

BRIDGING THE DIGITAL DIVIDE IN SRI LANKA: ISSUES IN INTERNET ADOPTION AMONG RURAL COMMUNITIES

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INTRODUCTION

Information and Communication Technology (ICT) plays an important role in the modern information society. ICT media provide a space where individuals can create opportunities for interaction and the rehearsal of invented identities and relations. Updated UNESCO Discussion Paper (2013) mentioned that the Internet facilitated new media communications such as chat-rooms, email, blogs and micro blog sites, social media, mobile phones and modern wireless networks, for instance, have had positive effects on human and community socio-economic development. The Internet is also a vehicle to help attain rural development goals such as promoting the rural economy, mobilizing the efforts of rural populations and developing infrastructure in developing countries.

ICTs have the potential to bridge the digital divide in rural areas and urban areas in developing countries, but the new communication technologies have not brought the same developmental changes for all countries in the world. Xiaoming & Jinqiu (2008) note that developed countries, for example, the United States of America (USA) and European countries have gained large amounts of revenue from these modern media. However, many developing countries have only limited access to modern media for development purposes, creating a great digital divide between the information rich and the information poor.

Majority of developed and some developing countries use the Internet to achieve their development goals. Some 84.2% of people in the United States of America have used ICT facilities successfully for their development purposes. Developed Asian countries such as Singapore (73%), the Republic of Korea (84.8%), Japan (86.2%) and developing countries such as India (15.1%) are also using ICT facilities for their development purposes (World Bank Report, 2013).

The Internet has a larger role to play in the rural development of Sri Lanka. According to a report of the Department of Census and Statistics (2012), 81.8% of the people in Sri Lanka belonged to rural communities while only 18.2% of comprised the urban population. This elucidates the fact that 81.8% of the people in Sri Lanka remain separated from the facilities provided by this medium. Sri Lankan Internet user percentage was a mere 21.9% (World Bank Report, 2013). Wategama, Gunawardene & Wickremasinghe (2005) also note that digital divide is one of the major issues in Sri Lanka. Traditional media such as newspapers, radio and television are still popular among Sri Lankans when compared to the Internet usage.

The Internet was introduced to the Sri Lankan information and communication system in 1990. However the Internet is still an innovation in Sri Lanka when compared with developed and other developing countries. The problem is, why Sri Lankan rural community is lagging behind in Internet adoption? The aim of this study is to identify the issues hindering Internet adoption among rural communities in Sri Lanka with a view to recommend the solutions to overcome these issues in order to bridge the digital divide. The objectives are to determine the relationship between Internet adoption and infrastructural facilities, the adopter characteristics of rural communities, the characteristics of technology and affordability. Taking into consideration the objectives of this study, several hypotheses are postulated. The hypotheses

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are formulated to test the relationship between Internet adoption and above mentioned variables. Based on the Five Stages Innovation- Decision model designed by Everett M. Rogers (2003), this study identifies the issues of Internet adoption among rural communities in Sri Lanka.

METHODOLOGY

This study used the survey research method to obtain data from randomly selected rural communities in **Bibile Divisional Secretariat (DS)** within a specific four week period, in order to identify issues of Internet adoption among rural communities. Viraj (2011) notes that Bibile has poor infrastructural facilities and it has a large number of rural communities with 72% of its labor force involved in agriculture. Bibile is the poorest area in Monaragala district (poverty headcount index - 35.2%). Satharasinghe (2004) claims that the lowest rate of computer literacy, computer awareness, availability of computers in households and the lowest Internet facility from the Monaragala District in the Uva province. The researchers distributed 470 questionnaires but only 413(87.87%) were able to be collected. Of these, only 400 (85.10%) questionnaires were usable.

Quantitative data analysis using SPSS (version 20) involves a description of inferential statistics and descriptive statistics. The inferential statistics included reliability tests and correlation. Correlation was used to determine the relationship between Internet adoption and infrastructural facilities, adopter characteristics, technology characteristics and affordability. Internet adoption is the dependent variable and the independent variables include infrastructural facilities, adopter characteristics (needs, relevance, attitudes, computer skills and English language skills), technology characteristics (ease of use, perceived benefits) and affordability.

