

ISSUES RELATED TO INTERNET DIFFUSION: A CASE STUDY ON ICT RELATED PROJECTS IN SRI LANKA.

GALAGEDARAGE THUSHARI MADHUBHASHINI, ALI SALMAN,
WAN AMIZAH WAN MAHMOOD & FAUZIAH AHMAD
UNIVERSITI KEBANGSAAN MALAYSIA

Abstract

Internet user percentage in Sri Lanka has lingered at a mere 13.1% in 2011 according to an Annual report by Department of Census and Statistics in Sri Lanka. The aim of this paper is to identify the issues and problems of internet diffusion among rural communities in Sri Lanka. This conceptual paper is based on literature review. Reasons for Sri Lanka to experience a very low internet usage, due to social, economic, political, cultural and moral circumstances: no clear policy framework for facilitating the use of the Internet, lack of knowledge about the benefits of the new information technology, lack of motivation to use the Internet, economic problems, English Language barriers, attitudinal problems and inadequate infrastructure. 'E- Sri Lanka', 'Horizon Lanka project', 'Virtual Village project', 'Kotmale Community Radio Internet project' are ICT related projects in Sri Lanka. These ICT related programs are based in specific rural areas and there are experimental programs still trying to establish in other rural areas. There should be powerful and effective programs to empower rural and semi urban communities with ICT and English language literacy, skills and attitudinal motivation to access internet for socioeconomic development purposes.

Keywords: *Rural Communities, issues, Digital Divide, internet diffusion, ICT related projects,*

Abstrak

Laporan tahunan oleh Jabatan Perangkaan dan Statistik di Sri Lanka melaporkan bahawa peratus pengguna Internet di Sri Lanka hanya berada di tahap 13.1%. Kajian ini bertujuan untuk mengenalpasti isu dan masalah difusi internet dalam kalangan komuniti luar bandar Sri Lanka. Kertas konsep ini adalah berasaskan kepada sorotan literatur. Sri Lanka mengalami penggunaan Internet yang rendah disebabkan oleh keadaan sosial, ekonomi, politik budaya dan keadaan moral dan juga tiada kerangka polisi untuk memudahkan penggunaan Internet, kekurangan ilmu mengenai kebaikan teknologi maklumat baru, kurang motivasi untuk guna Internet, masalah ekonomi, masalah bahasa Inggeris, masalah sikap dan kekurangan infrastruktur. E- Sri Lanka, Horizon Lanka project, Virtual Village project dan Kotmale Community Radio Internet project adalah antara projek yang berkaitan dengan informasi teknologi maklumat di Sri Lanka. Program berkaitan dengan ICT ini di letakkan di bawah kawasan luar bandar tertentu dan ada program eksperimental dalam cubaan untuk memperkemaskan diri di kawasan pedalaman yang lain. Seharusnya ada program yang bagus dan berkesan untuk memperkasakan komuniti luar bandar dan separa luar bandar dari segi ICT dan penguasaan Bahasa Inggeris, skil dan motivasi sikap untuk mengakses Internet bagi tujuan pembangunan sosio ekonomi.

Kata kunci: Komuniti luar bandar, isu, jurang digital, difusi Internet dan projek berkaitan ICT.

INTRODUCTION

Information and communication technologies (ICT) play an important role in the day-to-day lives of the people. The internet is one of the new media in this global information society. Everyone can basically access the Internet from anywhere in the world if they have an internet service provider (ISP), a telephone connection, a modem and a basic computer or alternatively have a smart mobile phone within a 2.5G and above phone network. More importantly, the Internet has become a successful development communication medium among grassroots levels. The Internet serves as an agent of change in rural areas; it has positive effects on the livelihood and education of the rural people” (Zhao 2008: 17).

The majority of people (77.3 %) in the United States of America have used the Internet for their development needs. This was the highest internet usage in the world according to the Internet Usage and Broadband Usage Report in 2011. However, most of the Asian, African and Latin American countries are

constrained in the development process without internet facilities. Zhao (2008: 10) Majority of developed and some developing countries access internet to achieve their socioeconomic development goals. Developed Asian countries such as Singapore, Korea, Hong Kong and Japan are also successfully using ICT facilities for their human, social, economic, political and cultural needs. Malaysia also has fair internet usage when compared to most of the developing countries in Asia. The governmental and non-governmental organizations have introduced some powerful programs to increase internet usage among rural communities in Malaysia (Alias, Jamaludin, Hashim, Ismail & Suhaili 2010:1). India has 121 million Internet users and the Indian internet user percentage has lingered at a mere 10% (International telecommunication report in 2011).

