technologies include any communication device associated radio, television, cellular phones, computer and network hardware and software, satellite systems and so on, as well as the various services and applications associated with them, such as videoconferencing and distance learning.

II. History of Information Technology

If we look in the history of the IT ; it divide in four main ages. Among the four ages first is the premechanical age; which is the earliest age of information technology. It is defined as the time

between 3000B.C.(Years are designated as before the Christ's birth) and 1450A.D.(Years are designated as after the Christ's birth). When humans first started communicating they would try to use language or simple picture drawings known as petroglyphs which were usually carved in rock. Later paper was created out of papyrus plant. The most popular kind of paper made was probably by the Chinese who made paper from rags. It is the time around 100A.D. when the first 1-9 system was created by people from India. After 775 years that the number 0 was invented. The popular model of that time was the abacus , it was the first sign of an information processor. Second age is the Mechanical age. It is the age when we first start to see connections between our current technology and its ancestors. It is the time between 1450 A.D. and 1840 A.D. In this age an analog computer used for multiplying and dividing, pascaline popular mechanical computer by Blaise Pascal, the difference engine which is used to tabulate polynomial equations using the method of finite differences developed by Charles Babbage was invented. Third age is the electromechanical age. It is the age time between 1840 and 1940. In this age telephone by Alexander Graham Bell in 1876, the first radio developed by Guglielmo Marconi in 1894 was created. It is the age of extremely crucial emerging technologies that led to big advances in the ICT field. Fourth age is the Electronic age. It is the age time between 1940 and right now. IN this age the ENIAC, Mark 1 and high level language computer programming language was invented. The fourth and latest generation brought in CPUs (central processing units) which contained memory, logic, and control circuits all on a single chip. The personal computer (Apple II) and the graphical user interface was developed in this age.

III. Development of ICT

If we think about the development of Information and Communication Technologies, today is everything by the ICT. The development of ICT refers to the use of information and communication technologies in the fields of socioeconomic development, international development and human rights. The more and better development of information and communication furthers the development of a society. Development of information and communication also requires an understanding of community development, poverty, agriculture, healthcare, and basic education. The United Nations through own development programs consider ICT as a powerful tool for economic and social development around the world. In modern times, The development of ICT has been divided into three periods such that first period is considered mid-1950 to late-1990. This was before the creation of the term "ICT4D". The focus was taken on broadcasting development communication, computing / data processing for back-office applications in large government and private sector organizations in developing countries. Second period is considered such that late-1990 to late-2000. The focus was taken on the combined advent of the millennium development and mainstream usage of the Internet in industrialized countries led to a rapid rise in investment in ICT infrastructure and ICT programs/projects in developing countries. The most typical application was the telecentre, used to bring

information on development issues such as health, education, and agricultural extension, into poor communities. Third period is considered such that late-2000 onwards. The focus was taken on suggestions of moving to a new phase include the change from the telecentre to the mobile phone as the archetypal application. There is new development-oriented priorities are in the field of environment, sustainability, poverty, development finance, basic needs, economic development such that growth, jobs and the digital economy development, digital library, accountability and transparency data revolution cross-border flows, peace and security, urban development, resilience, inclusive development etc.

IV. Applications

The applications of ICT in production help that capital try to reduce production costs and expand markets. ICT products help reducing costs and expanding markets, high innovation costs, and relatively low production costs; the technological innovation to ensure continued sales which is a challenge to sustainability. The applications of ICT in the consumption is that separation between production of the enabling media and production of the content; technologies allow new modalities in consumption. The applications of ICT in exchange that ICTs enable exchanges of information, finance, communication.

In coming days it is demanding of smart city and smart villages. First we have know that about smart city . A smart sustainable city is an innovative city that uses information and communication technologies (ICT) and other means to improve quality of life, efficiency of urban operation and services, and competitiveness, while ensuring that it meets the needs of present and future generations with respect to economic, social and environmental aspects. It provides guidance on implementation, and promotes efficient deployment of wireless networks in smart sustainable cities. Smart city information security system provides security for smart city from technology and management. If we take applications of ICT for farmers in villages, it is time saving technology to them. We have to develop e-Choupal Internet kiosk in the house of a trained farmer (Sanchalak) within walking distance of target farmers. We have to develop warehousing hub managed by the erstwhile middleman, within a distance of target farmers. These e-Choupal will help the farmers to customized knowledge on farm and risk management, better supply chain for ITC for farm inputs and lower transaction costs, relevant real-time information results in higher income, commodity prices, local weather, news, customized knowledge despite heterogeneity, reduced transaction costs. Direct marketing channel for farm produce screened for quality, demand aggregation for competitive prices and efficient. It is taken from (7) that 3,500 e-Choupals in 5 states of India covering 21,000 villages, servicing 2.0 million farmers, sourcing a range of agri commodities (oilseeds, grains, coffee, aquaculture). E-Choupals helps farmers to marketing a variety of goods and services (agri-inputs, consumer goods, insurance, market research), they get higher incomes through better yields and prices.

V. Conclusion

Communicators must understand each other, and must wish to be understood languages, codes, rules of communication, uses many different senses Hearing, sight, smell, touch, taste etc. Conclusion is that If we think about old time when ICT was available as in a old manner then we used in the form of transformation of information from one place to another place in writing on a cloth or on a stone or any another way, in such type old way of

communication had spent a lot of time, but now days with the help of ICT we communicate in seconds by ICT devices like mobiles, internet etc. We get information with the help of radio, television and communicate with the help cellular phones, computer and network hardware and software, satellite systems and so on, as well as the various services and applications associated with them, such as videoconferencing. ICT uses as e-Choupal internet kiosk in villages to help farmer by which a lot of time is saved which can play an important role in the development of the economy of India because more than 75% populations of India lives in villages . Using of ICT helps Capital try to reduce production costs and expand markets.

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