RESULTS & DISCUSSION

Out of a total 400 respondents analysed, 201 (51 %) were males and 199 (49%) were females. In terms of age, 131(32.8%) of these rural communities belong to the 15-30 age group, 119 (29.8%) in 31- 40 age group, 101(25.2%) in 41-50 age group, and 49 (12.2%) in 51-60 age group. In terms of education qualifications, 59% (236) have Advanced Level qualifications and 5.3% (21) have ordinary Level qualifications, 26 % (104) have Diploma qualifications, 8.8% (35) have Bachelor qualifications, and 1.1% have Master Qualifications.

In this study, all variables have a high reliability as all the variables tested revealed an alpha of more than 0.7 ($p < .05$). From the correlation analysis, all nine variables had a significant relationship with Internet adoption. Hypothesis testing was carried out to understand the relationship between Internet adoption and independent variables. As a result, hypotheses 1, 2, 3 and 4 were accepted (figure 3.1).

The main purpose and objectives of the study have been achieved by determining the variables which have a relationship to Internet adoption. There are relationships between Internet adoption and nine ID variables. Some issues in Internet adoption among rural communities in Bibile are lack of infrastructural facilities, problems of affordability and low computer and English skills. Apart from these factors, there are other cultural perceptions such as negative attitudes like the use of Internet socially corrupts their values. This means that these highlighted variables are significant factors for internet adoption. It shows that, the Diffusion and Innovation theory which provides the theoretical framework has been validated through the findings of this study. The proposed model for this study goes beyond Rogers's model to look at other variables related to issues and problems of Internet adoption. These theoretical implications which contribute to the knowledge are infrastructural facilities, relevancy, and technology characteristics for Internet adoption (figure 3.2).