Most of the third world developing countries like Sri Lanka, Bangladesh, and Nepal have no clear policy framework for facilitating the diffusion of the Internet towards rural needs. Besides the lack of knowledge about the benefits of new information technology, the lack of motivation to use the Internet, economic problems, the lack of English knowledge, attitudinal problems and inadequate infrastructure adds to the main problems faced by developing countries. Although information and communication technologies (ICTs) have the potential to address the digital divide in developing countries, there is a widening gap between the urban and rural areas in terms of the dissemination of ICTs.

Some local and international organizations are conducting different kinds of ICT projects to empower rural poor to access the internet for their development activities. The United Nations Education, Scientific and Cultural Organization (UNESCO) and other local and international organizations have conducted pilot projects in some of the developing countries in Asia, Latin America and Africa to find possibilities in using the Internet for rural development purposes. Currently there are some ICT programs in Sri Lanka.

The internet usage in Sri Lanka also, still remains very low due to the above discussed social, economic, cultural, political and moral factors. Internet user percentage in Sri Lanka lingered at a mere 13.1% (Annual report by Department of Census and Statistics in Sri Lanka, 2011). The percentage of internet usage in Sri Lanka is very low when compared to other countries. Sri Lanka hit 13% internet penetration by December 2011 and the number of internet users in Sri Lanka shows a significant increase in the last few years (International telecommunication Union report, 2011). The rural people can benefit from the internet to improve their skills, knowledge and create a positive behavioral and attitudinal usage to fulfill human, social, and economic needs. The aim of this paper is to identify the issues and problems of internet diffusion among rural communities in Sri Lanka.

INTERNET IN SRI LANKA.

The Project called LEARN (Lanka Experimental Academic & Research Network) established in 1990 by the University of Moratuwa for the purposes

of higher education. The internet was introduced to the Sri Lanka in 1995 by LEARN project. The Information and Communication Technology Agency of Sri Lanka, (ICTA) was established under the e-Sri Lanka roadmap resulted in the implementation of the Information and Communication Technology Act, No. 27 of 2003. When the world celebrated the 40th anniversary of the birth of the internet, the internet user percentage in Sri Lanka lingered at a mere 13.1% (The Annual report by the Department of Census and Statistics in Sri Lanka, 2011). The internet is still an innovation among Sri Lankans. 75% of people attached to the semi urban and rural communities in Sri Lanka while only a 25% of people make up the urban communities. This elucidates the fact that 75% of the communities in Sri Lanka remain separated from the internet facility. It is ironic that the Sri Lankan society as a whole is trying to enter 'global society' while having such a paradoxical situation.

Chanuka Wattedgama has identified a number of important issues of internet adoption in Sri Lanka, in his report, titled "Development of Information Technology for Human Enhancement" submitted to the Sri Lankan government . They are the higher cost for internet usage in the rural areas, the low level of computer and English literacy in the rural areas, the lack of developed ICT and social infrastructure in the rural regions. There is a divide among rural and urban communities in terms of socioeconomic and technological development.

ICT RELATED PROJECTS IN SRI LANKA.

Some governmental and non-governmental organizations are conducting various ICT projects to improve internet diffusion among the rural communities. They are 'E-Sri Lanka' program, 'Horizon Lanka project', 'Virtual Village, and 'Kotmale Community Radio Internet Project'.

E- Sri Lanka program

E- Sri Lanka Program is mainly managed by ICTA (Information and Communication Technology Agency) of Sri Lanka. The main funders for this program are the World Bank and the government of Sri Lanka. Six hundred and thirty 'Nenasala' centers have established in all districts of Sri-Lanka to bridging the digital divide, particularly between urban and rural regions, by facilitating ICT including internet to these rural and semi urban communities.

The Nenasala program provides access to internet, telephone, fax, print and photocopy services, other ICT services and IT training classes. There are few paid ICT services and free ICT services to maintain the sustainability of these Nenasala centers.

Rural community access internet to get information for their day to day needs, such as farming, professional, education, health and legal issues, entertainment and social media usage etc. Most of rural people do not have the motivation to use the internet due to attitudinal and technological factors, lack of computer and English language literacy. This ICT program should support them to

overcome these issues and encourage using the internet for their socioeconomic development purposes.

