

INTEGRAL ROLE OF ICTS IN SOCIAL DEVELOPMENT

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ABSTRACT

There are various things that can be done by the use of the web to make a difference, whether it is donating money to charities via click through, educating people, helping the local community, signing the online petition or accessing the information. This paper, mainly aims at to study the social implications of electronic commerce (popularly known as e-commerce). To study the social implications of e-commerce and other IT enabled technologies in a systematic manner, few areas have been selected, especially those which are of prime social interest? Further, to justify the true impact of e-commerce on the society, negative impact of e-commerce and IT on the society has been studied. In the end of this section, concluding remarks are given.

Keywords: E-Commerce, Poverty, Health and Education, Gender Equality

INTRODUCTION

Basically, electronic commerce (popularly known as E-Commerce) is an economic phenomenon; it forms part of a broader process of social change, characterized by the globalization of markets, the shift towards an economy based on the knowledgeⁱ and the information, and the growing prominence of all forms of technology in everyday life. These major societal transformations are now under way and will probably continue far into the foreseeable future. As both a product and manifestation of such transformations, electronic commerce is being shaped by, and increasingly will help to shape, modern society as a whole. Social factors will thus have profound influence on its future development. They will also merit attention from a public policy standpoint, both to establish the social conditions that allow electronic commerce to reach its full economic potential and to ensure that its benefits are realized by the society as a whole. It is therefore vital to understand the social processes that will inevitably influence how electronic commerce evolves and how quickly it can grow, as well as the areas where, through externalities of various kinds it may profoundly affects societyⁱⁱ

Impacts on society

A historical correlation exists between higher socio-economic development and technological innovation (GIT Report, 2005/06). However, experts argue that lack of access to ICTs is not as serious as malnutrition, inadequate shelter, access to medical facilities and

clean drinking water- the basic survival needs. But, the majority now believes that ICTs have the potential to enable countries that missed out on opportunities of agriculture and industrial revolutions, leapfrog stages of growth. Therefore, there has been a large wave of investment over the past decade in ICT for development, and some significant part of this has been aimed at poor people - both in terms of bringing ICT access poor communities, and in using ICTs in many other ways which support poverty reduction. There have been many successes, lessons learned and experience documented.

Initiatives bringing ICTs and Internet access to the poor people and communities have been active since early 1990s. The 1998/99 World Development Report entitled "*Knowledge for Development*" accelerated this process (World Bank, 1998/99). The Millennium Declaration 2000; a unanimous resolution adopted by the world community against poverty, has also highlightedⁱⁱⁱ the importance of ICTs towards poverty alleviation by making it a part of the Millennium Development Goals (MDGs). In 2001, the Markle Foundation presented its report entitled '*Digital Opportunity Initiative: Creating a Development Dynamic*' to the G-8 leaders at 2001, Summit in Genoa. The findings and framework of that 'DOI Report' provided the basis for a series of Markle Foundation initiatives exploring opportunities to achieve the kind of comprehensive and integrated impact of ICTs on poverty alleviations (Markle Foundation, 2001). United Nations Conference on Trade and Development Report on '*E-Commerce and Development Report*' (2003) conclude that, by making business more competitive and economies more productive and most of all by empowering people with knowledge, ICTs can support faster economic growth and thus strengthen the material basis for development. The real challenge is to ensure that this potential is used to generate real gains in the global struggle against poverty, disease and ignorance. Further, the Information Economy Report (2005) highlights the extent to which the developing countries are striving to close to gap that separates the "information haves and have-nots". By bridging the gap of digital divide, developing countries can join the benefits of ICTs to achieve the millennium development goals (MDGs). In the recent years information and communication technologies have been deployed in numerous initiatives in rural communities in developing countries. Many world leaders, including UN Secretary General Kofi Annan, have spoken about the tremendous potential of these new technologies to transform the lives of the poor. Groups as diverse as the United Nations, the G-8, nations, Foundations, national, state and local governments, and private companies have seized upon the hope that the use of the ICTs could enable even the poorest of developing nations to leapfrog traditional problems of development like poverty, illiteracy, disease, unemployment, hunger, corruption, social inequalities so as to move rapidly into the modern information age, according to Kenneth Keniston, Director of MIT-India programme. Mark Maloch Brown, administrator of UNDP, is convinced that '*ICT can help us reach the targets established by world leaders at the Millennium Summit, including the goal of halving poverty by 2015*'.