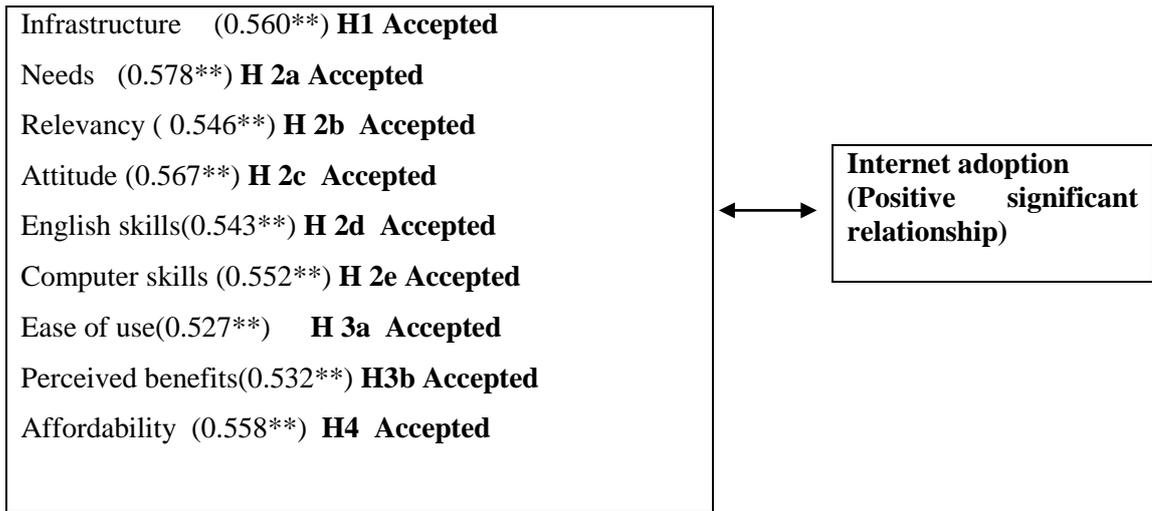


Figure 3.1. The acceptance of hypothesis

** . Correlation is significant at the 0.01 (2-tailed)

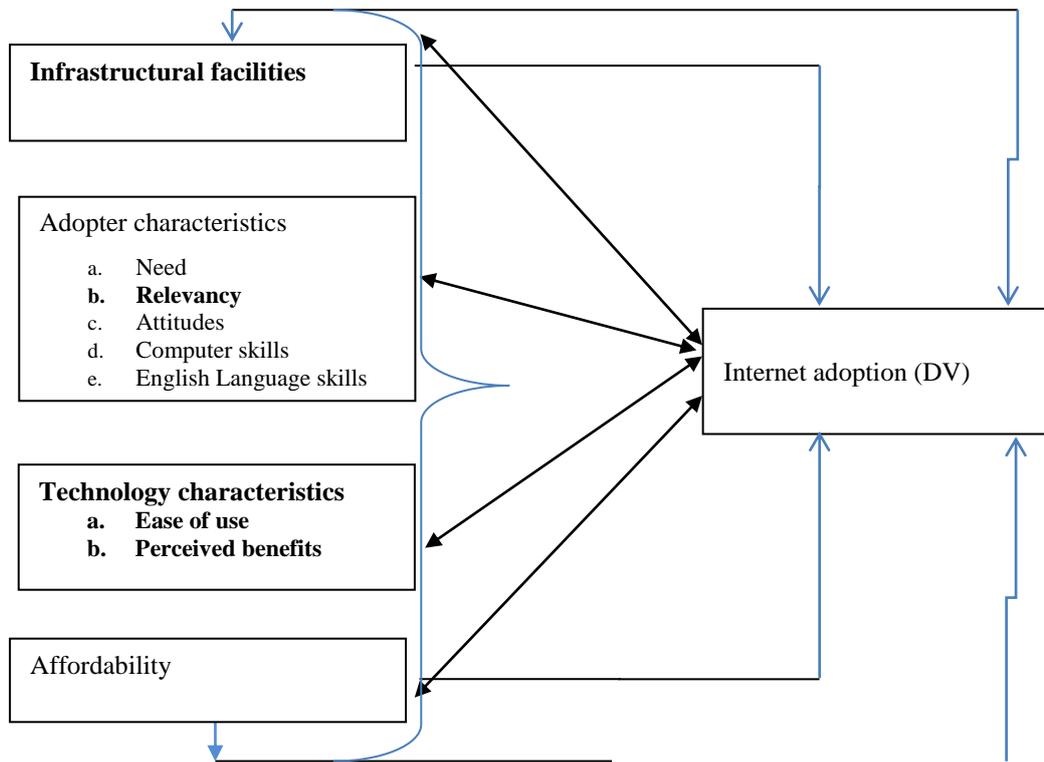


Figure 3.2. The proposed model for the study

CONCLUSION/ RECOMMENDATIONS

The findings and suggestions of this study will be valuable to all relevant authorities, especially those responsible for ICT and Internet initiatives, in an effort to increase Internet adoption among rural communities and to bridge the digital divide in Sri Lanka. This is where improving infrastructural facilities, affordability, adopter characteristics (needs, relevance, attitudes, computer skills and English language skills), technology characteristics (ease of use, perceived benefits) become crucial. Therefore, there should be a practical policy framework to support the aforementioned issues of Internet adoption. As mentioned earlier, without greater

Internet adoption, the benefits of the Internet cannot be accessed by rural communities. Therefore, issues related to Internet adoption should be overcome with significant solutions.

The government, or any other responsible organization should develop infrastructural facilities such as transport, telecommunication, electricity and so on in rural areas. The responsible authorities also should fund large-scale education to overcome ICT, computer and English illiteracy. These are three elements: teaching English, building Sinhala and Tamil keyboards or introducing IT Packages that can translate between Sinhala, Tamil and English, and providing computer training for the masses, for example conducting community classes on software and applications (e.g. MS Office, hardware course, and graphic design). There should also be a proper mechanism to provide these facilities at reasonable cost as well as introduction of Island wide projects to change the attitudes and behavior of rural communities in Sri Lanka. Kapadia (2005) claims that the government involvement is very important to overcome issues in Internet adoption. The government should build ICT infrastructure and capacity, fund large-scale ICT education, create rural employment, enable self-employment and political empowerment.

All the variables highlighted in this study are significant to have a relationship with, contribute greatly to and have practical importance to Internet adoption. Therefore, this study has suggested that attention should be given to the highlighted variables in order to increase the Internet adoption.

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