Horizon Lanka project

Horizon Lanka Foundation was established in 1998 to bridging the digital divide among children from the rural village of Mahavilachchiya. Local and international organizations provide scholarships and funds for students to improve ICT including internet and English language literacy. Through studying the Horizon Lanka project, it is expected that e-villages can be successfully established throughout Sri Lanka.

The children use ICT including the internet for their education, information and entertainment purposes. They can also help for agriculture, professional, health, legal and other issues of residents by using ICT services on the Horizon Lanka project. This project must be extended and improved to cover the rest of the residents to empower with ICT. The government and other non-governmental organizations should take suitable actions to develop socially and ICT infrastructure facilities of Mahavilachchiya area to enjoy the ICT benefits towards rural needs.

V-village program

The V - village program is conducted by Sarvodaya organization and some other non-governmental organizations to bridging the digital divide for the rural poor. ICT facilities including internet, telephone, fax, scan, print and photocopy services, other services and IT training classes are available for these communities. In the first stage, two tele centers have established, in Meewala village in the Gampaha district, kudaoya in Nuwaraeliya district. Strategic locations within these two villages such as religious places (temple, church, Mosque), schools, government offices are provide ICT facilities by using WiFi (Wireless Fidelity) and CDMA (Code Division Multiple Access) technology.

This experimental project should be expanded to other rural areas in Sri Lanka. The management should empower rural communities with ICT, internet, computer and English language and encourage them to access internet for their socioeconomic development purposes.

Kotmale Community Radio Internet program

Kotmale Community Radio Internet program was established in 1998 by UNESCO in collaboration with a number of local and international organizations. It is only based on the Kotmale area in Nuwaraeliya district. There were four ways how people can use the Radio Internet Program in Kotmale. These four ways are internet access at ICT centers, Internet access at radio, community database, web page development and radio browsing programs.

Community radio is a community venture which reflects the needs, aspirations

and hopes of the grassroots level. The community radio is the best model example of empowering rural communities with ICT benefits. Kotmale community radio internet program was an effective project among rural communities in Kotmale. It was a successful internet program for their agriculture, health, legal and all the day to day needs. Presently Kotmale community radio internet program is not effective due to management, financial, project planning and some other issues.

ISSUES RELATED TO INTERNET DIFFUSION IN SRI LANKA

The number of people who are used to ICT is severely limited in Sri Lanka. While it is true that ICTs are increasing popular mainly in urban areas, substantial efforts are required to increase access in rural regions where a majority of population lives. The government and some private bodies are conducting these ICT related programs to bridge the digital divide among rural and urban communities. Galpaya (2011) notes that 3.2% of the BoP (those at the bottom of socioeconomic Pyramid) had used the Internet, that 74% had heard of the internet and 23% had never heard of the internet in Sri Lanka.

There are some critical issues in these ICT related programs. Most of the ICT related programs are based in specific rural areas and there are new programs still trying to be introduced in other rural areas. E- Sri Lanka program is only an island wide ICT related program in Sri Lanka which is supporting to empower grassroots people with ICT facilities including internet. Some other ICT related programs are in the experimental stage and some are not functioning properly. There should be powerful ICT programs to bridge the digital divide among rural and urban communities in Sri Lanka. Some of these ICT related programs are not successful due to management, financial, project planning and other issues. The important thing is that ICT programs should be sustainable and empower rural communities with ICT facilities.

The rural communities face various kinds of social, economic, political, cultural and moral issues in internet adoption in Sri Lanka. They are the higher charges for internet usage, the low level of computer and English skills, attitude problems, the lack of developed infrastructure in rural areas and the low living conditions of the rural communities. Wategama, Gunawardene, Wickremasinghe (2005) claim that the ICT developments specially targeted to raise the socioeconomic level of the population that takes place in Sri Lanka at a pace much lower than what it is in the developed world. This can be due to various complex reasons: the higher charges of ICT, low in computer and English language skills and lack of ICT and social infrastructure facilities.

The management of these projects should empower rural communities with ICT, internet, computer and English language and encourage them to access internet for their socioeconomic development purposes.