There are various things that can be done to use the web to make a difference, whether it is donating money to charities via click through, helping the local community or signing an online petition. The launch of a site from Amnesty International^{iv} that enables people to e-mail and SMS their support for the various cases is one such scheme. Today, the response rate for each appeal has been growing rapidly and Amnesty can now expect around 5000 people to respond within a couple of days, with people signing up to the urgent appeals at a rate of two minutes. By using the web in this way to target users, Amnesty International can

now reach people that otherwise would never been able to get involved with the organization.

To study the social implications of electronic commerce and other IT enabled Technologies in a systematic manner, few areas have been selected, especially those, which are of most social interest and where the impact of these technology can be seen widely. Among them some of the most important are:

Health: Information technology and electronic commerce health care applications can play an integral role in the promotion of virtuous cycle ^v It can help realize cost saving while broadening the reach of the health care system (Industry Canada, 1998). In addition Internet and other IT enabled technologies can assist the overall health system to become more cost effective through, structural and functional rationalization of the delivery system, and the wide implementation of ICT will result in improved availability and quality of health services (European Commission, 1996). It can play a positive role in expanding services and service delivery options while creating cost efficiencies in the administration and management of health services and therefore lead to greater economic prosperity. This is particularly true if access to these now and better services is extended to the most disadvantaged segments of the society, as they have the most to gain from improved health conditions.

Education and Human Resource Development: ICTs integration in primary, secondary and tertiary education is one major goal of ICT projects. One prominent project is the SchoolNet initiative that aims to connect school to Internet and to train teacher in the developing countries. They operate in partnership with the private sector, government, NGOs and the donor community. In South Africa per example, where SchoolNet is focusing on historically disadvantaged schools, almost 3000 schools are already involved in the initiative (Spence, 2003).

ICTs also have deep impact on distance education, which is currently most relevant to poverty reduction. E-learning ^{vi} enhances the access to education for the who have access to ICTs reducing several constraints that distance education has faced in the past: lack of interactivity, long development cycles, lack of flexibility of materials and insufficient support mechanisms for learners (UNESCO, 1996). In tertiary education access to online journals and to other information through the World Wide Web (www) has revolutionized research possibilities in the countries with the limited resources.

Poverty Alleviation/Reduction: information and communication technologies (ICTs) have an important role to play in reducing the poverty by improving the flows of information and communications. Much of the recent attention to the role of ICTs in development has focused on the new technologies, such as the Internet and mobile phones. Yet no full range of ICTs is relevant to the fight against the poverty (Chandra, 2003). The potential impact of ICTs on the poverty can be seen at the micro level, intermediate and macro level. At the micro level, ICTs can be used by the poor directly to address their information needs, develop their own strategies and solutions for improving their lives, and articulate their interest in societal processes and institutions that affect them. At the intermediate level, ICTs can help a range of intermediary institutions and agents work more effectively and more responsive to the needs of the poor. Health workers can access the latest information; get

assistance with diagnosis, and more effectively target intervention and resources with the help of ICTs. At the macro level, ICTs can help foster more efficient and transparent markets more participatory process of the governance, and new forms of economic and social innovations that benefits the poor.

Major ICTs based reforms in Chile have reduced the percentage of people below poverty line from 40 percent¹³ to 17 percent. Similarly continuation of prudent policies in Taiwan over the last few decades, have resulted in a dramatic reduction in poverty and the country joining the ranks of progressive competitive economies. Studying the impact of ICT on poverty alleviation of East African regions, Elder (2003) observed that ICTs is a powerful tool to eliminate poverty by enhancing job creation, increased income; better use of information; individual capacity building and improvements in agricultural production. The study Pigato (2001) examined the relationship between ICT and poverty on the basis of empirical evidence drawn from sub-Saharan Africa (SSA) and South Asia. The Study advocates the need for an integrated framework to develop appropriate policies of access and diffusion of ICTs within developing countries. Available evidence shows however that technology is not a goal (poverty alleviation) in itself, but a means for achieving development goals.