CONCLUSION

The benefits of the ICT cannot be achieved by rural people without high ICT adoption. Therefore issues of ICT and internet adoption such as infrastructure facilities, affordability and computer and English language skills should be overcome with significant solutions. The government or private bodies should introduce ICT policies, social and ICT infrastructure facilities and Effective Island wide projects to change attitudes on internet adoption of Sri Lankan rural communities.

Kapadia (2010) notes that, the issue of internet adoption such as lack of ICT infrastructure are not issues that ICT programs can overcome independently; it needs substantial government and non-governmental involvement to build the required ICT infrastructure such as teaching the English language, build Sinhala and Tamil keyboards, ICT packages and tools. Conduct computer training for the masses, conducting courses such as MS Office, hardware course, and graphic design for different groups. The government and non-governmental organizations should supply large-scale ICT education, just like it does on regular education policy.

ABOUT THE AUTHORS

Galagedarage Thushari Madhubhashini is currently a PhD candidate at the School of Media and Communication Studies, Faculty of Social Sciences and Humanities, Universiti Kebangsaan Malaysia. ***Ali Salman*** Ph.D. is a Senior Lecturer at the School of Media and Communication Studies, Faculty of Social Sciences and Humanities, Universiti Kebangsaan Malaysia. ***Wan Amizah Wan Mahmood***, Ph.D. is a Senior Lecturer at the School of Media and Communication Studies, Faculty of Social Sciences and Humanities, Universiti Kebangsaan Malaysia. ***Fauziah Ahmad***, Ph.D. is an Associate Professor at the School of Media and Communication Studies, Faculty of Social Sciences and Humanities, Universiti Kebangsaan Malaysia.

REFERENCE

- Ahmad, A.R. Abiddin, N.Z. Badusah, J. & Wai, P.S. 2009. Computer Usage and Achievement among Adults in Rural Area Malaysia. *Journal of Social Sciences* 5(1): 1-8.
- Alias, N. H. Jamaludin, S. Hashim, I. S. & Ismail, N. 2010. Theories of Change and Evaluation of Malaysian Rural Internet Centers .Paper prepared for presentation at postgraduate stand, ICTD.
- Amarasingha,S. & Govinda ,S.2005. The Internet usage in Sri Lanka. No publisher.
- Dearnley, J. & Feather,J. 2005. The wired world. 2nd ed. UK. Library Association Publishing.
- Evertt, A. & Cardwell, J.2007. New Media. 3rd ed. New York: Routledge.
- Galpaya, H. 2011. Broadband in Sri Lanka: Glass Half Full or Half Empty? World Bank publication.
- ICTA. 2008. Nenasala evaluation report. Colombo: Skill International (PVT) Limited.
- ICTA. 2008. Nenasala Interim Survey Report. Colombo: Skill International (PVT) Limited.
- ICTA. 2010. Outcome evaluation project report of Nenasala project. Colombo: Skill International (PVT) Limited.
- ITIA. 2011. International Telecommunications and Information Administration Annual Report. London: ITIA.
- Kapadia, k.2005. Developing information technology, informing technology for development: A study of ICT and rural development in Sri Lanka. Sri Lanka. 2011. Central bank Annual Report.
- Sri Lanka.2011. Department of Census and Statistics Annual report.
- UNESCO. 2010. UNESCO annual report. Paris: UNESCO.
- United States of America.2011.Internet Usage and Broadband Usage Report.
- Webster, F.2005. Theories of the Information Society, New York: Routledge.
- Wattegama,C. 2005. Development of Information Technology for Human Enhancement.
- Wattegama, C.Gunawardene, N. & Wickremasinghe, H.2005. Promoting ICT for Human Development in Sri Lanka: Realizing the Millennium Development Goals, Sri Lanka: ICTA.
- Wiberg, M.2007.The Interaction Society: Practice, Theories and supportive Technologies, New York: Routledge .
- www.horizon lanka.net (December 22, 2011)
- www.v-village.lk (September 20, 2011)
- World economic forum.2011. The Global Information Technology Report 2010 – 2011: Transformation 2.0 report.
- Yang, G. 2009. The Internet and Rural Development in China: The Socio-Structural Paradigm. *Contemporary Sociology: A Journal of Reviews* 12(2):22-32.

- Zhao, J. 2008. ICT4D: Internet Adoption and Usage among Rural Users in China. Know 21: 9–18.
- Zins, C. 2007. Conceptual Approaches for Defining Data, Information and Knowledge. Journal of the American society for information science and technology 58(4):479–493.