Gender Equality: Since recent studies indicate that the Internet use by men and women may soon approach equality ^{vii} gender is becoming less of an issue. There is clear evidence that the majority of poor are women and poverty reduction is nowadays highly correlated with the gender equality. Thus it is stressed to include the gender equality into ICT Policies, programmes, projects at all level. Experiences range from empowerment initiatives at local levels, to national and regional networks. However, implications of IT for women empowerment are not an easy task. (Spence, 2003), identified that women face specific barriers ^{viii} to the use of ICTs. Therefore, it is important to target women in ICT projects specifically. On a community level experiences shows that radio favours women to men, because radio requires little skills to operate and broadcast (Gerster and Zimmermann, 2003). ‘Women for Change’ is a Zambian NGO, committed to working with an empowering remote rural communities, especially women. The essence of networking for the ‘Women for Change’ is to share resources and action strategies for women’s empowerment. Networking allows ‘Women for Change’ to stay in touch with what is happening locally, regionally and internationally and use of information and resources so gathered in helping the rural Zambian women. To facilitate the networking a website and online content have been developed to disseminate the information.

Added to all this, e-commerce is also helping in reducing the gender gap. With the emergence of IT enabled service industries ^{ix}, more and more women are getting employment in these industries In these industries women have equal opportunities (even more in some cases ^x) to men. Thus it is quite logical to conclude the IT and e-commerce is helping in reducing the gender gap.

Access to Information on Community Level: We are moving on from IT to ICT and from ICT to Information Society (IS), according to Richard Heeks. Electronic Commerce and ICTs abolish distance and alter the concept of community. Many of these changes are positive creating links with new people, maintaining closer ties with far-flung friends and family members ^{xi} and creating new online communities with potentially global membership.

The 'e-governance' is a result of such development and has emerged because of the increasing interest of government and citizen around the world.

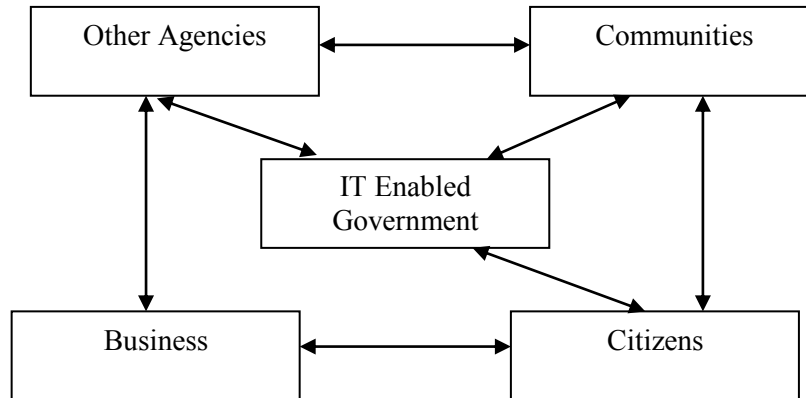


Figure. 1. E-Governance for Development

It involves new styles of leadership, new ways of debating and deciding policy and investment, accessing education, listening to citizens and organizing and delivering information and services. Sumanjeet (2006) identified the following benefits of e-governance.

- Increase the accessibility of individual citizens to information and services that allows them to influence govt. operations.
- Opportunities to earn a living by learning a new skill in the knowledge based economy.
- Producing same output at lower total cost.
- Opportunities to trade and banking online.
- Reduction in time and paperwork.
- Supports effective decentralized decision making by providing an efficient information flow.
- Various govt. departments find it very easy to perform their functions like collection of tax, water charges, professional taxes etc.
- Enhance access to information and communication across large distance.
- Deliver essential services to citizens.
- Improving agriculture productivity.
- Improves resource management.
- Enables marketisation by supplying information related to the market and enhances public services.
- Transparency in judicial and administrative work.

- All notifications and circulars can be put online, so that cases can be disposed faster.
- Helpful in confidence building among the citizens and the government machinery.
- Market expansion and organized job creation and its overall impact on the macro economy.
- Transition from cumbersome procedures for clearances to improved relations by providing quick approvals.
- It is an innovative way of administration. It facilitates easy monitoring and tracking of files. There is no place for red tapism.

Other Expected Implications: The Internet also has had a great influence in empowering consumers over the last few years, and there is a great opportunity for citizens to similarly empower themselves. Today, many communities have used the Internet to effect change in the things that matter to them. This is because the Internet allows communities of interest to communicate and share knowledge in ways never before possible, unrestricted by previous geographical boundaries.

One consistent finding across many countries is that intensive users of information technology tend to be well educated and to have higher than average household incomes (IDC, 1998).

Last but not the least, ICT can assist notional management that relies critically on good information and statistics notably social service delivery, especially health and education requires good information bases. Furthermore, ICTs are important for increasing knowledge on human and constitutional rights, laws and regulations. ICTs such as radio and the Internet have been used for monitoring government programmes, thus making the powerful more accountable and giving the poor a voice, e.g. through rural radios. Thus ICTs can be highly effective in enhancing transparency and accountability in the political system.

CONCLUDING REMARKS

At the social front, e-commerce and ICTs can definitely empower the poor, give them a voice and connect them to the global world. These technologies can also help in attaining a minimum level of education, health and nutrition. The ability to participate in democratic decision making can also fall into this category. But it is difficult to predict the extent to which these technologies will transform the developing countries. On the basis of various studies, it is observed that, there is very high costs and relatively low benefits of the direct Internet and e-commerce technologies to the poor or the other needy people. Access to radio and telephone services show a higher benefit cost ratio and lower the overall costs as the alternatives to and intermediaries for the Internet and e-commerce in poverty alleviation and other social upliftment programmes.

In a developing country such as India, it is of particular interest whether such benefits can reach to the poor and even help directly or indirectly reducing the deprivations associated with poverty. For example, better access to education, agricultural market, information or to government services may be relatively more valuable for the poor people who cannot afford to use the traditional methods or communications media, or to pay for the services of traditional facilitating intermediaries.

In short, development of e-commerce and IT has great singinficance not only in the economic growth, but also in human and social development. It boost social as well economic infrastructure, generate revenue, provides employment and many more. But the development of these technologies would remain uncomplete, unless the benefits of these technolgies reaches to the common man.

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NOTE

- i. The knowledge-based economy is commonly thought of as an information technology economy, with an emphasis on software and hardware. Information technology is however, primarily an enabler, not an end in its own right (other than for data based products such as information). As such, it will have an impact on the entire economy.
- ii. Analysis of social dimensions of electronic commerce is hindered, however, both by the rapidity of change, which limits the collection of quantitative data on the growth and implications of new forms of electronic business, and by the difficulty of isolating electronic commerce from ICTs more generally. Research is also hampered by the pervasiveness of electronic commerce in the economy and the consequently diffuse nature of its linkage to broader social, institutional and cultural factors. Within these limitations, this section of study reviews literature and evidence from a variety of disciplines to point to areas where a significant relationship appears to exist between social and economic considerations and which consequently may merit attention in terms of public policy.
- iii. Goal 8, Target 18, “to make available the benefits of new technologies, especially information and communications”
- iv. This is one of the world most oldest and popular Human Right Organization
- v. It is well established that a population’s overall health is closely related to its economic prosperity. Improved health conditions and access to health information contribute significantly to economic growth, because healthier workers are more productive. Government policies that promote health education help people lead healthier lives by increasing their access to and are of relevant information. When combined with polices to ensure effective and accessible health services and those generate income growth, a virtuous cycle is created in which economic growth and improvements in health reinforce each other {World Bank, 1993), *World Development Report 1993: Investing in Health*, Oxford University Press, New York}.
- vi. E-learning is the use of network technology to design, deliver, select, administer and extend learning. It is an Internet enabled learning processes whose components include content deliver in multiple formats, management of the learning experience and a community of networked learners, content developers and experts. E-learning as a universe comprising three basic elements – content, services and technology.

[Deva, Vasu (2003), *E-Learning: Search for Excellence*, New Delhi: Commonwealth Publishers.]

- vii. Commerce Net/Neilson Study as cited in “*Starting Increase in Internet Shopping*”, Business Wire, December 31, 1997
- viii. Lower level of literacy and education; domestic and reproductive responsibility; restricted access to training; cultural attitudes and Practices; less proficiency in English; lower level of financial resources and lower access level to ICTs at work, public access is located in the areas where women do not feel comfortable. And higher density of women in the rural areas
- ix. In some industries it is quite natural and logical to place a women than men. For example in call centers women are preferred because of their soft voice and lower pitch pitch. And in these industries women can work very easily because there is no physical work.
- x. Like call centers, medical transcription and other voice based services and even in some industries women are intentionally employed to attract more and more customers. (This statement is based on the personal experience of the researcher. Working with India’s biggest stock broking company lindiabulls) the research found this.
- xi. For example, e-mail brings family closer. A growing number of parents with children away at college are surprised at the frequency that their children are using e-mail to stay in touch. Parents also find their children are opening up to them via e-mail for more readily than if they were talking to them over the telephone, or even face to face. Convenience is cited as a main reason for using e-mail, as well as cost savings and 24 hours. Contact availability without disrupting scheduler.
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